

**THE STATE COMMITTEE OF INFORMATION, INFORMATIZATION  
AND TELECOMMUNICATION TECHNOLOGIES OF THE REPUBLIC  
OF UZBEKISTAN**

**TASHKENT UNIVERSITY OF INFORMATION TECHNOLOGIES**

**On the right of handwritten  
UDC 025:004**

**AGZAMOVA DILDORA MASHRABJONOVNA**

**Methods of creating electron catalogue and full-text databases in  
the ILO (Samples of national writer of Uzbekistan Utkir  
Khashimov)**

Specialty: 5A5320200-«Informatization and library science» (according to  
spheres)

Dissertation written for TAKING getting the academic degree of Master

**Scientific advisor:  
PhD, associate professor,  
Karimov U.F.**

# CONTENTS

<b>Introduction .....</b>	<b>4</b>
<b>I. Chapter. Tendency of developing electron library in the World.....</b>	<b>8</b>
1. Development of information technologies and its impact on information- resource centers.....	<b>8</b>
2. Technologies of creating electron library.....	<b>14</b>
3. Copyright of electron resources.....	<b>20</b>
4. Security issues for electron libraries.....	<b>24</b>
5. World electron libraries.....	<b>29</b>
<b>Conclusion on Chapter I.....</b>	<b>31</b>
<b>II. Chapter: Methods of creating electron library database (Utkir Khashimov).....</b>	<b>32</b>
1. Analysis of works by the writer Utkir Khashimov.....	<b>32</b>
2. Methods of cataloguing documents in the corporative IRC on automated system.....	<b>42</b>
3. Electron library of the works by Utkir Khashimov.....	<b>58</b>
<b>Conclusion on Chapter II .....</b>	<b>67</b>
<b>III. Chapter: Functional and organizational structures of electron library.....</b>	<b>68</b>
1. Organizational structure of electron library.....	<b>68</b>
2. Functional structure of electronic library.....	<b>71</b>
3. Implementation of electron library of the works by Utkir Khashimov in IRC.....	<b>78</b>
<b>Composition on Chapter III.....</b>	<b>82</b>
<b>Conclusion.....</b>	<b>88</b>
<b>Appendix.....</b>	<b>91</b>
<b>List of literature.....</b>	<b>96</b>

## АННОТАЦИЯ

Ушбу магистрлик диссертациясида автоматлаштирилган ахборот-кутубхона тизими дастурий таъминотидан фойдаланилган ҳолда ўзбек ёзувчиларининг электрон каталогига асосланган электрон кутубхонасини яратиш методикаси ишлаб чиқилган. Ёзувчилар асарларини каталоглаштиришда маълумотномалардан ва рубрикаторлардан фойдаланишнинг ўзига хос томонлари кўрсатилган. Маълумотлар базаси ёзувчи Ўткир Ҳошимов асарлари асосида шакллантирилган. Диссертацияда ёзувчи асарларининг жанрлар бўйича таҳлили, турли ўзбек ижтимоий сайтлардаги яратилган тўлиқ мантли ресурсларнинг таҳлили, Тошкент шаҳридаги олий ўқув юртлари талабаларидан олинган турли анкета сўровларининг натижалари келтирилган.

Мазкур диссертациядан ахборот кутубхона муассасалари ходимлари, шу йўналишда иш олиб бораётган тадқиқотчилар фойдаланишлари мумкин.

## АННОТАЦИЯ

В данной магистерской диссертации используются автоматизированная информационно-библиотечная система программного обеспечения, была разработана методика создания электронной библиотеки на основе электронного каталога узбекских писателей.

При каталогизации произведений писателей были показаны особенности использования справочников и рубрикаторов.

База данных была создана на произведениях писателя Уткира Хашимова.

В диссертации были проанализированы жанры произведения писателя, анализ полнотекстовых ресурсов основанных в различных социальных узбекских сайтах, предоставлены результаты нескольких видов анкетирования студентов высших учебных заведений города Ташкента

Данной диссертацией могут пользоваться специалисты информационно-библиотечных учреждений, а также соискатели этого профиля.

## THE SUMMARY

This thesis deals with the study of creation technique for electronic library on the basis of Uzbek writers 'electronic catalogue with the use of automated library information system software. There have been shown the features of using rubricators and manuals while cataloguing the works of writers,. The database has been created on the basis of Utkir Khashimov's works. The genres of writer's works, full-text resources from different Uzbek social websites have been analyzed in the given thesis. The results of questionnaire of students from different institutes of higher education of Tashkent city have been presented in it as well..

The information given in the research can be used by specialists of information and library institutions as well as the candidates of this profile.

THE STATE COMMITTEE OF INFORMATION, INFORMATIZATION  
AND TELECOMMUNICATION TECHNOLOGIES  
TASHKENT UNIVERSITY OF INFORMATION TECHNOLOGIES

Master–Agzamova D.M.

Department- “Information-Library Systems”

Faculty -“Professional Pedagogics”

Supervisor-Karimov U.F.

Academic Year- 2013

Specialty –Informatization And Library Science

**Methods of creating electron catalogue and full-text databases in the ILO (Samples of national writer of Uzbekistan Utkir Khoshimov’s works)**

Abstract

**Actuality of the theme.** In this master’s dissertation methods of electron library development based on uzbek writers’ catalogue using the automated information library system are elaborated. The features of data and rubricators in catalogue of writers’ works are shown. Database is formed on the base of Utkir Khoshimov’s works. Analysis of writer’s works in different genres, analysis of full-text resources created in different uzbek social sites, results of surveys received from the students of higher education establishments of Tashkent are given.

**The purpose and tasks of the work.** The electron library of the works by Utkir Khoshimov has been created. The purpose of the library is collecting information about works from different sources, which were published in different years and in different languages, presenting writer’s collection to his fans, to help in propagating writer’s works, methods of forming the full-text and electron catalogue databases and to study their methods.

**To achieve purposes of the research the following tasks should be done:**

- to collect writer’s selected works 1-5 from the funds of information library institutions, systematize them, classify them according to their topic, digitize. To study working principle of automated software system before its catalogue process;
- To hold analysis of full-text resources created in different uzbek social sites and survey among the students of higher education establishments in order to implement electron catalogue of Utkir Khoshimov’s works and full-text database in corporate information resource centers;
  - To study ways of catalogue using the automated information library system’s database of Utkir Khoshimov’s works, to create algorithm of searching information in electron library and to define drawback in digitizing documents;
- To create organizational and functional structures of electron library of Utkir Khoshimov’s works;

**Object and subject of the research.** Writer's selected works 1-5tomes and bibliographical index created in 2011 by Tashkent state institute of culture with National library named by Alisher Navoi have served as an object of the work.

Electron catalogue of Utkir Khoshimov's works and methods of forming full-text database, analysis of his works, results of surveys, catalogue and the process of the development of digital library are subjects of the work

**Methods and methodology of the research.** Writer's works have been collected, systematized, classified according to their topic. The results of survey among the 1-2 years students of higher education establishments of Tashkent were studied. Systematic analysis in sites concerning his works were defined and methods of comparative topology were used.

**Novelty of the results of the research.** The novelty of the work comprises systematic analysis of Utkir Khoshimov's works, study the ways of catalogue of writer's work, development of Utkir Khoshimov's works electron library, the problem of initial implementing his works in information resource centers as monographic form, even though Utkir Khoshimov's activity in different genres was studied before. Utkir Khoshimov's works electron catalogue and full-text database have been created for the first time.

**Benefits and implementation of the results of the research.**

Students of higher education establishments, pupils of secondary special systems and others can use writer's electron catalogue and full-text database, which was created on the base of automated software any time through the network. Database has been implemented in the main library of electron resources department of Academy of science Of Uzbekistan. All these are implementation of the results of the research.

**The structure and order of the work.** Master's work consists of introduction, main chapter, conclusions to each chapters, general conclusion, appendix and references, the total value is 85 pages.

**The main results of the work.** Utkir Khoshimov's works electron catalogue and full-text database have been created using the automated software system of electron resources department base of main library of Academy of Science of Uzbekistan.

**Conclusion and summary.** Utkir Khoshimov's works electron catalogue and full database have been created in electron resources department base of main library of Academy of Science using automated system effectively..

Writer's works electron catalogue and full-text database can be used by wide group of user through the network .

**Supervisor**  
**Master**

**U.F.Karimov**  
**D.M.Agzamova**

Давлат алоқа, ахборотлаштириш ва телекоммуникация технологиялари  
кўмитаси

Тошкент ахборот технологиялари университети

Магистратура талабаси-Агзамова Д.М. Кафедра- "Ахборот-кутубхона тизимлари"

Факультет-"Касбий таълим"

Илмий-раҳбар-Каримов У.Ф.

Ўқув йили- 2013 й.

Мутахассислиги-Ахборотлаштириш ва кутубхонашунослик

**АКМларда электрон каталог ва тўлиқ матнли маълумотлар базасини  
шакллантириш методлари (Ўзбекистон халқ ёзувчиси Ўткир Ҳошимов асарлари  
мисолида)**

## АННОТАЦИЯСИ

**Мавзунинг долзарблиги** - Ушбу магистрлик диссертациясида автоматлаштирилган ахборот-кутубхона тизими дастурий таъминотдан фойдаланилган ҳолда ўзбек ёзувчиларининг электрон каталогига асосланган электрон кутубхонасини яратиш методикаси ишлаб чиқилган. Ёзувчилар асарларини каталоглаштиришда маълумотномалардан ва рубрикаторлардан фойдаланишнинг ўзига хос томонлари кўрсатилган. Маълумотлар базаси ёзувчи Ўткир Ҳошимов асарлари асосида шакллантирилган. Диссертацияда ёзувчи асарларининг жанрлар бўйича таҳлили, турли ўзбек ижтимоий сайтлардаги яратилган тўлиқ матнли ресурсларнинг таҳлили, Тошкент шаҳрида олий ўқув юртлари талабаларидан олинган турли анкета сўровларининг натижалари келтирилган.

**Ишнинг мақсади ва вазифалари** - Ўткир Ҳошимов асарлари электрон кутубхонаси яратилди. Бу электрон кутубхонанинг мақсади, турли манбаларда, турли йилларда ва тилларда чиққан асарлар ҳақидаги маълумотларни тўплаб, уни йиғма равишда адиблар ихлосмандлари эътиборига ҳавола этиш, адиб асарларининг тарғиботига ёрдам бериш.

**Тадқиқот мақсадларга эришиш учун қуйидаги вазифаларни ҳал этиш лозим бўлади:**

- Ёзувчи 1-5 томли Танланган асарларини ахборот-кутубхона муассасалари фондларидан тўплаш, уларни тизимлаштириш, мавзулар бўйича классификациялаш, рақамлаштириш. Каталоглаштириш жараёнини бошлашдан, аввал автоматлаштирилган дастурий таъминотнинг ишлаш тизимини ўрганиш;
- Турли ўзбек ижтимоий сайтларда яратилган тўлиқ матнли ресурсларнинг таҳлили ва Ўткир Ҳошимов асарлари электрон каталог ва тўлиқ матнли маълумотлар базасини корпоратив ахборот-ресурс марказларига жорий қилиш мақсадида олий таълим муассасалари талабалари ўртасида анкета сўров ўтказиш;
- Ўткир Ҳошимов асарларини автоматлаштирилган ахборот-кутубхона тизимининг дастурий таъминотидан фойдаланиб каталоглаштириш усулларини ўрганиш, электрон кутубхонадан

маълумотларни қидириш алгоритмини тузиш, ва ҳужжатларни рақамли кўринишга ўтказиш жараёнидаги камчиликларни аниқлаш;  
➤ Ёзувчи Ўткир Ҳошимов асарлари электрон кутубхонасининг ташкилий ва функционал тузилмасини яратиш.

**Тадқиқот объекти ва предмети** - Ўткир Ҳошимовнинг 1-5 жилдли Танланган асарлари ва 2011 йилда Абдулла Қодирий номидаги Тошкент давлат маданият институти ҳамда Алишер Навоий номидаги Миллий кутубхонаси билан биргаликда яратилган унинг биобиблиографик кўрсаткичи тадқиқот **объекти** вазифасини бажаради.

Ёзувчи Ўткир Ҳошимов асарлари электрон каталог ва тўлиқ матнли маълумотлар базасини шакллантириш методлари, унинг асарлари таҳлили, сўровнома натижалари, каталоглаштириш ва электрон кутубхона яратиш жараёнлари диссертацион ишнинг **предметини** ташкил этади.

**Тадқиқот услубияти ва услублари** - Ёзувчи асарлари тўпланди, тизимлаштирилди, мавзулар бўйича классификация қилинди. Тошкент шаҳридаги олий ўқув юртлари 2-4 курс талабаларидан анкета сўров натижалари ўрганилди. Унинг асарлари юзасидан сайтларда тизимли таҳлил ишлари аниқланди ва қиёсий-типологик усуллардан фойдаланилди.

**Тадқиқот натижаларининг илмий жиҳатдан янгилик даражаси** - Ўткир Ҳошимов ижоди турли йўналишларда маълум маънода ўрганилган бўлсада, ишнинг илмий янгилиги ёзувчи Ўткир Ҳошимов асарларининг тизимли таҳлил қилиниши, автоматлаштирилган тизимда ёзувчи асарларини каталоглаштириш усулларини ўрганиш, Ўткир Ҳошимов асарларининг электрон кутубхонасини яратиш, унинг асарлари электрон кутубхонасини АРМларга жорий қилиш муаммолари илк бор монографик тарзда ўрганилаётганлиги билан белгиланади ёзувчи Ўткир Ҳошимов асарлари электрон каталоги ва тўлиқ матнли маълумотлар базаси илк бор яратилди.

**Тадқиқот натижаларининг амалий аҳамияти ва тадбиқи** - Автоматлаштирилган дастурий таъминотдан фойдаланган ҳолда яратилган ёзувчи асарлари электрон каталог ва тўлиқ матнли маълумотлар базасидан олий ўқув юрт талабалари, ўрта махсус тизими ўқувчилари ва бошқа фойдаланувчилар тармоқ орқали исталган пайтда фойдаланишлари мумкин.

Маълумотлар базаси Ўзбекистон Фанлар академияси Асосий кутубхонасининг Электрон ресурс бўлимида жорий қилинди. Буларнинг барчаси тадқиқот натажаларининг **тадбиқи вазифасини бажаради**.

**Иш тузилиши ва тартиби** - Магистрлик иши кириш, асосий боб, ҳар бир боблар бўйича хулосалар, умумий хулоса, илова вафойдаланилган адабиётлар рўйхатидан ташкил топган бўлиб, ишнинг умумий ҳажми 85 саҳифани ташкил этади.

**Бажарилган ишнинг асосий натижалари** - Ўзбекистон Республикаси Фанлар академияси Асосий кутубхонасининг электрон базасида автоматлаштирилган дастурий тизимдан фойдаланиб Ўзбекистон Халқ ёзувчиси Ўткир Ҳошимов асарлари электрон каталог ва тўлиқ матнли маълумотлар базаси шакллантирилди.

*Хулоса ва таклифларнинг қисқача умумлаштирилган ифодаси* - Автоматлаштирилган тизимдан унумли фойдаланиб, Фанлар академияси Асосий кутубхонасининг электрон базасида Ўткир Ҳошимов асарлари электрон каталоги ҳамда тўлиқ маълумотлар базаси яратилди.

Ёзувчи асарларининг электрон каталоги ва тўлиқ матнли маълумотлар базасидан кенг фойдланувчилар гуруҳи тармоқ орқали фойдаланишлари мумкин.

**Илмий раҳбар**

**У.Ф.Каримов**

**Магистратура талабаси**

**Д.М.Агзамова**

## Introduction

There was adopted a Decree for the President of the Republic of Uzbekistan on June 20, 2006 about “On providing the population of the Republic with e-library”. In the Decree there are shown information-library organization and information-resource centers forming the base for full textual information and electronic catalogue, and creating service for information resource centers to young generation in a world level. [2]

There was put into practice the Law “On the activity of information-library” by the President of the Republic of Uzbekistan on 13 April, 2011. In the Law much attention given for forming the attitudes between the citizens in the field of information-library and institutions to control the work for information library of the Republic of Uzbekistan, the legal basis of showing the service information-library, to establish the funds of information-library.[1]

On the 12<sup>th</sup> article of the Law, there was indicated the importance of forming electronic catalogue and e-library to all users in order to know the cultural and spiritual, historical heritage of the people of Uzbekistan in growing the young generation.

In constructing the system of working information-library in the Republic of Uzbekistan 106 number summit resolution on June 11, 2012 and special secondary education, centers order 175 “On corresponding the activity of information-resource centers” July 2, 2012 in order to execute this order there was pointed some tasks. [4]

According to this Law, it should be created e-libraries in the system special secondary education and to modernize new library technologies in order to use the information resource centers by young generation, besides that to develop web sites, to world level.

*As a theme of the dissertation paper chosen forming.-* the methods on the basis of full textual resources and electronic cataloguing in Information-library organization (on the example of the works of Utkir Khashimov, People’s writer of Uzbekistan).

***The actuality of the dissertation.*** On the very dissertation worked out the automatic information-library system according to electronic catalogue of Uzbek writers to create the methodology of e-library. Specific features are shown in using cataloguing information of the compositions of writers. The base of information is formed by the compositions of Utkir Khashimov. In the dissertation there was analyzed the compositions by genre, analysing of full text resources created in social Uzbek sites and results of questionnaires from the students of higher education of Tashkent city.

***This dissertation*** can be useful for the people working information resource centers and the researches working in this field.

The object of the research as an object for research chosen Utkir Khashimov's 1-5 volumes compositions and bibliographic indicator created together with the National library of Uzbekistan named after A.Navoi and 2011 Tashkent State institute of Culture named after Abdulla Kadiri.

The subject of the dissertation is forming the methods on the basis of full textual information and electronic cataloguing of the compositions of Utkir Khashimov, his compositions analyzing, the results of questionnaires cataloguing and the process of creating e-library.

***The aim and tasks of the dissertation*** is learning the forming methods on the basis of full textual information and electronic catalogue in IRC, and to create the full textual information base of 1-5 volumes compositions of Utkir Khashimov.

***There should be fulfilled the tasks in order to gain the aim of the research:***

— to collect writer's 1-5 volumes selected compositions from the funds of information-library organization, to systematize them, to classify by the themes and numbering. To learn the working system of automated program providing before cataloguing the process;

— to make questionnaires among the students of higher education in order to put into practice Utkir Khashimov's electronic catalogue and full textual information base in corporative information resource centers and full textual resource analyze created in different Uzbek social sites:

— to learn the ways of cataloguing using automated information-library system of Utkir Khashimov's compositions to form searching algorithm from the e-library and to identify the shortcomings in the process of documents into numbering view;

— to create functional system and organizing structure of e-libraries of the compositions of Utkir Khashimov;

— to prove the demands of the readers the electronic cataloguing of the compositions of Utkir Khashimov and full textual information base, to compare the conditions of the resources given in full textual version in different Uzbek social sites and e-libraries of his novels, to learn functional demands of e-library.

***Electronic library of Utkir Khashimov's compositions and forming full textual information base is the hypothesis of the dissertation:***

— writer's books will keep in good condition, there are more than 12 thousand information-library organizations but there is no opportunity to buy author's compositions, therefore the service via distance net will be improved;

— there is an opportunity to enthusiasts of the writer to read his compositions any time within 24 hours;

— there is a chance to search writer's compositions by simple search and to book distantly to writer's compositions and there is no limit of its return;

***Short analysis of the literature of the theme.*** The skill of creating fiction characters are learnt through in literature and on this point there are several researches and graduation qualification papers created together D.Agzamova and some other authors such as: I.Sultanov, H.Yoqubov, M.Qushjanov, O.Sharafiddinov, S.Mamajonov, N.Karimov, S.Mirvaliev, B.Nazarov, U.Normatov, A.Rasulov, O.Dusenbaev, M.Rakhmatullaev and U.Karimov carrying out theoretical and practical works on creating the system of e-library, ways of cataloguing, automating the libraries. But there is no special research on electronic library of Utkir Khashimov's compositions and its forming full textual information.

There is a first research in monographic way of electronic library of Utkir Khashimov's compositions and forming the base of full textual information.

Short definition of the methods used in the research-Writer's compositions collected, analyzed and classified by the theme. It has been learnt the results of questionnaires on the 2<sup>nd</sup> and 4<sup>th</sup> year students of higher education institutes of the Tashkent city.

According his compositions it has been identified systemized analyses in websites and has been used in comparative-typological method.

***Theoretical and practical significance of the results of the research.***

There is 9840 amount number in analyses of the writer's compositions on websites. According to the results of the questionnaire from the students of higher education 79% students proved the importance of putting writer's compositions into corporative net. It was shown in special schemes. This fulfills the theoretical significance of the research.

Furthermore, one can use any time from the net the compositions of the author by electronic catalogue and full textual information base.

The basis of information put into practice in the main library of electronic resources in the Academy of Science of the Republic of Uzbekistan. All these appeared in practical importance of the research.

***The novelty of the work*** is shown in learning a first monographic way and put into practice in Information Resource Centers in e-libraries, creating e-libraries of Utkir Khashimov's compositions learning the methods of cataloguing in an automatic way of the compositions of Utkir Khashimov.

***The content of the work.*** The dissertation consists of an introduction, three main chapters and conclusion for each chapter, general conclusion, appendix, and the list of used literatures. The total pages are 85.

## **I. Chapter. Tendency of developing electron library in the World**

### **1. Development of information technologies and its impact on information- resource centers**

In order to ease human hard work, gain economic revenue through power of technology and on the purpose of regulating demand and supply activities, in the world markets the time of technology began. First generation of machines were computers, which developed in 40s of XX century. Despite the discovery of about the possibility of power transfer through vacuum in 1883. Flaming created first vacuum Deout electronic lamp in 1904. However in 1931 english scientist Wenny Williams developed a power of frequencetiratron calculator, with this development he created a new path for electronic lamps. It created lots of problems using electronical lamps in computers. In every 7-8 minutes lamps broke down, considering 15-20000 lamps in one computer, it was very difficult to find broken lamp. More over they generate a lot of therma energy through heating, that's why it was needed special coolers to get work. First generation computers were MARC ENIAC, EDSAC, UNIVAC (UNIVAC). Even if computers are considered discovery of XX century human work equipments for calculations have thousands of years of history. Initially the humans count on fingers.

(IS) were the cause of the third generation computers. Nowadays one can find them in everywhere for example (car, washing machine and etc.). Speaking about computers, one can't imagine the computers without IS. One IS can be replaced thousand transistors. In short, the small crystal can replace the function of 30 tons of Eniak. The speed of third generation Electronic Calculating Machines (ECM) has increased hundred times.

#### **Personal computers.**

Few years after development of the first microchips, 2 K/bit flash memory microchip was developed by Intel in 1969. That was the first time there were placed ten thousands transistors in one crystal.

After one year, in 1972 company released for sale this first time micro-processors with the model of 8008. It was the microprocessor that designed for

direct using in computers. This microprocessor caused for whole changing of computer architecture (its components and internal structure)<sup>1</sup>.

Pravets 8 and Toshkent private computers were developed based on 6500 and 6501 microprocessors of Motorola, Yamaha 8 PC based on Z80A microprocessors of Zialog, Korvet and Sugdiyona PCs based on KR580BM1 microprocessor were the major PCs in the computer classes of schools in the Republic. [13]

One more point of these computers were that they had of new generation graphical operation system: Windows can be installed and work freely. Capacity of these computers had enough to work with three dimensions. Later on production of 3D games became big commercial business and it effected to development of computer technology.

In 2000 number of transistors in micro-processors reached from 2000 till 50 millions, frequency of tactile of the micro-processors from 0.8 MHz till 2000 MHz, number of ranks increased from 4 till 32. As a result, during the one tactile, signal could not get from one side of micro-processor to other side. Volume of temperature of millions of transistors increased rapidly and appeared problem of efficient cooling of micro-processors. The quantity of the temperature of fastest models of them are few hundred Watts and for cooling it was used new 1156 and 1366 leg slots. To comparison, in 8086 microprocessors had 40 leg slots. Main feature of microprocessors are followings: to which slot it is settled (leg number of micro-chip), frequency of tactile(solvency of simple task in one second), numbers of ranks (simultaneously usage of numbers in double digit system), number of cores (simultaneously solving of number of tasks), cache memory volume, quantity of temperature from microprocessor, number of transistors and measure of transistors. [14]

---

<sup>1</sup> Kagan B. Computers, computer systems and networks: monograhyy.- Moscow: Mir Publishers, 1988.- P.312.

declared that fifth generation computers will be quant computers Nowadays the process of neuron computers also began. The automatization of libraries was began in mid of 1960s. using of computers in librarian field began with creation of bibliographic data and catalogue of libraries. This process was done by very huge ECM. First results in machine readable catalogues and single catalogue network were gained. In 70s, the opportunity of connecting computers into single set via communication channels was created. It was at the same time gave chance to use bibliographic data from one computer in other ones. In 80s, after development of PCs, development of library networks and use them widely were became reality. In 1967, Ohio College Library Center (OCLC) was created by the initiative of heads of colleges and universities of Ohio State of US<sup>2</sup>.

- . For example, there some common terms used: “library of initial modules”, “catalogue”, “library of settled modules” and others. Customer service process is like customer service in common library. The development and maintenance of the people agreed presidential Decree "On the organization of information and library provision of the population" № PP-381 in June 20, 2006, special attention was paid to the fact that creating necessary conditions for a wider and unhindered information support to the population, especially young people, in their self-education with the use of modern information technology, quality and operational information support of the population, based on new information technologies, databases and Internet resources. Considered the need to develop and regulate the activities of the newly formed Information and library institutions, the basic objectives of these institutions. After the 22 years of the state independence of our country, it was given all the support to youth trends. There is an urgent need to improve the intellectual and spiritual level of the population of republic from the first years of independence, along with the reform

---

<sup>2</sup> Корпоратив ахборот-ресурс марказларининг автоматлаштирилган тизими (KARMAT-U): Ахборот-ресурс марказининг автоматлаштирилган тизимидан фойдаланувчилар учун услубий қўлланма / Абдулла Қодирий ном. Тошкент Давлат Маданият институти, Алишер Навоий ном. Ўзбекистон Миллий к-аси; Тузувчилар: М.А.Раҳматуллаев, У.Ф.Каримов, А.Ш.Муҳаммадиев, Ж.Атажанов, М.П.Савочкин; Масъул муҳаррир А.О.Умаров.- Алишер Навоий ном. Ўзбекистон Миллий кутубхонаси.-Т.: Алишер Навоий ном. Ўзбекистон Миллий к-наси нашриёти, 2009.- 24 б.

of all sectors of life, youth education program, and the problems of educating a new generation to the rank of national importance.

For example, in Japan, agency of new technologies, library of national parliament, some ministries, more the 20 libraries and cultural centers created XXI century library by uniting their efforts. [11]

A few years before, it is began creating national program of electronic library in congress library of the U.S. Since 1994, with the initiative of NSF, DARPA and NASA began research program of Digital Libraries Initiative (DLI). Since 1998, its second phase of this program, these programs united in unique system. Statistical department of US, National humanitarian fond, US national archive and other federal agencies were included into this program. Since 1995, national program of United Kingdom “Elib” was implemented. Some projects about electronic libraries in some countries (Canada, Germany and etc) were become national and international projects. Using and creating electronic library were implemented by some projects 4<sup>th</sup> Frame Program of Partnership of European Commission (FPEC). Usually this type of projects implemented in small project makes and later on it reaches national and international level. For example, we can refer to electronic library which was planned by G7. Russia also was invited to attend to this project. DLI project in US and ELIB project in UK can be example for this. In Japan there is ongoing process of creating XXI century library. In Germany, GLOBAL-INFO electronic library project has kicked off. All above said projects have been financed by respective countries. These countries are attracting different investments into work out electronic library issues, for example, different foundations, personal funds, charity companies are directed. In Russia has experience of creating electronic library.

The present level of information and technological development of the society, the rapid development of information technology, the rapidly changing needs of the new generation of users to have to put the library to look for new approaches to library services, combine traditional and innovative, classic and innovative ways of working. Traditional, familiar features in the modern type

libraries get new development through the use of advanced computer and communication technologies, which significantly speeds up the user experience and improves its quality.[10]

Especially main library processes: gathering information, reproduce, maintenance, search and delivering can be effective by using modern technologies in communication channels. “Information revolution” at the end of XX century has effected into library activities. Today many people use the internet as information source because it has wide capacity of electronic information recourses. Telecommunications’ devices gives opportunity of using information recourses regardless of distance. It is about creating center of information recourses by using automating and applying organizational-technique methods. There are many names for this kind of libraries. For example, “electronic library”, “Virtual library”, “Automated library” and others. Creators have desire to use the term of “Automated library”. “Automated library” (AL) – is such library that the function and information service of library (computers, servers, organizational technical devices, program complexes) mainly automated and implemented via telecommunication devices.

## **2. Technologies of creating electron library**

Library is a part of informatization of cultural environment of society that spirit certain ways and temporal parameters of intelligent, ethics, by emotional potential. Informative potential of library environment makes library fund. Now property of library fund is considered his ability to design most meaningful and appropriate lines of human activity. Essence property of library fund his ability to design the most meaningful and appropriate lines of human activity is considered. Thus a library fund comes forward as a debenture model of culture. One of main tasks of library as social institute there are possibility and plenitude of grant of access to the informative resources<sup>3</sup>. This task will be realized through structure of library fund on different grounds. A fund must be organized so that two aims were simultaneously carried out: the effective use and maintenance of fund for the subsequent use. Facts confirm that libraries experience the responsible period of transition from the traditional technology oriented to the man as performer, to new, based on microelectronics. New technology allows to pass on distance in digital form texts, pictures and to provide penetration of information in all points of earth, passing frontier and language barriers. The term electronic library is set as a virtual library or digital library.

The use of such library shows that, taking some of the information or part of the fund or the entire fund can be converted for digitization and use of the electronic network, and can also be stored on the media (CD, DVD, and BD) drives, flash drives, mobile cell devices and computers.

Electronic network is a global Internet network, or a local network, and it means that network may be in the information resource center. To date, that would serve the reader creates a virtual library with the corporate network. When we speak of a

---

<sup>3</sup> Земсков А.И., Шрайберг Я.Л. Электронные библиотеки: учебное для ВУЗОВ.-Москва: Либерия,2003.-С.245.

must have machine-computing equipment (computers, telecommunications devices, etc.), to basic programs include (operating system, office applications), but the main processes in the library (to gather information, store, search and access). [7]

An automated library is part of the service but it is with automation (personal computer to be, servers, technical equipment, specialized software, and this is done with the help of telecommunications equipment. Libraries are maintained to information library system<sup>4</sup>.

Can say that, the electronic library is automated library products and it depends on the classification and coding of information. This library is part of the electronic catalog, annotation, and full-text database. Electronic library resource centers refer to the information system, it depends on the ordering (e-catalog, full-text and multimedia database, and others) as well as information storage, retrieval and transmission methods with complex special programs<sup>5</sup>.

How to organize the work in a digital library for information and resource center?

1. Information -resource center must have a sufficient amount of computers. Create an Internet network, all librarians training on the use of computer technologies. All computers must be connected to the Internet. Library staff are trained how to do a search on the Internet, use of the electronic catalog and electronic bibliographic resources;

2. In the IRC conducted a special information processes (storage, remaking, search, and access to this information), a special program for Information (information system of their informatized library ISIL) purchased and implemented. What would create an atmosphere should start with training for the

---

<sup>4</sup> Каримов У.Ф. ва бошқ. Корпоратив ахборот-ресурс марказларининг автоматлаштирилган тизими электрон каталоги маълумотлар базасини шакллантириш: Автоматлаштирилган ахборот-кутубхона тизимидан фойдаланувчилар учун услубий қўлланма /Тузувчилар: У.Ф.Каримов, М. А.Раҳматуллаев, Ҳ.Э.Исломова; Масъул муҳаррир А.Ш.Мухамдиев.- Т.: Тошкент ахборот технологиялари университети нашриёти, 2012.- 115 б.

<sup>5</sup> Гусева Е.Н. Международная конференция «Крым»-2010: заметки очевица// Научные и технические б-теки.-2011.-№3.-С.35.

use of information resources. After training in the IRC must first create an electronic catalog of the fund. The program has such criteria as: the book issue, work with debtors, determine the statistical service of readers all over the network, these functions are done with the help of computer technology.

3. After the creation of an electronic catalog of the fund, new opportunities for readers. Statistics IRC gives the opportunity to learn more about book turnover and demanded literature in the fund IRC. Thus, the conversion of literatures from the fund of IRC conditions for service to readers. IRC buys special scans to scan the literature. And so, connect these resources to the full-text bibliographic electronic catalog. Electronic library can not be imagined without the electronic catalog. Electronic Catalogue need to search for bibliographic resources in an electronic library. To create a digital library to take advantage of ISIL. Electronic library must take the following criteria as an electronic catalog, electronic full texts and information about users of the electronic library.

E-library in the IRC has the following functions:

- Open access to different training office about resources as well as for text, video, multiplication, multimedia, imitation models;
- The electronic catalog will help in finding the right information. Speed of search in the electronic catalog supreme than the traditional catalog;
- Creating and saving in large size scientific, educational and encyclopedic database for users IRC and for other;
- Creation of an electronic catalog, it is a difficult process for the electronic library.

Full-text database is created in the NEXT stage in the digital library:

- IRC scans of their written or hand written documents and uses (photography, keyboard) to the introduction of the electronic catalog;
- IRC gives chance for free access to Internet networks;
- Using database of other organizations and individuals with an agreement;

When it comes to the technology of the electronic library, it is possible to note the role in social and educational environment. Electronic libraries not only retain information but provide users information and library services.

It is not enough saying about electronic library but there are some opinions

- Firstly, needing of technical equipments. It is known that, in all spheres of activities related objects in the IRS stored in computers. The central computing device should have a large amount of memory to, extra work when prompted.

Resources of IRC should save in two or more computers to simultaneously serve users of electronic library:

- Firstly, when the first computer does not work, the second computer comes to the rescue<sup>6</sup>. When given remote database irrelevant computer is connected to a wire or not but be an electronic network to the Internet. Creating an Internet network can be different. It depends on the Internet service providers, like WI-FI, ADSL, WI-MAX.

- Secondly, It should be comfortable and easy software for users and the operator. Settings of e-libraries resource should be convenient for users, for example, they have to answer 15 questions in the margins: volume, document type, the responsible of person, date of issue, belonging to someone, date of entry, language, whether to have the application or not so it should be divided into sections. Users of the electronic library should freely and comfortably finds the right resources. If the user of the electronic library is not comfortable with this program is that it means, this program is not suitable for use. Resources in the electronic library can be in formats Deja Vue, Doc, TXT, HTML, XML; graphic materials in TIFF, JPEG; materials for audio in mp3 and other formats are served by users on request. For the operator of the program is also important for the TGO that would, he was able to download new resources for the digital library for the

editing of bibliographic descriptions and general work on technical issues. As well as a program for the electronic library should carry out statistical information<sup>7</sup>.

E-libraries (EL) are even not direction today, it is ideology. EL became inalienable part of activity practically in any area; practically all run into a necessity to have developed and used of EL today. As before all aimed to get computers, so now, when already a certain satiation happened computers, it is talked mainly about two things - Internet and EL, thus growingly about EL. In this sense more all did not drive to the ordinary libraries: from one side, exactly libraries are one of main motive bodies of development of EL, and from other is a self word library in the name mixes up e-libraries many and often levels this concept him to the task of digitizing of some fragments or all fund. Many librarians began to understand e-libraries as thing that quickly will convert their library into fully electronic CAS, traditional funds will not be needed where upon. All of it not so simply word library in a concept e-libraries understood much wider as some unifying, in some wise well-organized (structured) collection of electronic resources. And on the whole EL can be presented as an association of heterogeneous and up-diffused resources within the framework of single ideology of organization and access. However, exact determination of EL yet nobody gave while, but sense many understand. As for libraries, then, undoubtedly, it is necessary to divide concepts the automated library and e-library, understanding under the first a greater heel toward technologies, and under the second - toward resources. Though crossing, certainly, but one is important: electronic any library becomes even fragmentary (meaning part of the digitized fund) only on a base to already realizable automation<sup>8</sup>. Dialectics. EL got wide distribution in the west, and we not strongly were late: if in the USA and Western Europe these problems

---

<sup>7</sup> Кудратов О. Электрон кутубхона-китобхонлар хизматида // ICT NEWS .- 2012.-№71.-Б.-29-31.

<sup>8</sup> Куракова Е.В. Информационные ресурсы и услуги в электронной среде: эффективность, потребности, перспективы .(По материалам прикладного исследования Научной библиотеки Ульяновского государственного университета)// Науные и технические б-теки.-2011.-№12.-С.35-38.

began to engage in 1992-1994, then in Russia the first projects appeared already in 1996-1999 .we drew the morals from the past, not to fall behind on 15-20, as it happened to Hardware and Software. E-libraries (EL) in a world and home informative infrastructure as far as development of programmatic-technical and telecommunication facilities acquire an all greater value in all spheres of activity of society. On the other hand development of the mentioned facilities renders substantial influence and on the change of technology of work of traditional libraries using library-informational CASS (ABIS). Often is there a question: "are not EL the modern alternative of ABIS. Thus some our colleagues examine ABIS as a loser actuality attempt of automation of traditional libraries. It is necessary to specify that between "traditional" and "electronic" libraries exist, both certain distinctions and really something a common.

### **3. Copyright of electron resources**

Nowadays in Uzbekistan it has been occurring rapid development in informational sphere, connecting with creating electronic libraries and automatization of the library processes.

In our life information-library centers have been creating their electronic libraries which in view of base full texts and multimedia. In order to make all compositions in an electronic format, it is presented open access to the Internet or local nets for open apply or for sale<sup>9</sup>.

It is necessary to look through how is finished by compositions author, another libraries and organizations, creating of electronic resources, rights for using these resources, with which law, for directions of solving this problem in Uzbekistan.

If the word “creator” usually in oral speech gives the meaning human, who wrote something, book, report, article then by copyright law “creator” is used for creating any compositions.

For that, sculptor, drawer or photography will be counted “creator” her or his compositions.

In the countries where recognize “labor relations”, work giver may be “author” of compositions.

Copyright is part of the intellectual property right, is not only system in human rights, but citizenship rights, International personal rights, it includes the

---

<sup>9</sup> Васильченко С.Д., Губарец В.В. Авторское право и Интернет // Научные и технические б-теки. - 2000. - № 3. - С. 21- 27.

overall rights that protected by international rights. In the market economy conditions, copyrights also have the same value as the conventional properties and authors has interest in protecting the rights which belong to them. That is why one of the wide spread type of copyright protection method is copyright contracts.

In the Republic of Uzbekistan “About copyright and related rights” (collection of law decrees of the Republic of Uzbekistan 2006, On №28-29, 260-article; 2011, 51,542-article)<sup>10</sup>.

The word Copyright (CR) means in two majority: exceptional right of author to get solve about ability of composition or public performance of his or her work. The second is the author puts his strong requirements: author has moral right for his work; nobody has right to change it without his agrees, or using author’s surname; author also has right to get incentives is sent to him; publisher also should get incentives for his contribution. Are these requirements strong in all cases? Is it necessary to follow in all requirements of authors? If we analyze it deeper we can separate some important points from these general rules. It depends on what points in copyright to present: in purpose for education, development of culture, in social purpose.

Now libraries become not only the ownership of physical objects such as books and magazines, but also access to the Internet and other electronic and information resources (electronic journals, databases).

Copyright provides automatic protection. Protecting the right arises together with the creation of the product, regardless of whether, whether the copy of the work in appropriate authority on copyright for registration. However, without registering the copyright holder can’t exercise their rights. For example, it can’t bring an action for infringement of his right can get a refund.

Copyright law, as mentioned, does not protect the idea, but its specific presentation. Therefore, the basis of software protection of copyright on the following considerations:

---

<sup>10</sup> [http:// www.norma.uz](http://www.norma.uz)

- Representative teams. The program is a sequence of commands, so it can be considered as "expression" of the ideas, that is, its product.

- Copying. This concept using in copyright, may be extended to movable programs from one medium to another, including to the media, the other type. Mathematically, this concept is formalized as following way. Suppose that we have a type of A and B carriers in the process of "transition" from one carrier to another: A ----- B and B ----- A.

If the object and when transition with B to A returns to the previous object and then a "transition" is copying.<sup>11</sup>

Judge the identity of programs on media A and B can be in many ways, for example by their similar functional properties, but the properties do not match functional copyright: the same functional properties as such, do not testify about playing the "form", i.e. about copying.

- Creativity. Detail other forms of fixation, protecting of the copyright, the computer program is the result of creativity.

- Style. Creative work, the author skillfully and creativity come into play as a program. Should set targets, all of which must be recorded by writing the program text give way to execute the program characteristics and even style?

- Algorithm. Which elements are in the program is based algorithms; it can not be protected from any authored play. This is the analogue of words in literature, or the brush strokes in a painting.

- Selection and pairing elements. If protection of computer programs from the perspective of the author of the selection and pairing of these basic elements, and this is manifested his creativity and ingenuity, and what distinguishes his work from the works of other authors. The case where the two authors independently would write for the same purpose two identical programs, almost out of rule. But when enjoyed programmers generally well-known (they are taken in the same operating environment from a single library).

---

<sup>11</sup> <http://www.inke.ca>

- The original program is the first basic requirement of copyright, often based on the selection and pairing of these well-known elements.

- Successful. Success in solving the problem to a large extent determined by the selection of items that we performed at each step to build. So the program can run faster, it is easier and safer to use, easier to read and are more productive than its predecessor and competitors.

Due to this growing level of interest to the readers of his works and demand. In accordance with Article 6 subject to copyright are: literary works (literary and artistic-governmental, scientific, educational, journalistic, etc.) and the dramatic sceneries; musical compositions with or without words;-musical works, audiovisual the product of, photographic of the product of the work and obtained new ways analogous to photography; geographical, geological and other maps. As in many countries, Uzbekistan questions author of copyright law regulated "Copyright and related rights " (from 21.07.2006 y). In accordance with Article 4 "CR is distributed: the works of authors or other owners of the original CR being the Uzbek citizens or permanent residence in Uzbekistan, a work first published in Uzbekistan, regardless of nationality or permanent residence of their authors, and on the product of, guarded in the Republic of Uzbekistan in accordance with international treaties of the Republic of Uzbekistan." When creating electronic resources of electronic bases of information of libraries when we use someone else's work, must stick to this article.CR extends to publication and on non-publication works.

From this we can conclude that if you're going to figure textbooks, scientific articles, books, etc., you oblige to take into account the limitations puts law on Arbitrary Uses of replication of these works.

#### **4. Security issues for electron libraries**

The paper examines basic principles of electronic document delivery from the technological point of view.

Question important safety information, chat process of introduction of new information technology in all aspects of society.

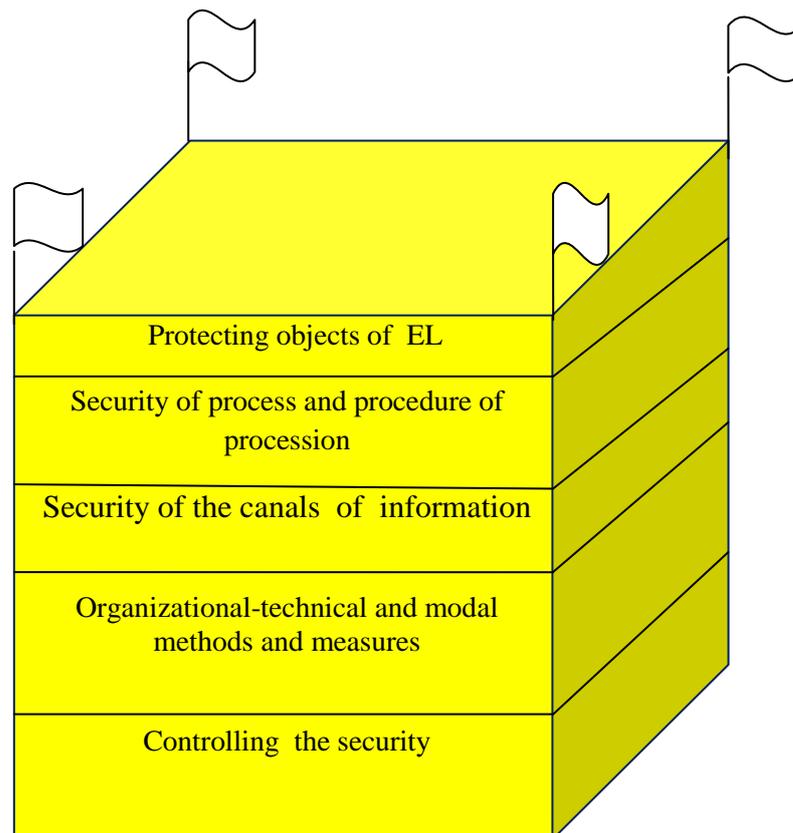
Vast scale uses of computers and telecommunication systems within the geographically distributed IP switching to paperless this basis, the increase in volume of information and increasing the use of lead to qualitatively new opportunity unauthorized access to resources and data information system, to their vulnerability.

That a threat of unauthorized use of the information now does more damage than, for example, "accidental" fires in the buildings or physical impact on employees. However, the cost of building information security system yet disproportionately small compared to the cost of protection against burglars or fire protection.

Unfortunately, at the same time constructing security systems are not limited to a simple choice of some of protect. For such systems must have some theoretical knowledge, as follows:

- What is a Secure Information System;
- what is the security system and what is required of it;
- What are the threats and causes of safety violations of information technology;
- what security features and how to be implemented as they are the threats and eliminate the causes of safety violations;

- how to build a comprehensive system of information security;
- how to achieve a high level of safety at an acceptable cost of information security, and much, much more.



Picture-№1. Some creatures for securing the electronic library

Ensure effective safety resources in the program KARMAT were solved following creations:

- to create of a system of bodies responsible for safety information;
- working out of theoretical and methodological bases of the safety information;
- to solve the problem of information security management and automation;
- to create a regulatory right base regulating all tasks to ensure safety information;
- to produce protection of resources;
- organize training for the protection of resources;
- prepare regulatory and methodological basis for the work to ensure the BIT.

Documentation of information prerequisite to include information in the information resources which are carried out in accordance with the organization of public authorities responsible for organizing paperwork, standardize and document arrays.

Retrieving a program KARMAT of information system gives the right to use resources only for those people who have the password and username for the use of resources. Entities Resources People's writer Utkir Khashimov the producers of the program KARMAT, which are created on their means, bought them legally, received a donation of his works was signed an agreement on the conversion of his works in digital format.

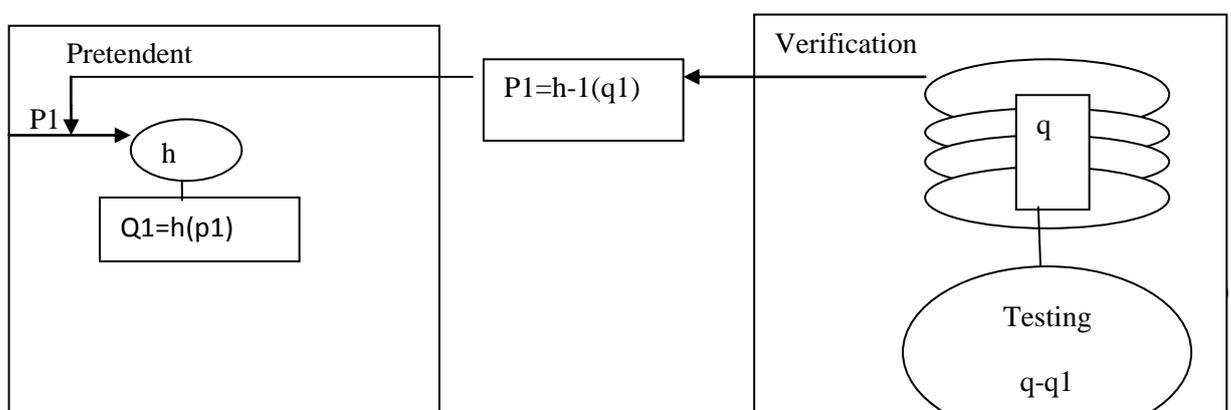
Since the works of writer Utkir Khashimov belonging mode and derivative products created in this case, we signed a contract.

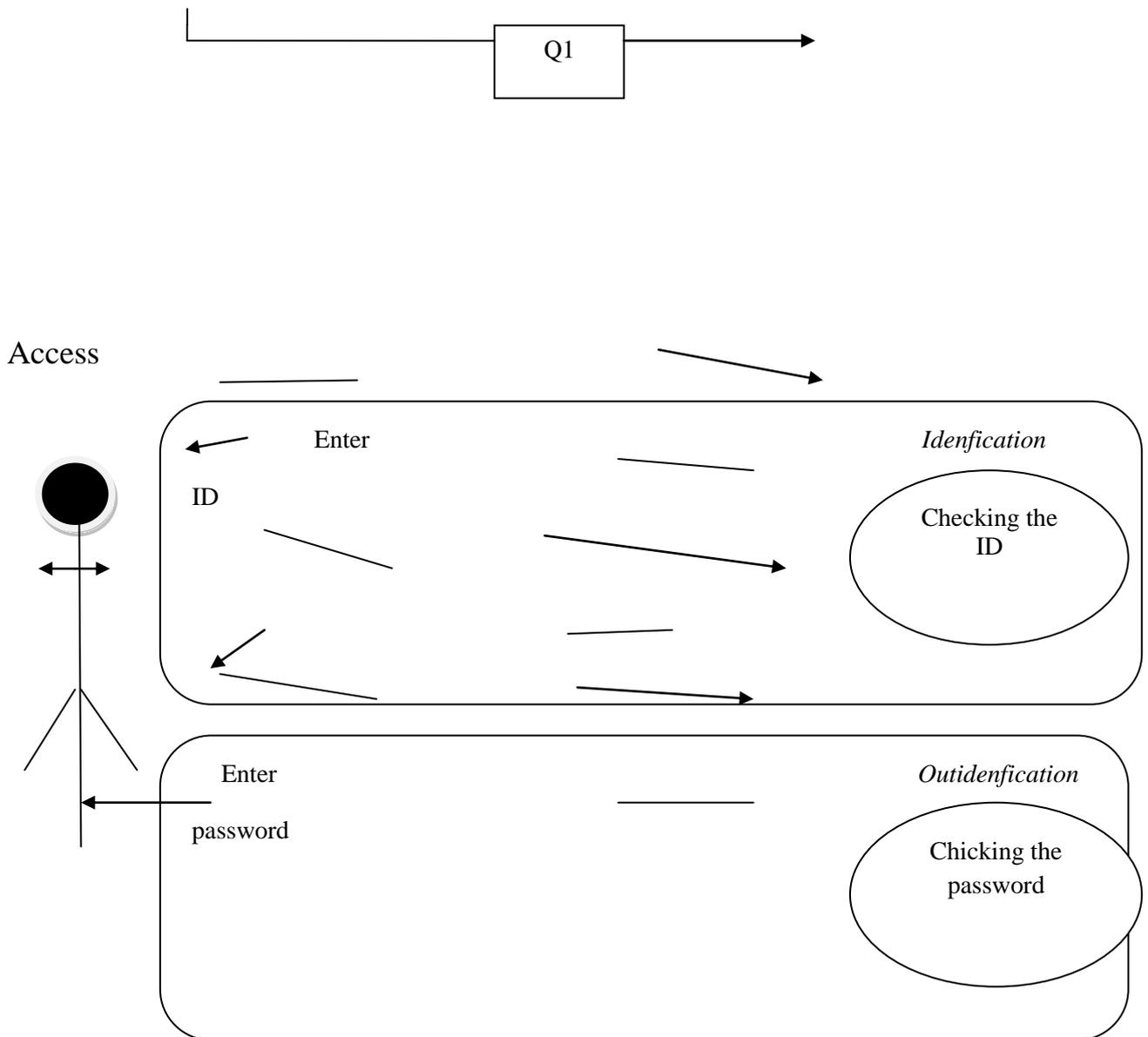
It may be noted that the producers of the program KARMAT as authorization person have the right to monitor the implementation of the requirements of data protection and to prohibit or suspend the processing of information.

CR extends as published and unpublished works. This law establishes the procedure for the user of the resource, specifying the place, time, policy-makers, as well as the procedures and provides condition of user access to resources in the digital library.

The electronic library of Utkir Khashimov an information system which gathered ordered all organizational documents (works of Utkir Khashimov) and information technology, including the use of computer technology and communications, implementing information processes.

The program KARMAT when a user types a password and username to login to the electronic library, the following operations to protect passwords during transmission:





Picture-1,2.Password protection for the transmission to the electronic library

When using e-runtime libraries with the program of KARMA considered authentication and integrity control separately from encryption algorithms can not give a considerable attention.

This e-library in the identification process is a one-to-one correspondence between the set of entities and multitude identifications. Identification allows us to distinguish the nature of the system for access control, auditing, etc.

Authentication an authenticated identity. In the process of identifying and authentications, the user or the program (the applicant) requests access the system (verifier). First is the identification. Verifier requires the applicant to show some

ID and verification to the presented set identifier ID registered in the system. When correctly identification verifier performs authentication(for example, asking for the password) to make sure that the candidate is exactly what it claims to access contender in only permitted in case of successful completion of the authentications.

Before using and for safety of electronic library, each user has the right to free trial registration as a resource for virtual reader. Electronic libraries not only allow users to access the full-text catalog but resources. Often the files are copied to the library on a variety of media as detected unauthorized use, and copyright. The problem becomes more complicated and due to the fact that users of electronic library can show your copied file to other users. The first is that the server can provide protection only access at the directory level, so if the user has access to the directory, you will receive access to all files contained in the directory. To minimize the risk in this situation, it is important by its associated way to from and manage the file system of LAN.

The second problem is in adequate mechanism protect local working stations. Copying user files to the e-runtime libraries to a local drive PC leads to the fact that the file is no longer protected by the means of protection, which protects it when it was stored on the server.

## 5. World electron libraries

When enter on the site <http://shakspeare.mit.edu/works.html> appears the title “The complete works of William Shakespeare”.

As written there it is the Web’s first edition of the Complete Works of William Shakespeare. This site has offered Shakespeare's plays and poetry to the Internet community since 1993<sup>12</sup>.

**There is a special map may press it and there appears all compositions of William Shakespeare**

<a href="#">Comedy</a>	<a href="#">History</a>	<a href="#">Tragedy</a>	<a href="#">Poetry</a>
------------------------	-------------------------	-------------------------	------------------------

---

<sup>12</sup> Жапарова А.Масофавий тармоқ ресурсларининг ахборот-кутубхоначилик хизматларини кўрсатишдаги ўрни // ICT NEWS .-2012.-№70.-Б.26-27.

<a href="#">All's Well That Ends Well</a>	<a href="#">Henry IV, part 1</a>	<a href="#">Antony and Cleopatra</a>	<a href="#">The Sonnets</a>
<a href="#">As You Like It</a>	<a href="#">Henry IV, part 2</a>	<a href="#">Coriolanus</a>	<a href="#">A Lover's Complaint</a>
<a href="#">The Comedy of Errors</a>	<a href="#">Henry V</a>	<a href="#">Hamlet</a>	<a href="#">The Rape of Lucrece</a>
<a href="#">Cymbeline</a>	<a href="#">Henry VI, part 1</a>	<a href="#">Julius Caesar</a>	<a href="#">Venus and Adonis</a>
<a href="#">Love's LaboursLost</a>	<a href="#">Henry VI, part 2</a>	<a href="#">King Lear</a>	<a href="#">Funeral Elegy by W.S</a>
<a href="#">Measure for Measure</a>	<a href="#">Henry VI, part 3</a>	<a href="#">Macbeth</a>	
<a href="#">The Merry Wives of Windsor</a>	<a href="#">Henry VIII</a>	<a href="#">Othello</a>	
<a href="#">The Merchant of Venice</a>	<a href="#">King John</a>	<a href="#">Romeo and Juliet</a>	
<a href="#">A Midsummer Night's Dream</a>	<a href="#">Richard II</a>	<a href="#">Timon of Athens</a>	
<a href="#">Much Ado About Nothing</a>	<a href="#">Richard III</a>	<a href="#">Titus Andronicus</a>	
<a href="#">Pericles, Prince of Tyre</a>			
<a href="#">Taming of the Shrew</a>			
<a href="#">The Tempest</a>			
<a href="#">Troilus and Cressida</a>			
<a href="#">Twelfth Night</a>			
<a href="#">Two Gentlemen of Verona</a>			
<a href="#">Winter's Tale</a>			

There is an announce for other Shakespeare resources, should visit the MR. William Shakspeare and the Internet web site. The original electronic source for this server was the Complete Moby (tm) Shakespeare. The HTML versions of the plays provided here are placed in the public domain<sup>13</sup>.

In the end of the Web site was written creator's name his e-mail (Jeremy Hylton, (jermey@alum.mit.edu ).

It is very comfortable site that for there were presented genre all of his compositions when press the link there appears full texts of his compositions. And there was announced the place where readers may buy his compositions.

On the site <http://eresources.lib.unc.edu/ebook/> have special links to the African-American poets (1750-1900) years of which have full text resources about 3,000 poems written by African-American poets in the late eighteenth and nineteenth centuries. And in this site has not arbitrary search queries.

**General information on the study of electronic libraries of writers and poets from all over the world have found the following results:**

<sup>13</sup> [http://www.study canada.ru/?action=articlear\\_id=550](http://www.study canada.ru/?action=articlear_id=550)

<b>№</b>	<b>The total amounts of found resources</b>	<b>Time</b>	<b>Language</b>	<b>Format</b>	<b>Number of the sheets</b>
<b>1.</b>	<b>5.210.000</b>	<b>18 second</b>	<b>english</b>	<b>PDF</b>	<b>22</b>
<b>2.</b>	<b>12.560.000</b>	<b>25 second</b>	<b>russian</b>	<b>PDF</b>	<b>25</b>

On the site [http:// www.works=e45v.gfytb.syrjkb0](http://www.works=e45v.gfytb.syrjkb0) has so lots of information about E-library of famous persons but links.

### **Conclusion on Chapter I**

First chapter of dissertation is called a development tendency of electronic libraries in the world.

It is about a development of information technologies and its impact on libraries, generations of computers, their formations, work functions and importance of new generation technologies with updated information.

Usage of lights on electronic calculating machines, an electronic devices of later period, creation of the first internal systems and their working functions were prescribed.

In the further parts there were given more attention about matters of creation of electronic libraries and prescribed importance of creating an electronic library and its implications.

With development of modern technologies, not only in calculation matters, in order to satisfy the demands of users in libraries, there is huge development in creation and implications of modern electronic libraries field. That is why in this

part, it is said about copy rights matters and their usage under the jurisdiction of related laws.

While considering above said matters, it is more elaborated the structure of defeating and securing from cyber wars to precious materials and information on electronic libraries today. In order to learn world experience, There have studied information of electronic libraries and their current situation of web sites of writers and poets of world.

## **2. Chapter: Methods of creating electron library of Utkir Khashimov**

### **1. Analysis of compositions Utkir Khashimov**

#### **Biographical survey of the life and work of Utkir Khashimov**

Main person of the Uzbek literature, very sharp figure, very respectfully writer, journalist, modern literature, people's writer Utkir Khashimov was born in 1941 on August 5 in Chilanzar district of Tashkent city.

His father Ataullahan Khashimov worked at the combine than worked in a camp that belonged to that combine. Utkir Khashimov left the world on May 24, 2013.

When he was a child, he chased after his brothers and went to school which was relating to Dumbirabad district. These ideas were widely opened by the writer in his novel about "Between the two doors".

In 1958, he graduated from high school and in 1964 he joined the faculty of journalism at the Tashkent State University (present National University of Uzbekistan named after Mirza Ulugbek), and at the same time also worked at the edition. His first collection of essays was published under the title "Po'lat chavandoz" when he was studying in his third year at the university. In 1963 April 17, the first of his art collection "To'rt maktub" was published in the newspaper "Toshkent haqiqati" (since that time has been celebrated as a holiday). His first novel, "Cho'l havosi" was published in the tenth issue of the Journal Star of the East. The national writer Abdulla Kakhkhar wished all the best for the activities of Utkir Khashimov. In 1965 he published a collection of stories titled "Gunafsha". In the same year, his drama "Odamalar nima derkin" was the first time shown by TV. "Bahor qaytmaydi," "Qlbingga quloq sol", "Dunyoning ishlari," "Ikki kara, ikki besh" stories, "Nur borki, soya bor," "Ikki eshik orasi", "Tushda kechgan umrlar", "Daftar hoshiyasidagi bitiklar", "Quyosh tarozusi", "Sirli yulduz", "Uzun kechalar", "O'zbeklar", "Badbaxtning tutqini", "Shumlik", "So'qqabosh bevagina" novels and other books have been very well accepted by readers. The books of "Notanish orol" and "Yettinchi mo'jaza" have psychological support young initiators. By compositions of Utkir Khashimov as "Hazon bo'lgan bahor", "Vijdon dorisi", "Inson sadoqati", "Qatagon", "To'lar muborak" were shot for television films. Thousands of several works of Utkir Hashimov were put in the educational process in schools, high schools and colleges. His four volumes of Chosen compositions as "Notanish orol", "Umr savdosi", "Hazon bo'lan bahor" and "Hadikli tushlar" thousands of times were published on demand. His works like "Shamol esaveradi", "Bahor qaytmaydi" "Qalbingga quloq sol", "Dunyoning ishlari" and "Ikki eshik orasi", "Tushda kechgan umrlar" are very much appreciated by readers. When every time you take his books you see that the artist is familiar. And say Oh! Here is a woman like my mother or that man so looks like to our neighbor from our yard. You think that you know the intellectual abilities of the man. A gifted writer tries to write stories of life and tries to suit with decorative

knowledge. The writer in each work individually suit to each staff and opens exactly their character<sup>14</sup>.

During 1995-2005 years four volume edition of selected compositions like "Nurli dunyo", "Umr savdosi", "Bahor sog'inchi", "Tushda kechgan umrlar" were published. And also were released for publication "Daftar hoshiyasidagi bitiklar", "Osmondan tushgan pul", «To'ylar muborak», «Shohruhning topishmoqlari», and other books of the writer. The book entitled "Nur borki, soya bor", "Dunyoning ishlari", "Tushda kechgan umrlar have been translated into other languages. About six of ten books were translated into other languages. And as the writer says, **"If the reader cries and laughs and worries during reading my compositions, I think I'm the happiest man in the world. When I write about the person in my story I have always tried to show our dignity openly"**.

The national writer Utkir Khashimov in total wrote three great novels, eight novels, three dramatic stories, as well as five great novels.

In the years 1969-1970, "Bahor qaytmaydi" again has been published.

In 1974, his novel "Bahor sog'inchi," was shown on TV forty times.

In 1977, a novel called "Nur borki, soya bor" was published a dozen time.

In 1978, under the name "Po'lat chavandoz" was shown on TV thirty times. In 1981 novel, entitled "Dunyoning ishlari" has been translated into different languages.

In 1983, for the story "Inson sadoqati" won government award of "Aybek".

In the 1984 television movie "Dunyoning ishlari" was shown more than thirty times. And also in the same year in the area of Djizzak region was built "Monument of mother" for the story, "Dunyoning ishlari" and received the State Prize.

In 1992, the first volume edition of selected Product of "Bahor qaytmaydi" was published twice.

1994 novel called "Tushda kechgan umrlar" was translated into English language in New York, USA.

---

<sup>14</sup> <http://www.izvestia.ru/health/article312769/>

In 1970-1971 the novel "Den' motil'ka" was published in Russian.

Utkir Khashimov not only wrote in the Uzbek and also in Tajik, Russian languages. Many compositions of the writer such as tragedy, satire, comedy, drama, psychological drama had been welcomed warmly by the readers. His stage works were acting in many theaters in the country. More than sixty of his compositions were translated into the Kirgiz, Tajik, Kazakh and Turkmen languages. The writer translated other world writers' dramatical compositions into the Uzbek language. Many of his works have been translated into English, Japanese, Indian and other languages.

The entitled "Nur borki, soya bor" was translated into the Bulgar language. Story of "Dunyoning ishlari" has been translated into the Vietnamese language and published as a form of book. The story is titled "Tushada kechgan umrlar" was published in the journal "Icarus" in the United States<sup>15</sup>.

Many of the dramatic works of the writer have been put in the theaters of Uzbekistan and abroad. In the words of the writer himself. -"**When I write somesort of story in the first place I give my wife, son, daughter and daughter-in-law to read. They read my writings and express their opinions, and then I give my compositions to the publication**". In general, the works of Utkir Khashimov "Qalbingga quloq sol" was published in 1997-1999, in 1973-1976 the "Daftar hoshiyasidagi bitiklar", in 1997-1999, the "Bir tomchi shudring" , in 1970-1971 "Odamlar nima derkin", in 1965-1967 "Po'lat chavandoz", in 1962-1964 the "Bahor qaytmaydi", in 1970-1999, the "Notanish orol" and other thinking, communication, jokes were released for publication in 1990-1991 twice times more than ever. In 2012 fifth edition of selected works was published in the edition "Sharq". Utkir Khashimov considered a great figure in art- literature, currently he works at the edition named after theatre. During the fifty years he was able to publish his works in the volume of two million as well as more than seventy books of his compositions were presented for readers.

---

<sup>15</sup> [http:// www.ebiblioteka.uz](http://www.ebiblioteka.uz)

## ANALYSING OF THE COMPOSITIONS OF THE WRITER UTKIR KHASHIMOV IN THE SOCIAL WEBS

The site WWW google.co.uz there are more than ten departments of the People's writer Utkir Hashimov and they are in the following order:

- 1 Department: "Daftar hoshiyasidagi bitiklar";
- 2 Department: Biography of Utkir Khashimov;
- 3 Department: Proceedings of Utkir Khashimov;
- 4 Department: Novel of Utkir Khashimov "Ikki eshik orasi".

If you pay attention to the first part you can find out that, under the title Essays on the lines of notebooks has five tabs in all tabs they indicate a link to site [www. she'rlar. uz](http://www.she'rlar.uz). Here are some sayings of all essays but there are no

In the second section focuses on the biography of Utkir Khashimov and found about three hundred and ninety-two information. Information about the biography of Utkir Khashimov in Russian. When going to the tabby footnotes,

The third section on the site Ziyonet.uz called "Figures", in the tab has the name of Utkir Khashimov with a personal photo. There is information about the life and work from 1968 to 1993, only in Russian language "Shamol esaverdi" "Osmondan tushgan pul" "Tushda

In the fourth section, there are one hundred forty-three thousand information about the novel of Utkir Khashimov. "Ikki eshik orasi" on the website [www.google.co.uz](http://www.google.co.uz). On the site Ziyonet.uz has information about the novel "Ikki eshik



- When asked about information on the works of Utkir Khashimov on site [www.google.co.uz](http://www.google.co.uz) were founded about 8560 eight five information.
- On-site [http:// www.forum.ziyonet.com](http://www.forum.ziyonet.com) was delivered in 2009 on 23<sup>rd</sup> of September writer's full story by name "Tushda kechgan umrlar", "Urushning so'nggi qurboni", "O'zbeklar" there were shown the links but when want to click the button to download it does not have access to download no foot notes to other data files;
- On the site [http:// www.ebiblioteka.uz](http://www.ebiblioteka.uz) of Tashkent State Pedagogical University named after Nizami has a section where says "Respectively leader of the people" it was in 2012 (by 70 years of National Writer Utkir Khashimov) there were written bibliographical in formation about writer. Here was talk about the stories of the writer, "Urushning so'nggi qurboni " for the 6 classes. And there were not also full bibliographic description of the writer's in periodical editions from 1992 to 2011. But there were no full text and there are no links to other sites.

other sites Literature.uz. The site contains information only in Russian. There is information about historian poets such as Atoi, Sakkoki and other modern writers as Utkir Khashimov. But there is no information about the creation of the modern figure of Utkir Khashimov. We are talking about the collection of essays published by the author in 1962 "Po'lat chavandoz" as well as stories information about selected books were written in 2001. But there are also no full text resources. There is no information about the life of National People's Writer Utkir Khashimov as in the sites My World, [http:// www. otherreferats.allbest.uz](http://www.otherreferats.allbest.uz), [http:// www. connect.uz](http://www.connect.uz), etc. These sites have only title under the name but there is no referring to other sites and there are not any full-text about the life and work of the writer. On the site connect.uz have resources of contemporary figures for the pupils

of classes 5 and 11. This site includes information in Uzbek, Russian, Spanish, German and French. But when press the button to download resource appears the word “no links”. It means that site this site was not created for the use and simply to the existence of. In one of the site uznet.uz has a sms by on-line system to Utkir Khashimov. There were written the next sentences: "Why don't you write the historical novels?" you do well. It was written by F.Sanaeva in 2010. The site uzbeklanguage.com on 13 September 2012 as written message to the writer (Writing in the margin of notebook, Daftar hosiyasidagi bitiklar). This site has only initial thoughts but there is no information about the responsible colleagues and there is no link. Also on the site mp3uz.there is only the name of the Utkir Khashimov but when press the button to the site find out an information about other singers. These sites are not viewed to meet the standards for service to readers. The readers confuse by finding information and resources on those sites. On the site ziyonet.uz were found 60 resources of Utkir Khashimov but these sites do not give a guarantee for authenticity.

ANALYZING OF COMPOSITIONS OF NATIONAL PEOPLE'S WRITER UTKUR KHASHIMOV													
Type of resource	Title of the book	Date	Story	Satirical story	Tales	Translate	For children	Stage composition	Thoughts	Memory of mentor	Novel	Comedy	Total
Selected composition №1	Икки эшик ораси	2012	1	1	6			3	1		2		14
Selected composition №2	Тушда кечган умрлар	2010											20
Selected composition №3	Нур борки, соя бор	2011	4	7	2	1	7			1	1	1	24
Selected composition №4	Дунёнинг ишлари	2009	4	4	1				2				11
Selected composition №5	Баҳор қайтмайд и	2009	9		5			1	2				17
Approved 2 languid, Volume 1	Баҳор соғинчи	2001	5	13	5			1	2				21
Approved 2 languid, Volume 2	Нурли дунё	1998	5						1		2		8
Approved 2 languid, Volume 1	Умр савдоси	1998	4	4	6						1		15
Approved 2 languid, Volume 2	Ҳадикли тушлар	2002	3	3	5			2			1		14

<b>ANALYSIS COMPOSITIONS OF NATIONAL PEOPLE'S WRITER UTKIR KHASHIMOV into WEBSITES</b>				
<b>Name of site</b>	<b>Story</b>	<b>General amount of the compositions</b>	<b>About writer's life and his oeuvre</b>	<b>Stage compositions</b>
Ziyonet.uz	140	8560	392	2
Google.uz	143	520	-	5
Googke.ru	-	5	-	-
Мой Мир	50	-	23	-
<b>Total:</b>	<b>333</b>	<b>9085</b>	<b>415</b>	<b>7</b>

## ANALYZING OF COMPOSITIONS OF NATIONAL PEOPLE'S WRITER UTKIR KHASHIMOV

### analyzing of books of Utkir Khashimov

#### Separately published books

Title	Date of publication	Feature article, thoughts	Story and tales	About other writers	Jokes
Po'lat chavandoz	1962	+	+		
Gunafsha	1965		+		
Bahor qaytmaydi	1970		+		
Bir tomchi shudring	1970		+		
Uzun tunlar	1973		+		
Qalbingga quloq sol	1973		+		
Badbaxtdala tutqini	1975			+	+
Uzun tunlar	1975		+		
Yer farzandi	1977		+		
Quyosh tarozusi	1980		+		
Dunyoning ishlari	1981		+		
Dunyoning ishlari	1982		+		
Oq kamalak	1984		+		
Sirli yulduz	1985		+		
Ikki karra ikki-besh	1987		+		
Notanish orol	1990		+		+
Ikki karra ikki-besh	1997		+		
Chorraha	2003		+		
Muhabbat	2008		+		
Badbaxtdala tutqini	2009		+		
Oq bulut, oppoq bulut	2010		+		
So'qqabosh bevagina	2010		+		
Osmondan tushgan pul	2010		+		
O'zbeklar	2010		+		

#### Published books in the Russian language

Title	Date	Novel	Story and novelette	Sorrow study
Kaplya rosi	1970		+	

Prislushaysya k serdtsu	1974							+
Dela zamniye	1982							+
Lastochki letayut visoko	1985							+
Tainstvennaya zvezda	1985							+
Dvaji dva-pyat	1985							+
Voyti I viyti	1989							+
Neznakomiye ostrova	1990							+
<b>Published books in the Moldovan language</b>								
<b>Title</b>	<b>Date</b>	<b>Novel</b>			<b>Story and tales</b>			<b>Thoughts</b>
Den motilka	1970				+			
<b>Some novels</b>								
<b>Title</b>	<b>Date</b>	<b>Novel</b>	<b>Story</b>	<b>Satirical story</b>	<b>Tales</b>	<b>Composition</b>	<b>40<sup>th</sup> years of thoughts</b>	
Nur borki, soya bor	1977	+						
Nur borki, soya bor	1981	+						
Ikki eshik orasi	1986	+						
Ikki eshik orasi	1989	+						
Tushda kechgan umrlar	1994	+						
Ikki eshik orasi	1996	+						
Nur borki, soya bor	1998	+					+	
Ikki eshik orasi	2000	+						
Nur borki, soya bor	2001						+	
Ikki eshik orasi	2007	+						
Daftar hoshiyasidagi bitiklar	2008						+	
Tushda kechgan umrlar	2009	+						
Yettinchi mo'jaza	2010					+		
Daftar hoshiyasidagi bitiklar	2011						+	
Dunyoning ishlari (in Latin)	2011					+		
Ikki eshik orasi (in Latin)	2011	+						
<b>Published books in the Russian language</b>								
Svet ne bez teni	1979	+						
Svet ne bez teni	1983	+						
Mejdu dvux dverey	1987	+						
Svet ne bez teni	1987	+						
Sokrovishe	1987	+						
Voyti I viyti	1989	+						

## 2. Methods of cataloguing in corporative IRC on automated system

The program KARMAT was made by using the last Web technology, so this special model of this program may give chance to have electronic-bibliographical resources of connected IRC by Internet system.

So for creating an electron library of Utkir Khashimov was firstly chosen work place by name "Work place of the cataloguer" and the work begins by pressing the button "Électron catalogue".

To enter a new literature into the electronic catalogue should press the button "'To open a new field'. There is shown that by entering the log and password may enter the system.



Pic-1

To begin cataloguing system the button by name "Électron catalog" should press. Here presenting an electron library of Utkir Khashimov is connected with files which are in PDF format.

The positive sides of the PDF are, you may enter full-texts of Utkir Khashimov by entering links. As said above, the value of this electronic library Utkir Khashimov is that users may have full-texts and electronic catalogues in any time.

To enter a bibliographical elements on KARMAT system first of all one should choose the field of the cataloguing. It works by entering log and password. After opening the face one should press the button by name "Elektron katalog". Then find the field "Work place". And should the following commands as "Katalog" and should choose the organization where it was created.

Ishchi sahifa: Журнал ёки газетанин ▼ **Katolog:** Уткир Хошимов ▼ [Uzbek](#)

---

Ma'lumotlar bazasi(Katologlar) bo'limi

Muassasa: **Уткир Хошимов** ▼

Pic-3

Pic-3. Here is shown Work place (General parts of the periodical publications). It was chosen Work place (Utkir Khashimov) from the catalogue. Then should press the button to add a new literature.

On picture-4 should choose the language of the resource.

Pic-5

On the picture-5 should enter the name of the creator.

Ma'lumotlar bazasi(Katologlar) bo'limi

Сериали нашрнинг алоҳида номери

		Tahrirlash
001 0	Nazorat raqami	UZ/CR/16900000921
005 0	Tahrirlangan vaqt	2013-04-16 17:15:13
001	Nazorat raqami	
008	Nazorat maydoni	
020	ISBN Indeksi	+ 130416q      uz q       Ouzb
022	ISSN	
040	Kataloglashtirish manbai	
041	Nashr tili	+ ^A^uzb
090	Shifrlar	
100	Muallif	
245	Sarlavha to'g'risida ma'lumot	+ ^A^Ўзбек тили ва адабиёти^С^алишер на
250	Нашр ха?ида маълумот	^A^1958 йилд январдан Ойбек асос солга
260	Чи?иш маълумотлари	+ ^A^Тошкент^В^Фан^С^1978
500	Ilova	^A^590 нуска

Pic-6

On the picture-6 is shown that periodical publications of the writer has to enter in three steps. Here is shown how to fill the separately number of the series publications. After that all fields should fill step by step in correct form.

520 A Annotatsiya

Ушбу мақолада ёзувчи Ўткир Ҳошимов турли хил ҳаётий ҳангомалари билан ўртоқлашган.

Pic-7

On the picture-7 is shown that to enter elements in all processes different so may add additional fields to this catalogue, it is made by Administrator of the base. The Administrator has right to add or take off some fields at working. When was entering bibliographical elements on the catalogue it was added the field by number 520. There were entered Annotation.

901 T Хужjat tipi b- серияли нашринг таркибий қисми

900 A То'лиқ matn \\192.168.0.1\exchangel\ИНФОРМАЦИОННЫЙ ЦЕНТР\Ўткурий Обзор... 1 mb

gacha

Qaytish Qo'shish Tozalash

Pic-8

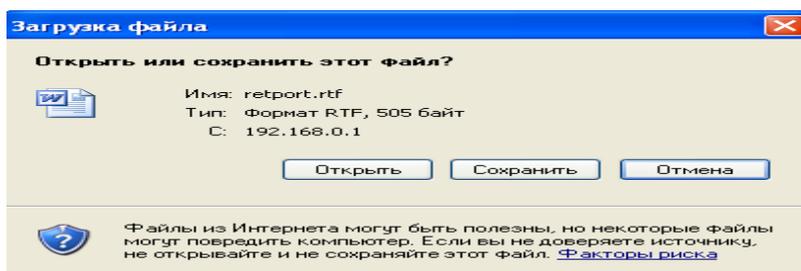
By the picture-8 may see that periodical publications of Utkir Khashimov were entered into the catalogue in the end was chosen the field 900 A to connect the full-text which was cut in a smaller piece.

After filling all the necessary fields should press the button "To add". After that one may continue entering of bibliographical elements.

Chop qilish Export

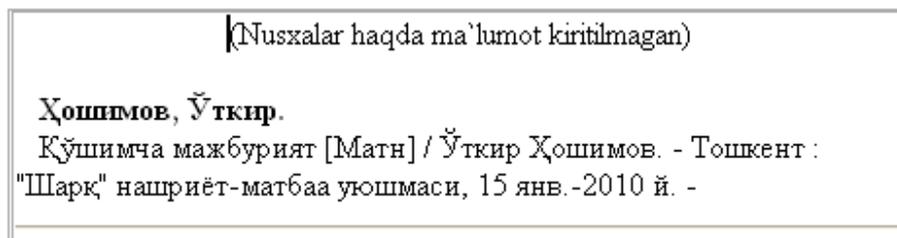
Ko'rsatiladigan soni: 50

Pic-9



Pic-10

On picture-9 is shown that in the process of the entering if librarian forgets in what field she stopped or confused then may press the button To print by using the mouse of the computer. On picture-10 is shown after pressing the button To print appears the face To open. May see it is correct or not.



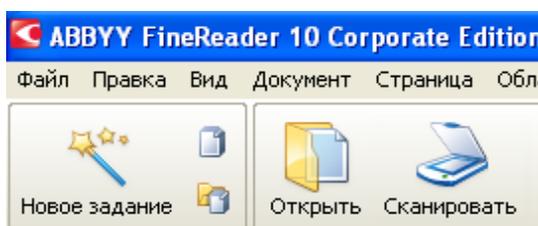
Pic-11

On picture-11 by pressing the button To print will find the following view.



Pic-12

On picture-12 is shown there are compositions of Utkir Khashimov in the Russian language. To enter his compositions in Russian language should press the button Russian. So were entered bibliographical elements from the hand book of the writer Utkir Khashimov about 8 hundred and were connected with scanned full-texts from his selected compositions by number 1-5 volumes. His selected compositions were scanned on the programs FINE READER 10<sup>th</sup> and a scanner SCAN TWAIN 330/330.



Pic-13

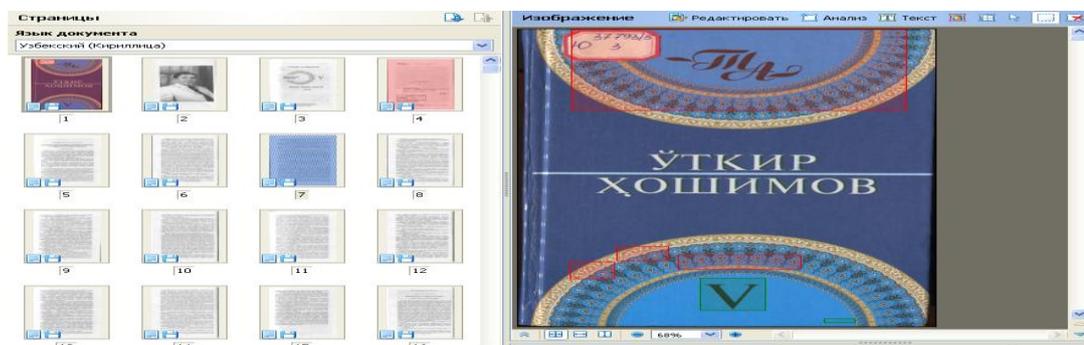
On picture-13 is shown how to start the work on program Fine Reader 10<sup>th</sup> version.



Pic-14

On picture-14 is shown after beginning the work on program.Fine Reader 10<sup>th</sup> version should save the document in anywhere. By pressing the button Save will appear the field where should fill by name of the book

Then was started work of scanning.



Pic-15

On picture-15 is shown after scanning the book, it was edited to delete unnecessary sides of the book.

After that the scanned book was recognized to save in PDF format and it is in the picture 15.

After scanning and processing of compositions Utkir Khashimov were connected to base of the electronic catalogue. Connecting discription to the electronic catalogue is done in the following way.

Initially before creating the EL bibliographical information which belong to the documents were entered into the special fields.

Then on the field 900 A was connected with full-text file by pressing "Survey".To check if the full-text was connected with catalogue there is a button "Inform\_KARMAT" it is situated in the low of the Interface.

To cancel the connection, click the button that is located on the right side of the interface.The user of the electronic library may have full-text file of Utkir Khashimov's composition which is connected with e-catalogue and he sees it in his own electronic library.You can see the full-texts which are connected with e-library by pressing the mouse of computer on special button.

**To enter descriptions into the e-catalogue of program KARMAT there are three ways in whole:**

1. To enter information by hand into the fields of the system;
2. By copying ready bibliographical resource;
3. To create the base of the e-catalogue may use from special 'dictionaries' (handbook).

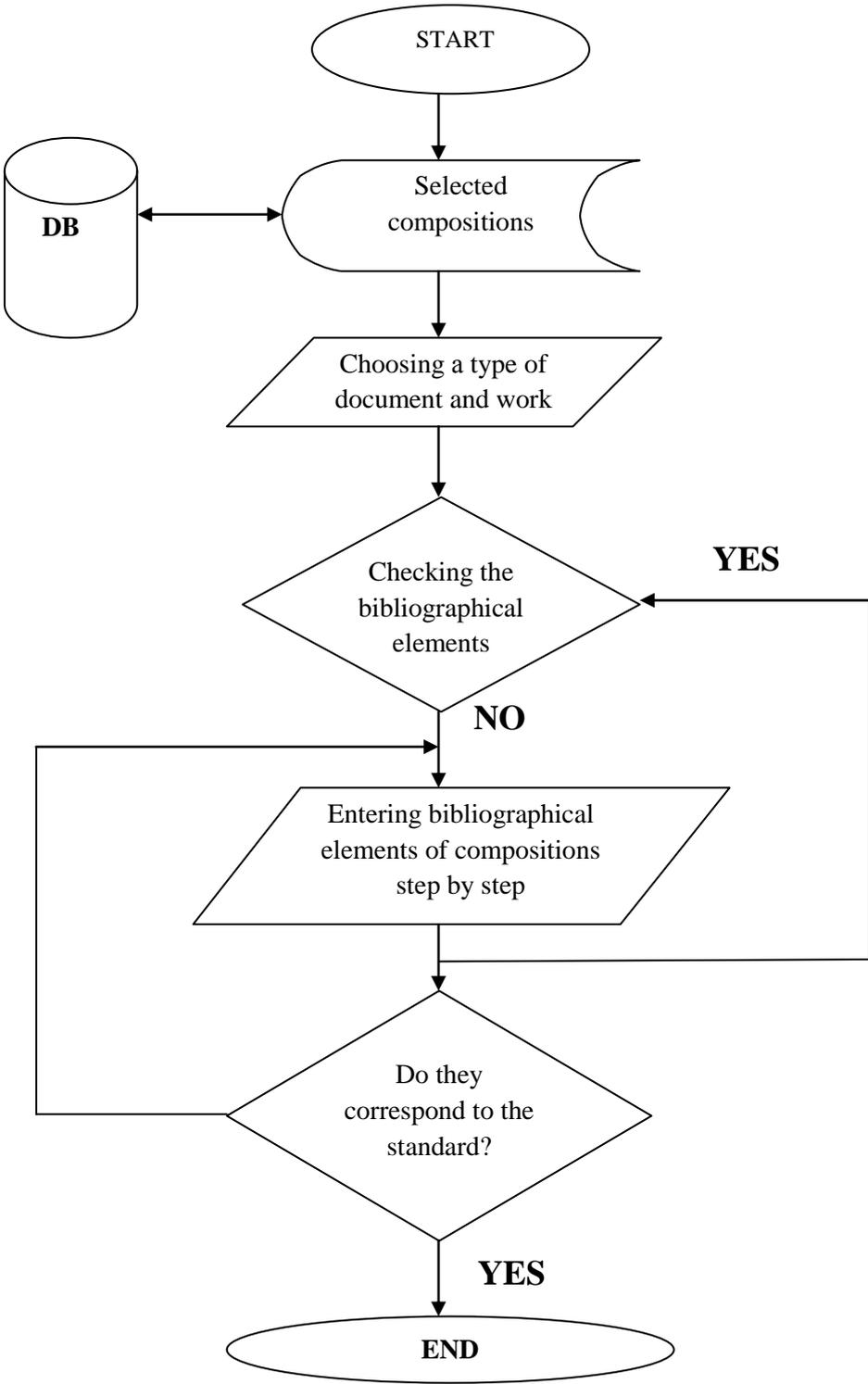
To create an electronic library (database) of Utkir Khashimov's compositions on program KARMAT. There were entered bibliographical descriptions into the e-catalogue and were used some methods. For instance in some cases were used special "dictionaries" for creating an electronic library of Utkir Khashimov as the fields as "Publishing office" and "Date of publication". There were used information which were in it. There is a field where was entered out information which is situated on the right with three dots so were entered information. The base of encyclopedia is filled with dynamical method and by entering special words. It fills its base automatically. The name of the publishing office with the windows (filling field is at the bottom of the window select the information with the cursor when you press twice the computer mouse. After that information appears on the selected field.

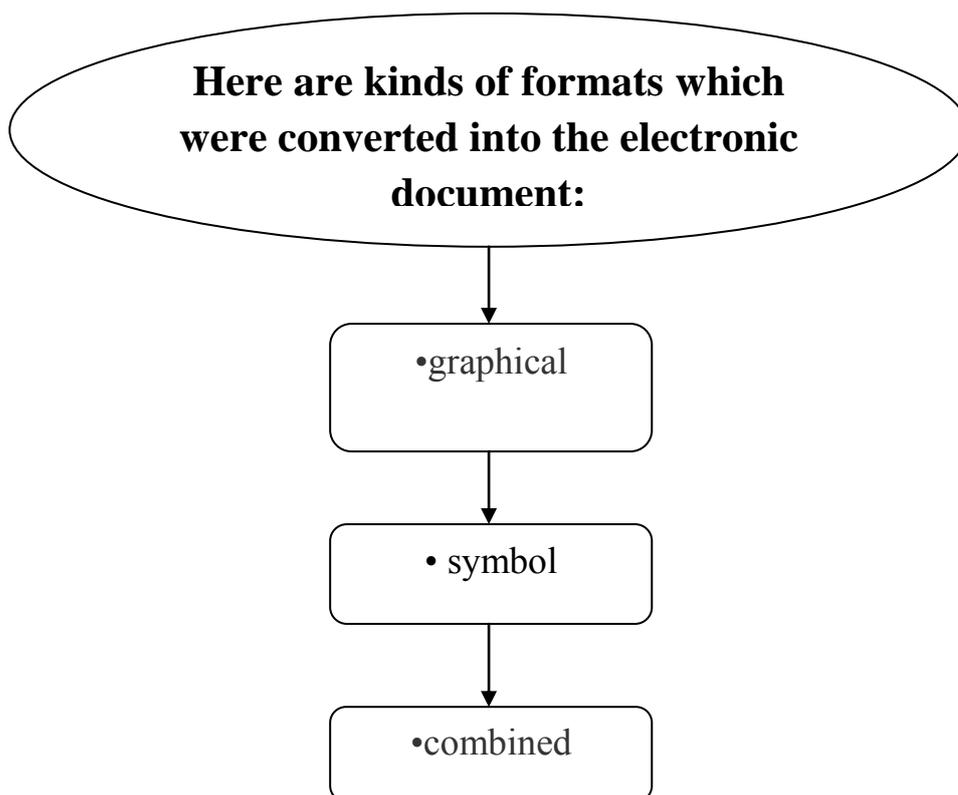
Entering bibliographic elements in that way firstly helps to fill the base of an electronic catalogue faster. Secondly it helps to use ready descripts and will control mistakes during the process of entering. To print the bibliographic descripts of the electronic catalogue from the database first should choose the descripts then press the special button "To print" which is on the left of the interface. Then should press the «To open» button. There is a chance to print bibliographic descripts through the printer. Higher said opinions that created electronic library on base of the Fundamental Library of the Academy of Sciences of Uzbek Republic. By the merits it will be in the corporate system. So, this electronic library by category of refers belongs to the department of Library Science at (index 78) and cataloguing process at index 78.37.

In 2012 was published bibliographical hand book with the responsible colleagues were Tashkent state institute of culture named after Abdulla Kadiri and National library of Uzbekistan named after Alisher Navoi.

In that way of entering one author's bibliographic elements into the catalogue. If it is necessary to process the discript should do special exercises.

# CATALOGUING ALGORITHM

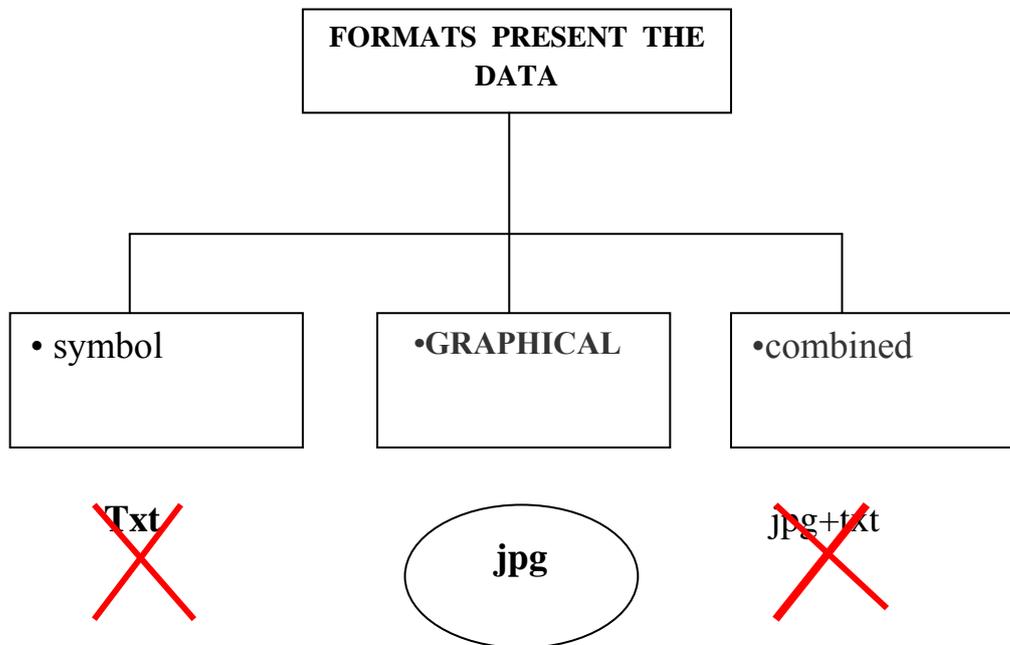




**At present, there are three main ways of  
Presenting in for mation in an electronic library:**

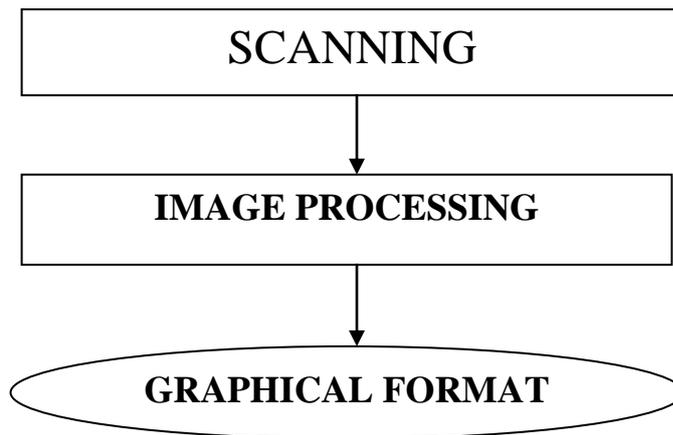
- graphical
- symbol
- combined

To create a database of National People's writer Utkir Khashimov on the program KARMAT we have used the PDF format in the next case, the first printed edition of the event represented as a set of graphic images of pages that provides high fidelity of the original. In this case, there are no many opportunities to work with the texts, in particular, there is no way to conduct lexical search. Graphical representation of data is implemented on the basis of format pdf, djvu, jpg, etc.

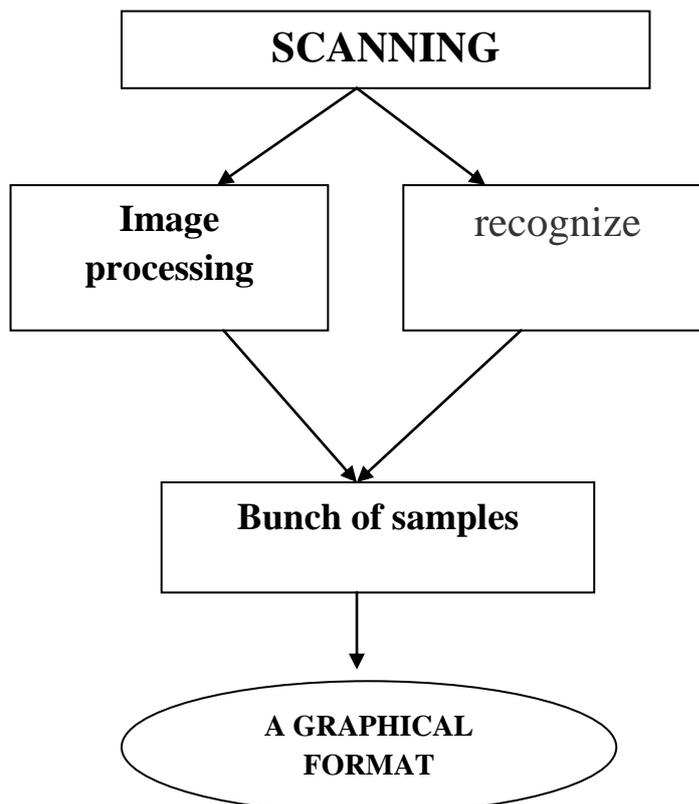


For technological preparing of information for the electron library of Utkir Khashimov depends on selecting a method of information. The first, on the purpose of the electron library and secondly, the size of the funding for the preparation of the information. Each of the discussed methods which require a certain technology, and the cost of information processing that is loaded into an electronic library that can vary greatly. In each case of the implementation process seems to be quite a large set of operations related in some way. Here is the integrated scheme of the process of preparation of information for each method of presentation. A series of operations that do not depend on the method of presentation (Acceptance of printed originals, bibliographic maintenance, process control, etc.) are not shown. In one form or another they are present in any process, and no appreciable effect on the value of preparation. Scanning is also a common operation; however it is presented in the diagrams as a very substantial and in some sense the initial.

## Processing period of compositions of Utkir Khashimov



Perhaps the most time-consume of operation is processed of image as it requires skilled manual experience and takes a lot of time on current regulations. In the case of the graphical representation, it plays a fundamental role and requires a special care, since this is the original text - the reader gets an exact graphic of image in the original. The impact of the individual errors for the results of the lexical search is not as great as it might seem. It follows that the first process of flow can be reduced.



Considering the graphical representation of information, we believe this approach is preferable, because the works of the writer was scanned by using the following technical equipments:

- Fine Reader program 10<sup>th</sup> version;
- SCANTWAIN 330/330 scanner.

These benefits play an important role in shaping the architecture of the electronic library as a server providing simultaneous access to a wealth of information.

Here is shown samples of one bibliographical elements of Utkir Khashimov's composition:

<b>№</b>	<b>Field and under field</b>	<b>Title of field and under field</b>	<b>The rule for entering information into the field and under field</b>	<b>Rating</b>
<b>1.</b>	<b>090</b>	<b>Shifrlar</b>		
1.1	X	Author element	<i>K 23</i>	Enter by hand
<b>2.</b>	<b>100</b>	<b>Muallif</b>		
2.1.	A	Surname, name, middle name	<i>Khashimov U.</i>	Enter by hand
<b>3.</b>	<b>245</b>	<i>Title</i>		
<b>a</b>	<b>Title</b>	<i>Mashina sotaman</i>		Enter by hand
<b>b</b>	<b>Continued title</b>	<i>Satirical story</i>		Enter by hand
<b>c</b>	<b>Information about the responsible</b>	<i>Painter V.Karimov</i>		Enter by hand
<b>h</b>	<b>Physical description</b>	<i>Text</i>		Using the reference book
<b>260</b>		<i>Exit information</i>		
	A	Date of publication	<i>Tashkent</i>	<b>Using the reference book</b>

4.2.	B	Publishing office	<i>Young Guard</i>	<b>Enter by hand</b>
4.3.	C	Year of publication	<i>1981</i>	<b>Using the reference book</b>
<b>5.</b>	<b>300A</b>	<b>Physical description</b>		
5.1	A	capacity	<i>40 p.</i>	Pages of book enter by hand
5.2	B	Other physical characteristics	<i>il.</i>	Enter by hand
<b>6.</b>	<b>500</b>	<b>Annex</b>		
6.1	A	Annex	2500 copies	<b>Enter by hand</b>
<b>7.</b>	<b>700</b>	<b>Other authors</b>		
7.1	A	S.N.M	<i>KarimovV.</i>	Enter by hand
7.2	E	Role of human	<i>Painter</i>	<b>Using the reference book</b>
<b>8.</b>	<b>091</b>	<b>Index of KBK (DOS)</b>		
8.1	A	Index of LBC (DOS)	<i>78.36</i>	Enter by hand
9.	<b>520</b>	<b>Resume</b>	<i>This satirical story is very interesting fact that the hero of the story has different situations when he sells his car in the market.</i>	Enter by hand
<b>10.</b>	<b>040</b>	<i>Heart of cataloguing</i>		

10.1	B	Langua, code. .	<i>uzb</i>	Using the reference book
<b>11.</b>	<b>041</b>	<b>Language of publication</b>		
11.1	A	Language code of the text	<i>uzb</i>	Using the reference book
12	900	a	<b>Full-text</b> <i>Mashina sotaman</i>	To connect the full-text into the bibliographic element should press the button ‘’Survey and should find the file where it was saved early.

Here is an overview of bibliographic description after entering into the catalogue:

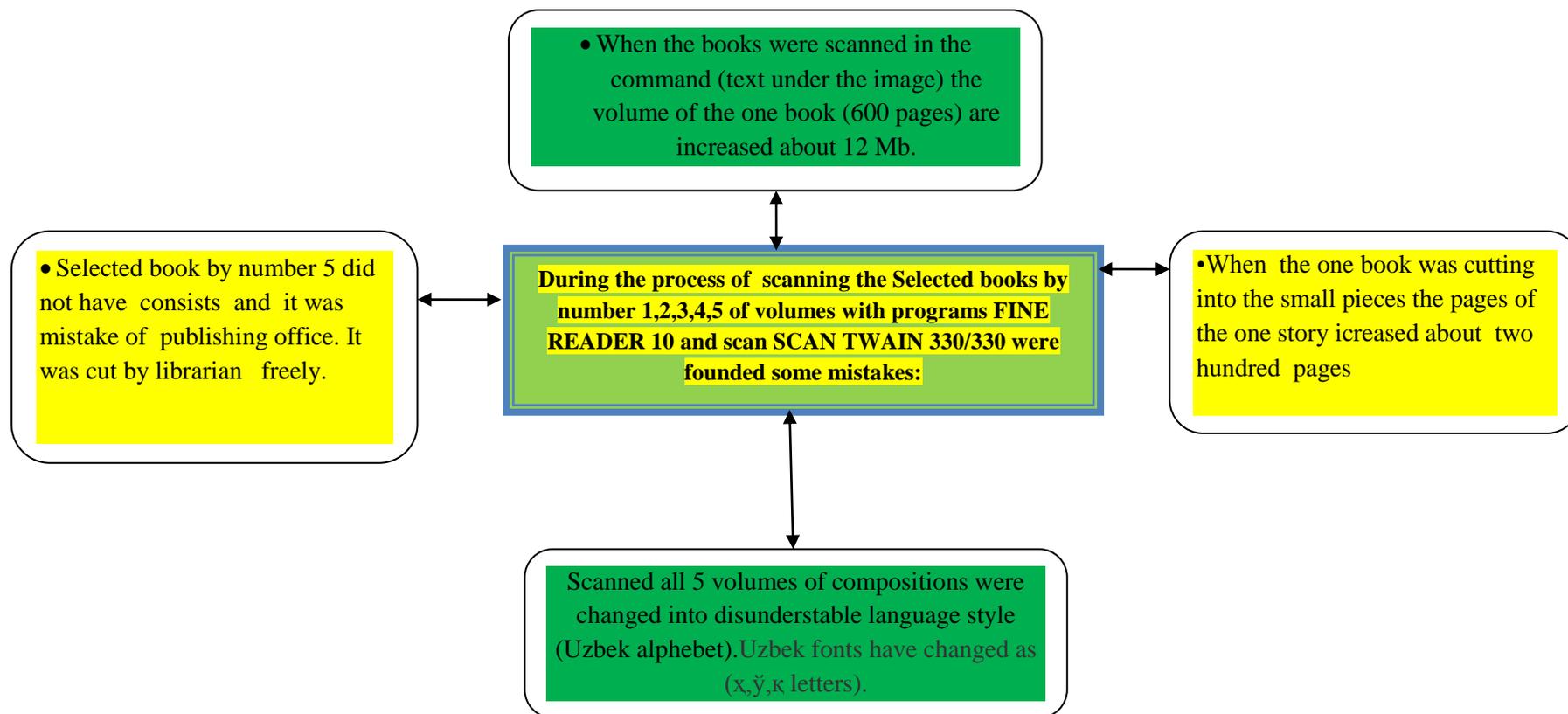
**Khashimov U.**

**H-55**

Mashina sotaman [Text]: Satirical story / U. Khashimov; Painter V. Karimov.-Tashkent, 1981.-40 p.- (“Kulak” library).

**78.36**

During the process of entering writer's discription into the program KARMAТ were fund some technical problems. The program KARMAТ is on the base of Fundamental library of the Academy of Sciences of the Republic of Uzbekistan so it was often switched off and when were entering elements on the field by hand that program hasn't saved the entered information. Under shown scheme of opinions discribe mistakes.



### **3. Electron library of the works by Utkir Khashimov**

Electronic library (database) of the National People's writer Uzbekistan Utkir Khashimov was established in the Fundamental Library of the Academy of Sciences of Uzbek Republic in the department of Electronic resource.

To date, corporate automated system of KARMAT has been installed in much information - resource centers at colleges, high schools of the Republic.

An electronic library of Utkir Khashimov created on the basis of the Fundamental Library of the Academy of Sciences of Uzbek Republic gives users a chance to get a processed the digitized information of the fund all parts. In addition, users are able to registrate on a corporate system and after that may download the full texts of the writer on the information carriers as (CD, DVD, BD discs, flash drives, mobile devices, computer). Some users do not have enough information about electronic webnet. When we talk about electronic webnet should realise that it means a global Internet web or local net. So it is in one any organization. Our database is in the Fundamental library of the Academy of Sciences of Uzbek Republic and it switch on the local system.

To serve readers in the corporative-automated system KARMAT at the Fundamental library of the Academy of science of the Republic of Uzbekistan was established the database of Utkir khashimov's compositions. To create electronic library of Utkir Khashimov was used the program KARMAT where were entered about seven hundred of bibliographical elements of books and about two hundred elements of periodical articles. And were written the summaries for each articles which were published in the jurnals and newspapers. At the end were connected Selected compositions of author by number 1-5 and scanned works of (81). There are about 200 (two hundred) tales which are in Uzbek, Russian and less part in other languages. And about 100 (one hundred) articles in many themes in the jurnals and newspapers. There are also talking articles with editors from newspapers.

There are articles were written by friends of the author for his congratulations 50, 60, 70 years in the electronic library.

There was connected his first story by name “Cho’l havosi”.

All written works of Utkir Khashimov well respond from the readers of different generations. To create a convenience for readers was created, the electronic library of the writer. The library has stories, reflections, tales, articles about him, and articles which were written by him about the other figures.

From the beginning we have tried to connect his compositions with KARMAT system from 1962 to 2013. Up to date Utkir Khashimov written about two hundred scientific-publication articles and was published his 5<sup>th</sup> selected composition book in the last of 2012. During creating electronic library were solved security of the library and by choosing (free, for money and accord) by program KARMAT.

**For creating electronic library of Utkir Khashimov was focused on some creatures:**

Firstly, to create an electronic library should have technical base (computer technologies, scan equipment, printer, nets and etc.) obviously later that, objects belong to creation and life Utkir Khashimov are saved in the computers. All resources are saved into the server which is on the base of the Main library of science of Uzbekistan. Objects belong to him are saved in some computers so, users of this e-library can freely respond. If the first computer is out of order the second one will be ready to serve readers in the library. The users of the e-library can use it by on-line system. There is an electronic net in the library for that each library should have WIFI, ADSL, WIMAX systems;

Secondly, automated corporate system of information-resource centers KAPMAT is chosen. This program is very comfortable for operator and for user;

Thirdly, were destroyed some factors which are dangerous:  
-Provide security from the "virus" which falls via the Internet;  
-Provide security from "Virtual Hacker" for that not let them to destroy unique resources so you must choose the following resolution as "Free access, through payment or accord". Each access into the corporate system should register as a subscriber and will get ID-card number to access the e-library;  
-For destroying problems while working in the corporate system. This process is analyzed in the work with KARMAT.

For using an electron library of Utkir Khashimov user should enter password into the box and should to press button "Enter".

Choosing name of the Organization from the interface. For researching any composition of UtkirKhashimov should fill the next fields like title of the book, key words and authors name and there is a button for whole researching and short researching on this program.

Muassasa:  ▾

Kod:

Muallif:  ▾ Boshlanadi ▾

Sarlavha:  ▾ Butun qidirish ▾

Kalit soʻz:  ▾ Boshlanadi ▾

### 3-picture

Kod	X	Nomi	Soni
70	<input type="checkbox"/>	<b>Hoshimov O'tkir</b> Dunyoning ishlari : qissa / Hoshimov O'tkir. - Toshkent : Sharq, 2008. - 208 b;.	
55	<input type="checkbox"/>	<b>Hoshimov O'tkir</b> Dunyoning ishlari : qissa / Hoshimov O'tkir, Zakirova G. - Toshkent : Shaq, 2011. - 208 b.	

### 4-picture.

Picture-4. Appears the following view when search. By means of automated system simple and extended searching actions can be activated.

**On the base of the Fundamental Library of the Academy of Sciences were introduced the following 1-5 selected works of Utkir Khashimov which were scanned and made as full texts:**

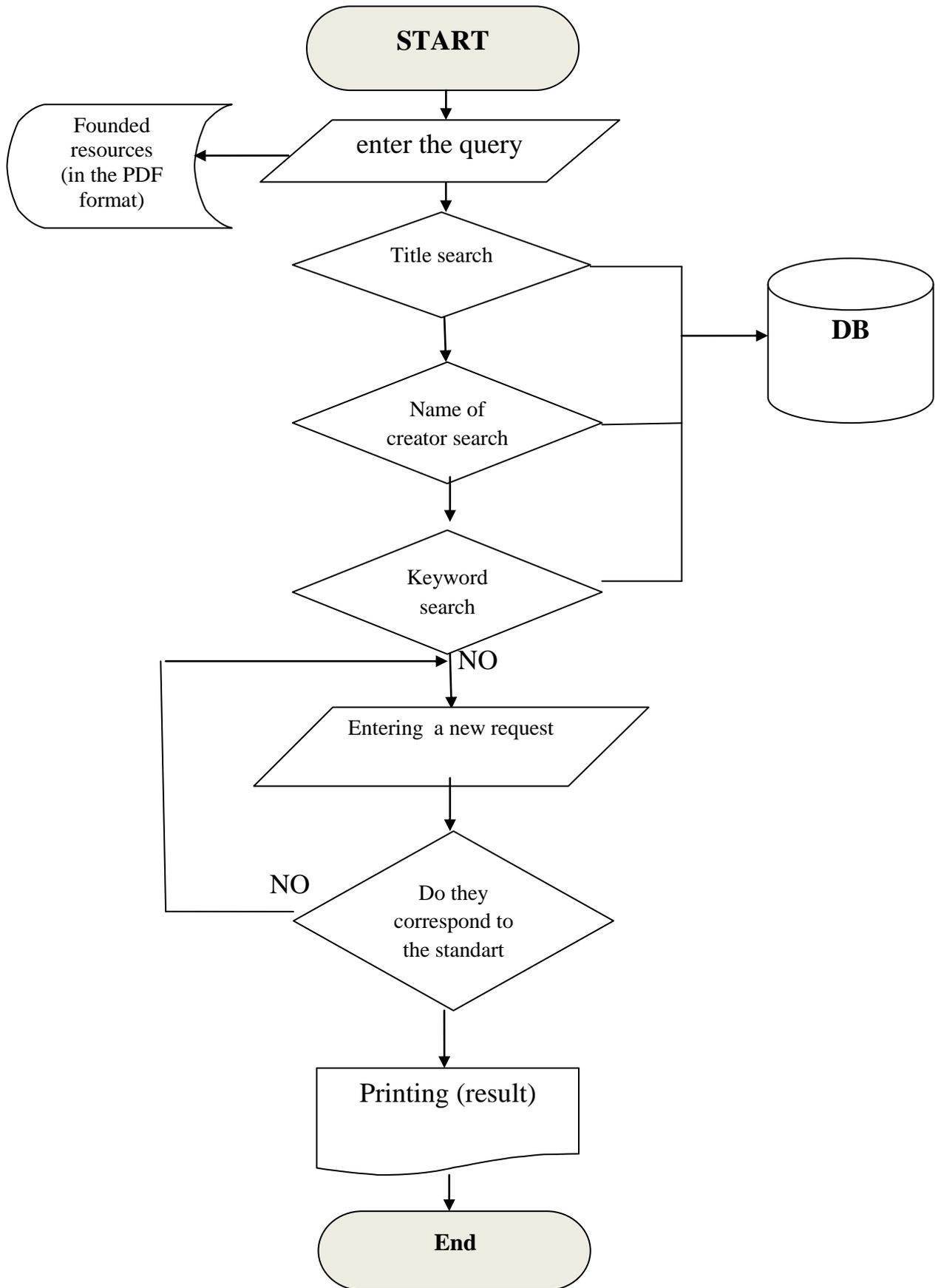
№	Title	st or y	Tales	Thoughts	Stage compo -sition	Satirical story	Novel	Trans- lation	Memory	For children
1.	Selected composition №1	2	9	5	1		-	-	-	-
2.	Selected composition №2	2	2	1	-	3	-	-	-	-
3.	Selected composition №3	-	4	2	-	7	2	1	1	1
4.	Selected composition №4	2	5	2	-	10	3	-	-	-
5.	Selected composition №5	3	5	2	2	-	3	-	-	
	Total:	9	26	12	3	20	8	1	1	1

On the base of the Main Library was created digital library of Utkir Khashimov. The database of Utkir Khashimov consists of 81 full texts of selected books 1-5 volumes. They operate in the following order:

There are 9 tales, 26 stories, 12 thoughts, 20 satirical stories, 3 scene compositions, 8 novels, one translation, one about teachers and one for little children. All scanned composition were remade and connected to the system's catalogue.

User of the e-library may use these resource by entering their password any time of year.

# SEARCH ALGORITHM. PROGRAM ALGORITHM



**HERE ARE SHOWN STEPS OF CONVERSION OF WORKS  
INTO AN ELECTRONIC FORMAT OF SELECTED  
COMPOSITIONS 1-5 VOLUMES OF UTKIR KHASHIMOV**

The books were founded from the libraries

SCANTWAIN 330/330 was switched on

FINE READER 10 was switched on

After clicking on the command should press on command the New window.

Write down the title of the book and press the button "Save"

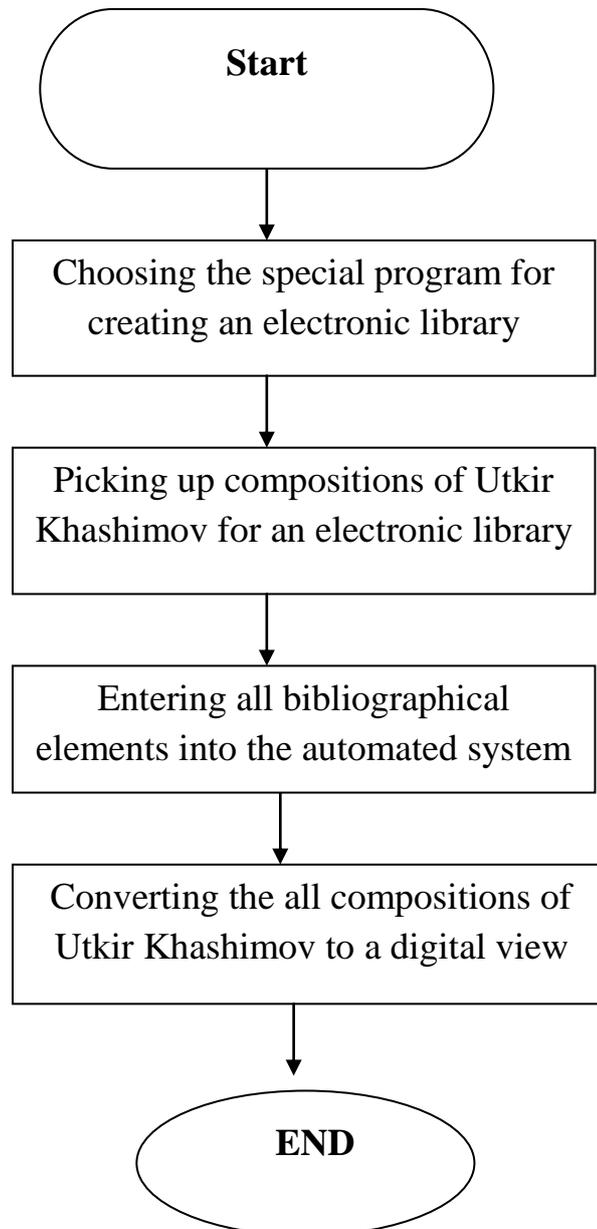
Pressed the button To scan and then pressed the button To start

After scanning all 5 volumes of books, were editad. Editading helps to remove unnecessary parts of the books by pressing the botton To cut

After was pressed the button Exit then was pressed the button

After analyzing it was saved as in PDF format

## CREATING ALGROTHM OF AN ELECTRONIC LIBRARY OF UTKIR KHASHIMOV



**HERE IS SHOWN HOW TO USE THE ELECTRON LIBRARY WITH ALL CONVINIENCES:**



Users of the electronic library may have information about funds, order books and can control the process of booking. There are plenty of databases in the electronic library so can search other resources. It helps to corporate operatively between the users and the e-library;



The user may have full-texts of Utkir Khashimov in his own e-cabinet;



The user may have information by pressing the buttons “Searching” va “Widely searching”;



The user may have about 6 hundred bibliographical elements of periodical publications and about 2 hundred books which were published from 1962 till 2013;

## **Conclusion on Chapter II**

This chapter is the heart of the dissertation and called methods of creation database for electronic library. In this part there has been a system analyze about the situation of novel's of Utkir Khoshimov in a different social web pages. In order to create a catalog of novels of the writer, it has been structurally analyzed the selected publications and other special and periodical publications genre. Moreover it has been elaborated quantity of Utkir Khashimov's novels in social web pages.

It has been described in an analytical scheme of the chronologic and genre of the novels of the writer.

Methods of cataloging of novels of Utkir Khashimov in an automatized system of corporate information resource center has been learnt. Algorithm of cataloging works, sequential a view of pictures of work has been described in scheme.

Following requirements for creating electronic library of the novels of Utkir Khoshimov, to created electronic library and develop other matters which is important had been studied. Vision of an electronic catalogue of a single creator's book, usage algorithm of an electronic library, problems in creating an electronic library had been elaborated.

### **3. Chapter: Functional and organizational structures of electron library**

#### **1. Organizational structure of electron library**

An organizational structure becomes from English language and it is the collection of ways in which the labor process is first divided into individual work tasks, and then reached the coordination of action to address the problems (Henry Mintzberg, "Structure in the fist").

In fact, the organizational structure specifies the distribution of responsibility and authority within the organization. As a rule, it is displayed in the form of organizational charts a graphical design, elements of which are hierarchically ordered organizational units (departments, job positions). We may say that document establishing the quantity and quality of business units and a schematic showing the order of their interaction with each other. Company structure is established based on the scope and content of the problems solved now, the focus and intensity of prevailing in the enterprise information and documentation flows, taking into account its organizational and material resources.

An organizational structure consists of activities such as task allocation, coordination and supervision, which are directed towards the achievement of organizational aims.

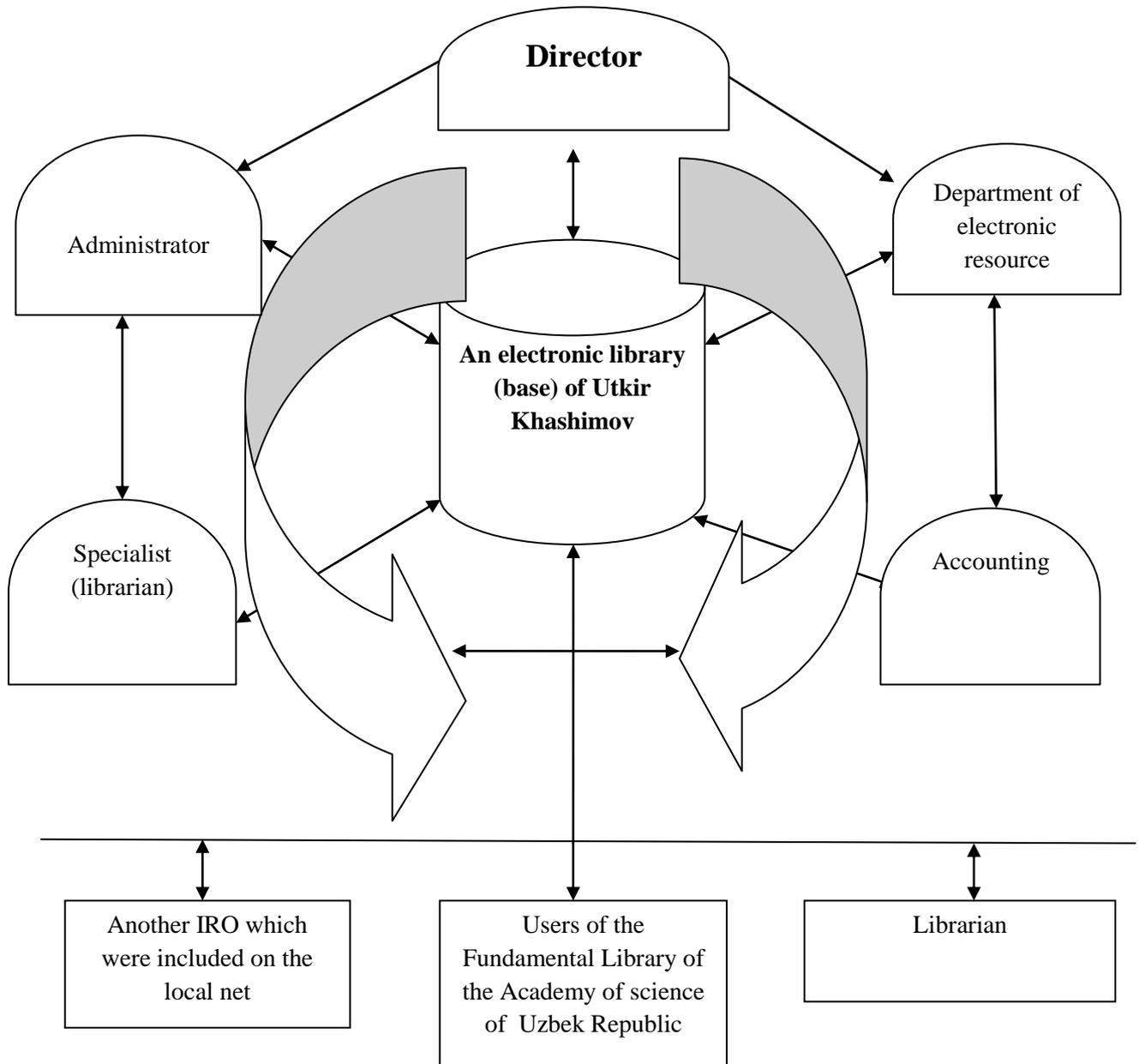
Organizations are the variant of clustered entities. An organization can be structured in many different ways, depending on their objectives. The structure of an organization will determine the modes in which it operates and performs.

Organizational structure allows the expressed allocation of responsibilities for different functions and processes to different entities such as the branch, department, workgroup and individual.

Organizational structure affects organizational action in two big ways. First, it provides the foundation on which standard operating procedures and routines rest. Second, it determines which individuals get to participate in which

decision-making processes, and thus to what extent their views shape the organization's actions.

### The organizational structure of creating electron library of Utkir Khashimov



## **The organizational structure of creating electron library of Utkir Khashimov**

1. Director joins activities of all departments and manages them;
2. Work of administrator includes that he sets the program KARMAT, opens up a new database and add the fields if it is necessary;
3. Department accounting finances credits it transfers money for the purchase of equipments;
4. Department of electronic resources scans allocated funds, serves readers by using program KARMAT and creates convenience for the creation of this database;
5. Bibliographer-librarian is taken at work for that he should entry bibliographic records in the program;
6. Base Utkir Khashimov is created in the Fundamental Library of the Academy of Sciences of Uzbek Republic and the base will be in a corporate network;
7. Users of the Fundamental Library of the Academy of Sciences of Uzbek Republic and the corporate network can use the electronic catalogue and full text of 1-5 volumes of the writer;
8. Librarian should help users to use an electronic database.

## **2. Functional structure of electron library**

The functional structure-a structure in which job positions are group to or organizational units on the basis of the functions they perform. The main function determines the direction of the economic role of the organization.

The main functions include purchasing, finance, marketing, production and management as a whole, including operations that are as associated with the hiring of staff. Function, without which the organization can do in the absence of specific regulations, which requires precise execution of these functions are referred to as options. Additional features include accounting, security, research and development, personal management (except for hiring and firing) and the work of the secretariat. Functional organization is a type of organizational structure that uses the principle of specialization based on function or role.

It allows decisions to be decentralized since issues are delegated to specialized persons or units, leaving them the responsibility of implementing, evaluating, or controlling the given procedures or goals. Functional structure employees within the functional divisions of an organization tend to perform a specialized set of tasks, for instance the engineering department would be staffed only with software engineers. This leads to operational efficiencies within that group. However it could also lead to a lack of communication between the functional groups within an organization, making the organization slow and inflexible.

As a whole, a functional organization is best suited as a producer of standardized goods and services at large volume and low cost.

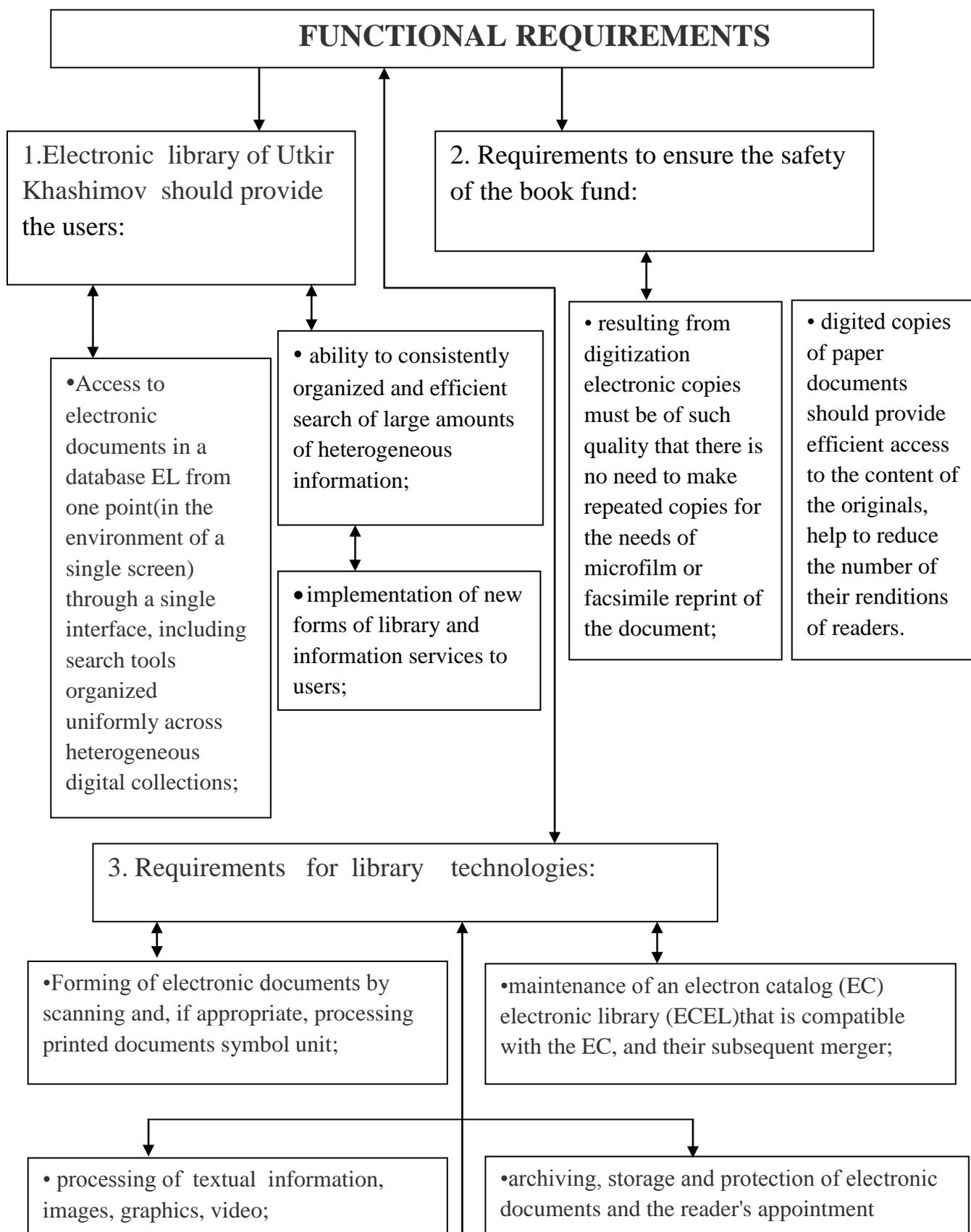
**THE FOLLOWING TERMS ARE VERY IMPORTANT  
FOR EL:**

-EL has become one of the most common library and information technology, which allows taking into account the requirements of the copyright information to provide users with a comfortable and personable service;

E-journals and e-books have become part of the fund and the part of the user experience; it often increases its presence in this area;

E-books on off-line technology (readers, gadgets) received a major boost in distributing and using in recent years of the past decade and certainly have a greater positive outlook nearly in the future;

-Book market is rebuilt, traditional and electronic media will exist and compete for a long time and libraries should all take this into account in planning and organizing fund service system, taking into account of course and the interests of all categories of readers.



**EL of Utkir Khashimov focused on a wide range of users and solves the following main tasks:**

•education, in which form the collection aimed at spreading general knowledge of works of art as a whole and on specific aspects;

•designed to promote learning topics (subjects) scientists and experts of high-level training;

• For readers of cultural studies, experts in the field of social sciences and humanities;

•education, which provides a framework to support both formal and non-formal education, by providing not only training material, but also the necessary additional literature the form of authoritative monographs;

•reference aimed at the need to meet the information needs of the disposable nature on a wide range of knowledge, based publications are encyclopedic;

**The databases of Utkir Khashimov's compositions  
in the software**

-Generating electronic collection of the writer, on the one hand, on the basis of its most valuable collections of documents in the traditional sense, determining their value in terms of the global and national culture.

**Identifies the following key sources of acquisition of full-text documents  
for EL:**

-receipt of electronic documents from external sources (websites, purchase of electronic documents on optical compact discs, transfer of full-text documents in PDF format readable form by the creators /owners);

-scanning of documents;

-trans missing of electronic versions of the product of Utkir Khashimov into the corporate union of the Republic;

-creation of a work of electronic documents of Utkir Khashimov;

**Adopted the following procedure for the formation of the fund EL**

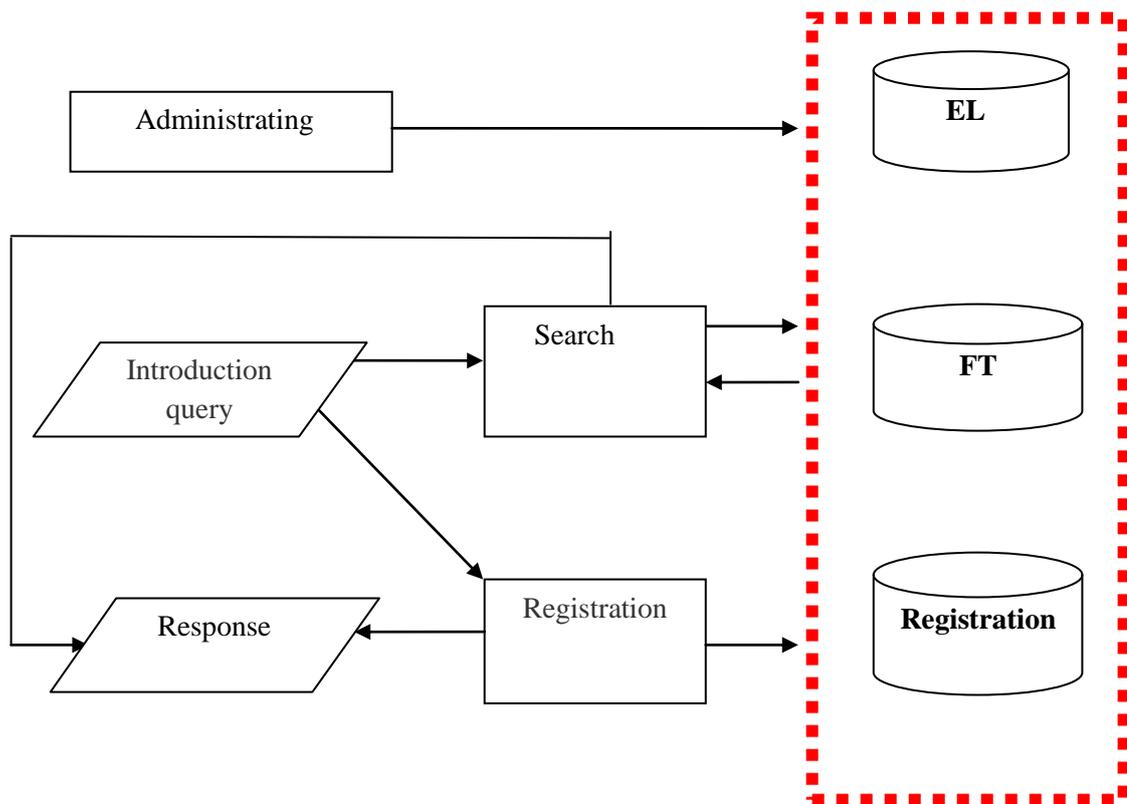
-projects for creating of digital collections for inclusion in EL served to readers of the direction;

-lists projects included in the digital collections of documents considered at the meeting of the department "ICT and library systems" and the Fundamental Library of the Academy of Science of the Republic of Uzbekistan to digitize books;

-project can be accepted as a centralized (within FLAS);

-The main directions of control: the issue of documents to scan and return.

## The functional structure of electron library of People's writer Utkir Khashimov



**This structure consists of two parts: an administrator and a user**

- The administrator controls the base, creates an opportunity for connection to the user decides to deliver all the features of resources.

In the process of managing administrator controls coming and going of database over the network.

To create a database of National People's writer Utkir Khashimov was resolved following functional requirements for electronic library determined the answers to some important questions:

- Heterogeneous products include electronic documents library;
- establish a single search engine for heterogeneous collections of national writer Utkir Khashimov;
- What forms of library and information services will be presented to users in an electron library?;
- How to ensure safety of funds e-library.

Depending on what methods of acquisition to be used are determined by the most important features of digital libraries. For example, if the e-library will be formed by digitizing, it is important to decide on the use of face recognition technology and, possibly, proof of recognized texts.

When digitizing works of People's writer Utkir Khashimov was used a program FINE READER 10<sup>th</sup> version and a scanner SCAN/ WAIN 330/330.

An important role in the conception must take legal matters. If you plan to transfer to digital editions of copyright, it is necessary to clearly define the principles and details of relationships with all the owners.

To create an electronic library Utkir Khashimov principles, sources and organization of fund acquisition of digital library concept were given six volumes of his qualifying works in general, because these issues in more detail revealed in the Regulations for the electronic library and the profile of its acquisition. Similarly, define the general economic principles of functioning.

The purpose and general principles of base Utkir Khashimov it was mentioned above that the main task of the library was using the program KARMAT and meets the information needs of specific user of groups and provide full-text works in PDF.

And also, it's not just about the theme and content of the species fund, but also about how to present information in digital libraries, its accuracy, timeliness, completeness, and other quality characteristics.

When creating an electronic library of Utkir Khashimov's compositions were considered to match the needs of consumers of features: a wide range of users, the easier it should be the functionality of the system and its interface. For advanced users need to provide far greater opportunities than for the mass market.

### **3. Implementation of electron library of the works by Utkir Khashimov in the IRC**

In the frame of national task of shaping the information society in Uzbekistan and integration in corporate information society by providing free access to a variety of user information resources project to create an electronic library database national writer Utkir Khashimov aims to achieve the following objectives:

- ensuring the availability of documents, the provision of which is difficult or restricted to readers (e-catalog, art books are not available to most libraries, etc.);
- ensuring access to information, existing only in electronic form;
- Provide users qualified new opportunities to work with large amounts of machine-readable data;
- targeted information provision artistic culture and education through the provision of full-text databases in a mode of remote access.

#### **EXPECTED RESULTS**

- A single database (the fund), containing electronic documents with a single user interface from a single point of access to all collections that make up the database EL of Utkir Khashimov;
- The system of metadata in the EL is in the first place - the online directory.

Now for the implementation of the program KARMAT with a base of writer spends the next survey is in some universities. In order that would determine whether the need for joining corporate EL among the Universities. It was selected students from the 2 and 4 courses and analyzed by 6 questions. On the question of whether there is a desire for full-text resources:

№	If an electron library is necessary for IRC of universities	2 <sup>nd</sup> course	4 <sup>th</sup> course	Average index
1.	Availability of full-text resources	62,2	57,8	59,9
2.	Internet access	49,2	52,5	50,5
3.	The presence of an electronic library	49,0	46,3	48,0
4.	A wide range of periodicals	38,7	32,9	35,9
5.	Having an electronic catalogue	32,9	34,1	34,1
6.	Availability of documents on media	28,2	30,9	29,6
7.	The presence of informative website of library	21,5	19,7	20,7

Corporative EC gives users access to electronic information resources, and the resources of the world information space. Among the three most important characteristics of modern libraries EC called complete book collection, internet access and the availability of digital libraries.

The selection and development of the corporate connections of university libraries is very important.

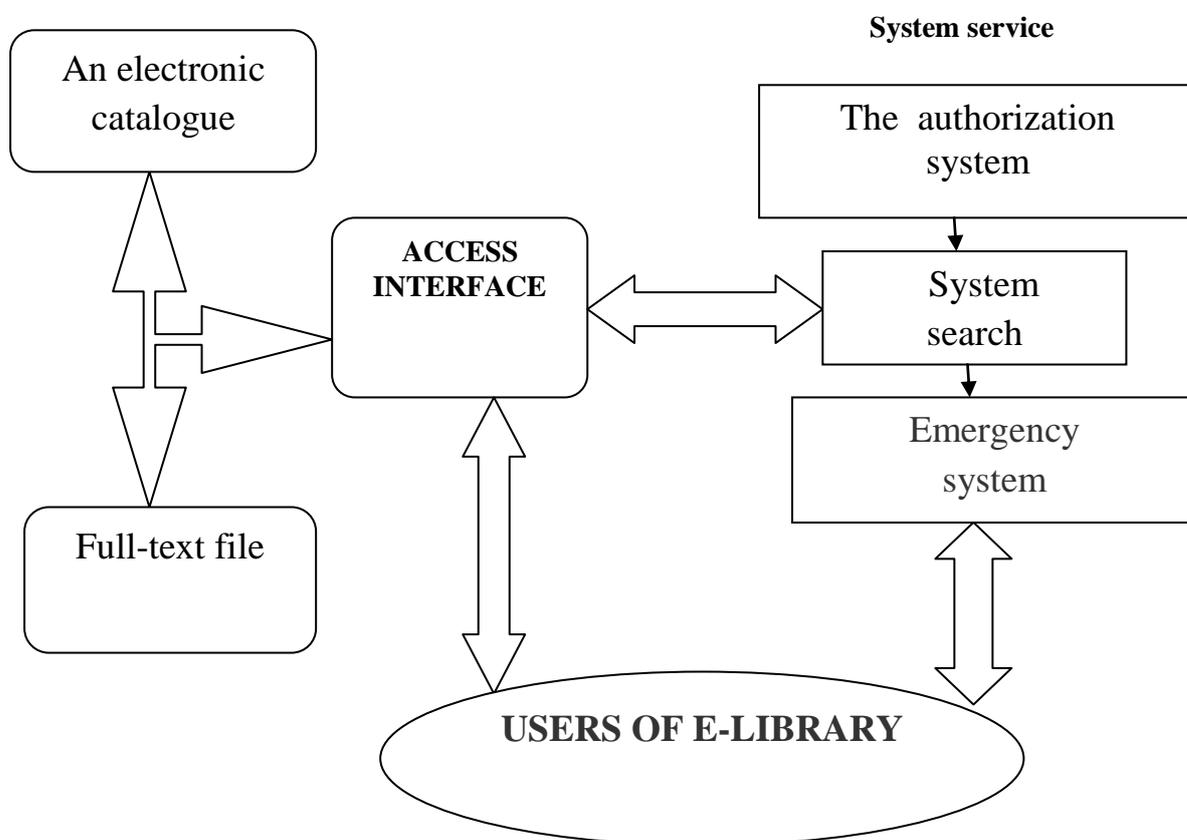
**Here are shown the most important potensional features of Utkir Khasimov's e-library into the corporative system**

The name of service	RATING									
	very important		rather important		rather not important		not at all important		indecisive response	
	2	4	2	4	2	4	2	4	2	4
Access to the databases of Utkir Khashimov via the Internet	39,6	545,2	332,0	226,5	112,2	112,7	77,2	66,2	88,9	99,4
Submission of electronic catalogues and full-text files of writer	23,0	225,3	333,1	330,5	119,3	118,6	114,3	114,2	111,0	110,7
Access to download his compositions	35,2	440,8	332,2	330,2	114,4	99,8	88,3	77,8	66,3	66,2
Access to EL anytime	9,9	99,1	226,9	225,9	225,8	119,4	117,2	117,9	222,4	112,5

If to analyz the base of Utkir Khashimov into the corporate consolidated base and were answered three universities for the following pharameteres: (Taskent State Pedagogical University named after Nizamii, National University of named after Mirza Ulugbek of Uzbekistan and State Institute of Art and Culture of Uzbekistan.

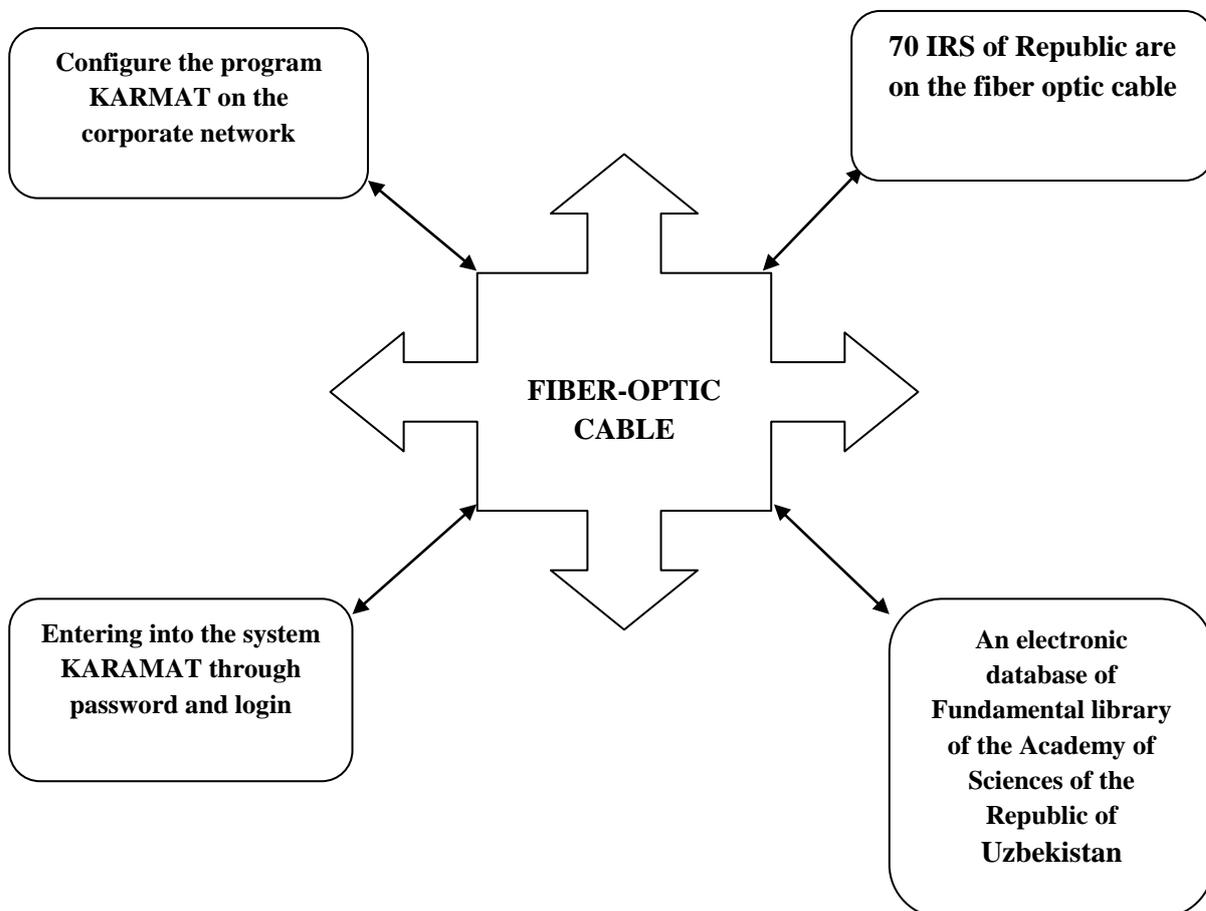
**Nowadays here are shown results and what kind of information wants to get from the corporative system**

Type of document	Typed form			Electronic form			Form don't matter		
	2 <sup>nd</sup> course	4 <sup>th</sup> course	Average index	2 <sup>nd</sup> course	4 <sup>th</sup> course	Average index	2 <sup>nd</sup> course	4 <sup>th</sup> course	Average index
Educational literature	72,6	60,6	66,3	9,1	19,3	14,4	18,3	20,1	19,3
Compositions	68,6	57,2	62,65	16,0	24,9	20,55	15,4	17,9	16,8
Reference publication	49,2	39,9	44,1	27,8	36,6	32,5	23,0	23,5	23,4



*The structure of an electronic library*

## Implementation of electron library of Utkir Khashimov's composition in IRC



### **Conclusion on Chapter III**

In this chapter, it has been described by scheme the organizational and functional structures of development of an electronic library of the novels of Utkir Khashimov. There has been defined about organizational structure of the electronic library of the novels of Utkir Khashimov in the electronic base of Fundamental library of Academy of Sciences of the Republic of Uzbekistan.

In later parts, functional structure of electronic library of the novels of Utkir Khashimov and important parts of electronic library have been described.

Essential requirements of functional structure, importance of the electronic library of novels of writer and duties has been described by schemes in sequences.

There has been given information for user about acquiring information on programmed structure, usefulness and sequence of usage of the Electronic library of the novels of Utkir Khashimov

## Conclusion

This dissertation written on the level of Master's degree consists of three chapters; it deals with the development of informational technologies and its influence to the information-resource centers and also new computer machine generations, their creation, working functions and the importance of working new generation machine with modern Mass-media.

It is pointed out the usage of lamps in electric calculating machines, later the appearance of first integral schemes of electric appliance and also took into consideration carrying out the working principles.

In the next chapters there was paid much attention to the problems of creating electronic library and here is dealt with the importance of creating electronic library.

Appearance of new technologies allows us not only carrying out calculating principles but also in order to supply the needs of users of information resource centers, to create electronic resources on the system of information library the works of presenting them carrying out a very high speed. Therefore there was mentioned above copy rights to the electronic library, and the play of their usage under the law.

Taking into consideration above mentioned ideas we can say that here is discussed the problem of preventing the attacks from the information resources in electronic libraries.

In order to learn world experience there was learnt today's condition and the aim of creation electronic library of the compositions of world writers and poets.

Being the heart of the chapter, this chapter is called forming the base of information of electronic library. In these analyses Utkir Khashimov's compositions are seen in different social sites. In order to catalogue writer's compositions selected compositions and the genre of the other publications are analyzed.

Besides that Utkir Khashimov's compositions are learnt in social sites from the point of view number.

Writer's compositions are pointed out chronological and genres analyze scheme.

Utkir Khashimov's compositions are learnt corporative information resource centers in automatic system in cataloguing way.

The algorithm of cataloguing, sequence of the work is shown in pictures and schemes.

The requirements putting forward to create electronic library of Utkir Khashimov's compositions, in creating electronic library and organizing it there has been learnt some other problems.

There was spoken about shortcomings in creating electronic library, the algorithm of using electronic library, the view of electronic version of the author's book.

In this chapter there was shown the creation of the electronic library, its organizational and functional structures as a scheme.

In creating electronic library of Utkir Khashimov's composition there is given the textual definition in creating e-library's organizing structure, the organizing structure of the Fundamental Library of the Academy of Sciences of the Republic of Uzbekistan.

In the next chapters Utkir Khashimov's e-library's functional structure, e-library's important features are shown schematically.

The main requirements given to the functional structure, the importance of e-library of the author's compositions and other tasks are shown in the schemes simultaneously.

The advantages of Utkir Khashimov's e-library to users and simultaneity of its usage are given information of getting information in a projected system.

***The scientific and practical importance of the results of the research.***  
Through projected system in the electronic base of the Fundamental library of the Academy of Sciences to create e-library of the compositions of Utkir Khashimov and via net it was created the opportunity to all users of Utkir Khashimov's work, students of Master's degree, students and researchers.

The first chapter of the dissertation is called World tendency of developing e-libraries.

**The solution of the problems of the research is as follows:**

— in writing the dissertation work there was learnt tendency of developing computer technologies, the problem of security in creating e-library, the copyright is as a resource of e-library, the technologies of creating e-library and there was shown scheme as an example;

— in order to create Utkir Khashimov's works in an automatic system of cataloguing process the types and languages of the publications analyzed systematically and there was created algorithm of cataloguing;

— there was learnt the requirements in creating e-library of Utkir Khashimov's compositions, the ways of using it is shown simultaneously;

— after creation of the e-library of the writer's compositions there was studied the problems which the users come across and the measures of preventing from technical lacks in the process of numbering the documents.

## APPENDIX

### LIST OF PUBLISHED PUBLICATIONS:

1.Замонавийлик контекстида узлуксиз таълим узвийлиги ва муаммолари: Илмий-услубий мақолалар тўплами / Ўзбекистон Республикаси маданият ва спорт ишлари вазирлиги, Ўзбекистон Давлат санъат ва маданият институти, Республика ихтисослаштирилган мусиқа ва санъат академик лицейи; Масъул муҳаррирлар: Ю.Ғ.Маҳмудов, Н.Ж. Исакулова.-Т.: DIZAYN-PRESS,2013.-586 б.

**Мундарижа:...Ёзувчи Ўткир Ҳошимовнинг электрон кутубхонаси / Д.М.Агзамова...**

2.Агзамова Д.М. Адиблар асарлари корпоратив тармоқда // ICT NEWS.- 2013.-№4.-40-42.

## ABBREVIATION

**BS** - BRITISH STANDARD  
**CPISM**-CODE OF PRACTICE FOR INFORMATION SECURITY MANAGEMENT  
**CR**-COPYRIGHT  
**DA**- DATABASE ADMINISTRATOR  
**DB**- DATABASE  
**DLI**-Digital Libraries Initiative  
**DS**-DATA SECURITY  
**DX** -Double  
**ECM**-ELECTRONIC CALCULATING MACHINES  
**EL**-ELECTRON LIBRARY  
**FPEC**-FRAME PROGRAM OF PARTNERSHIP OF EUROPEAN COMMISSION  
**FT**-FULL-TEXT  
**FTP** -FILE TRANSFER PROTOCOL  
**ILO**-INFORMATION-LIBRARY ORGANIZATION  
**ISIL**- INFORMATION SYSTEM OF THEIR INFORMATIZED LIBRARY  
**IP**- INTERNET PROTOCOL  
**IRC**-INFORMATION-RESOURCE CENTER  
**IS** -INTEGRAL SCHEMA  
**ISMS** -SPECIFICATION OF INFORMATION SECURITY MANAGEMENT SYSTEM  
**MARC**-MACHINE READEABLE CATALOGUE)  
**MMX** -MULTI-MEDIA EXTENTION  
**ON-LINE**- NOW AND HERE  
**OCLC** -OHIO COLLEGE LIBRARY CENTER OR ONLINE COMPUTER LIBRARY CENTER  
**OPAC** -ONLINE PUBLIC ACCESS CATALOG  
**PC**-PERSONAL COMPUTERS  
**PCS** -SONY AND PLAYSTATION  
**SX**- SINGLE  
**URL**-UNIFORM RESOURE ELOCATOR  
**WWW** -WORD WIDE WEB



**Мобил бизнес-дастурлар  
миллий бозорда**

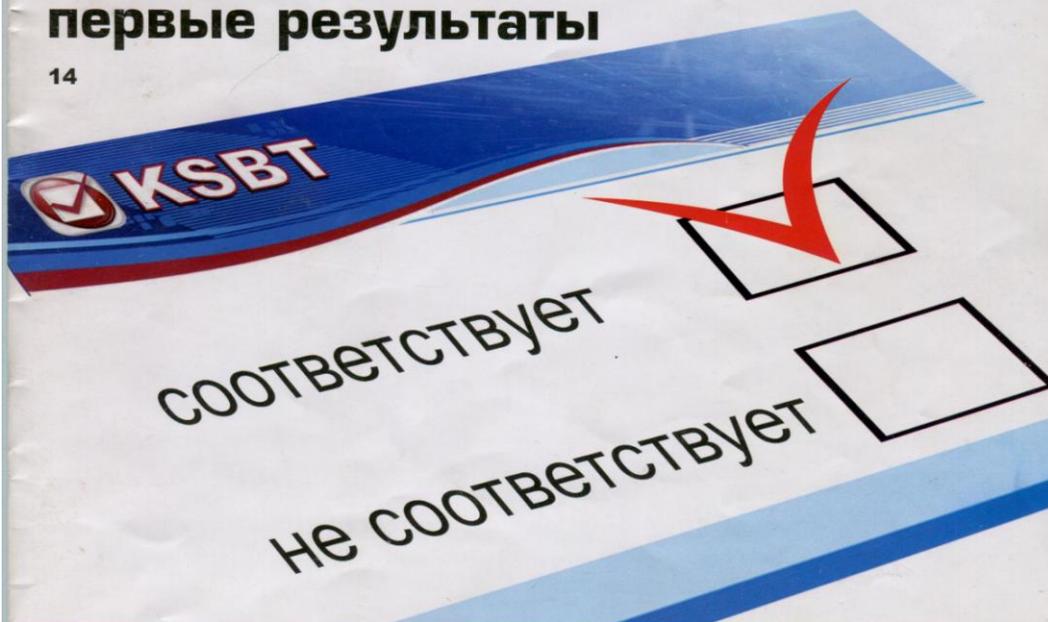
50

# ICT NEWS

www.ictnews.uz • 4 (78) 16-28.02.2013 • ISSN 2181-6727

## **Оценка компьютерной грамотности: первые результаты**

14



**Как Южная Корея  
стала мировым лидером  
E-Government**

24

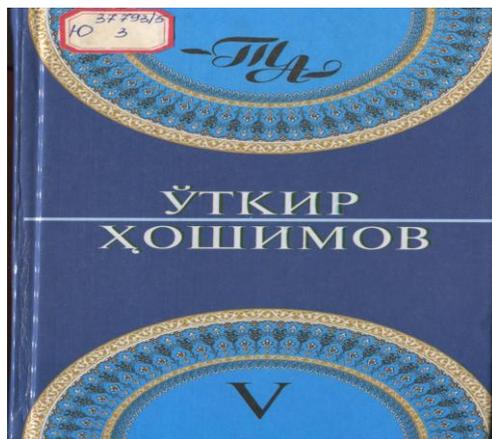
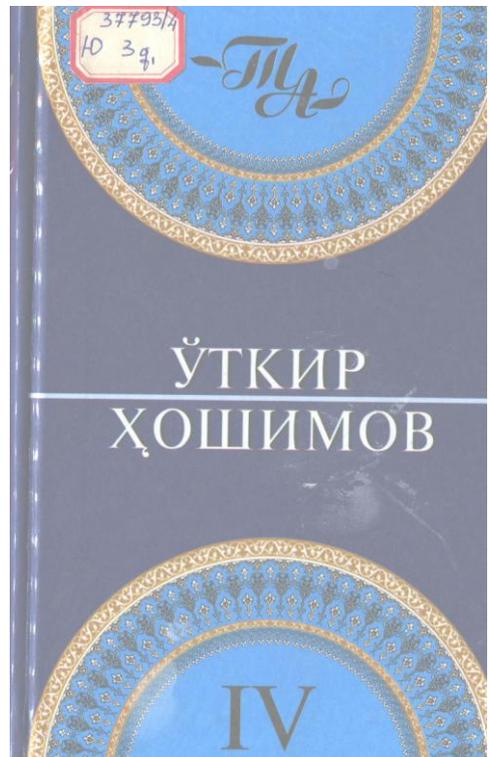
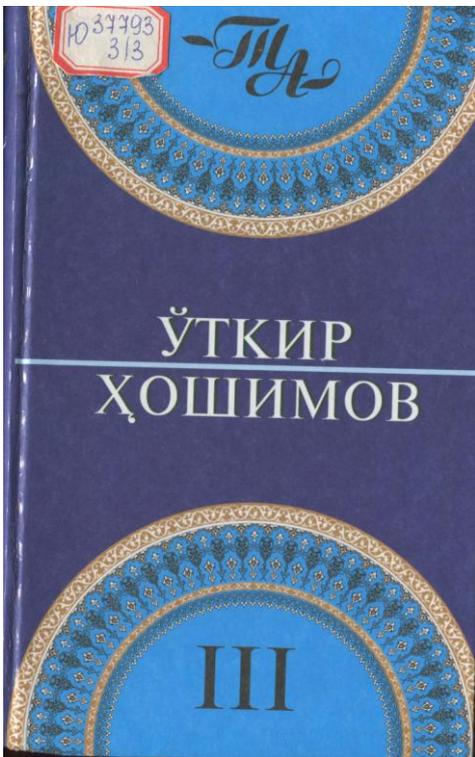
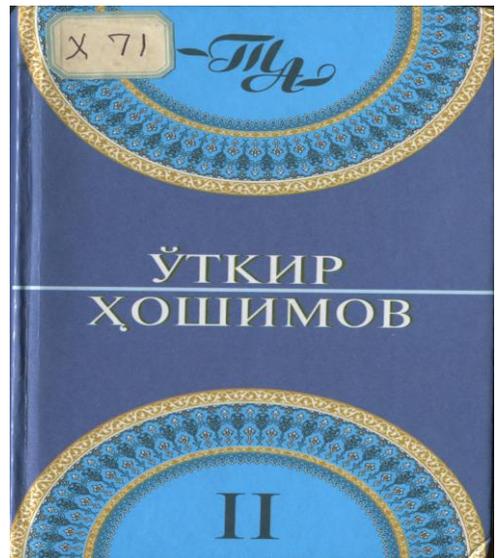
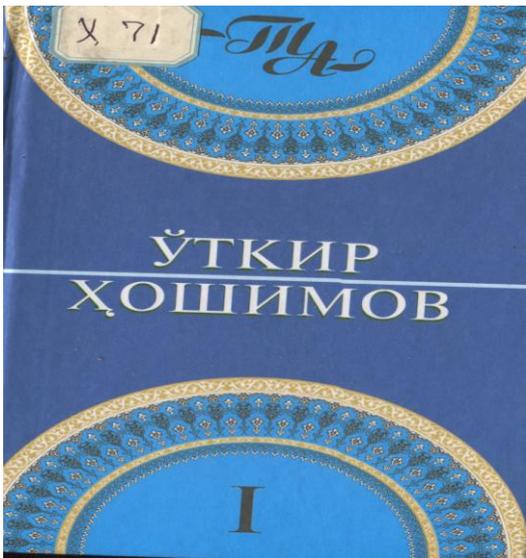
**Интерактив  
хизматлар –  
давр талаби**

34

Мақтабача таълим  
Умумий ўрта таълим  
Ўрта махсус, касб-хўналар таълими  
Олий таълим  
Олий ўқув юртидан кейинги таълим  
Кадрларни қайта тайёрлаш  
ва малакасини ошириш таълими  
Мақтабдан ташқари  
таълим



**ЗАМОНАВИЙЛИК  
КОНТЕКСТИДА УЗЛУКСИЗ  
ТАЪЛИМ УЗВИЙЛИГИ  
МУАММОЛАРИ**



## LIST OF USED LITERATURE

### Measure-legal documents:

1. Ўзбекистон Республикаси “Ахборот-кутубхона фаолияти тўғрисида” ги Қонуни 13 апрель 2011 йил.

2. Ўзбекистон Республикаси Президентининг “Республика аҳолисини ахборот-кутубхона билан таъминлашни ташкил этиш тўғрисида” ги 2006 йил 20 июндаги ПҚ-381-сонли Қарори.

3. Ўзбекистон Республикаси Президентининг “Корея Республикаси ҳукуматининг грант маблағларини жалб қилган ҳолатда илмий-техника адабиётларн электрон кутубхонасини ташкил этиш чора-тадбирлари тўғрисида” ги 2000 йил 26 август №ПҚ-952-сонли Қарори.

4. Ўзбекистон Республикаси Президентининг “Замонавий ахборот-коммуникация технологияларини янада жорий этиш ва ривожлантириш чора-тадбирлари тўғрисида” ги 2012 йил 21 март №ПҚ-1730-сонли Қарори

5. Олий ва ўрта махсус таълим вазирлиги, Ўрта махсус, касб-хунар таълими Марказининг “Ахборот-ресурс марказлари фаолиятини мувофиқлаштириш тўғрисида” ги 2012 йил 2 июлдаги 84-05/5-175-Б-сонли Буйруғи.

### Reference :

1. Каримов У.Ф. ва бошқ. Корпоратив ахборот-ресурс марказларининг автоматлаштирилган тизими электрон каталоги маълумотлар базасини шакллантириш: Автоматлаштирилган ахборот-кутубхона тизимидан фойдаланувчилар учун услубий қўлланма /Тузувчилар: У.Ф.Каримов, М. А.Раҳматуллаев, Ҳ.Э.Исломова; Масъул муҳаррир А.Ш.Мухаммадиев.- Т.: Тошкент ахборот технологиялари университети нашриёти, 2012.- 115 б.

2. Корпоратив ахборот-ресурс марказларининг автоматлаштирилган тизими (KARMAТ-U): Ахборот-ресурс марказининг автоматлаштирилган тизимидан фойдаланувчилар учун услубий қўлланма / Абдулла Қодирий ном. Тошкент Давлат Маданият институти, Алишер Навоий ном. Ўзбекистон

Миллий к-аси; Тузувчилар: М.А.Раҳматуллаев, У.Ф.Каримов, А.Ш.Муҳаммадиев, Ж.Атажанов, М.П.Савочкин; Масъул муҳаррир А.О.Умаров.- Алишер Навоий ном. Ўзбекистон Миллий кутубхонаси.-Т.: Алишер Навоий ном. Ўзбекистон Миллий к-наси нашриёти, 2009.- 64 б.

3. Ўткир Ҳошимов: Ўткир Ҳошимов таваллудининг 70 йиллиги муносабати билан биобиблиографик кўрсаткич / Абдулла Қодирий ном. Тошкент Давлат Маданият институти, Алишер Навоий ном. Ўзбекистон Миллий к-наси; Тузувчи А.М.Агзамова; Муҳаррир Ҳ.Маматраимова.-Т.: Фан, 2011.-120 б.

### **Text-books:**

1. Ахборот-кутубхона ва ахборот ресурс марказлари ишини ташкил этиш =организация работы информационно-библиотечных и информационно-ресурсных центров: Хужжатлар тўплами / Алишер Навоий ном. Ўзбекистон Миллий к-наси; Тузувчилар: Т.Егорова, О.Қиличбоев; Муҳаррирлар: И.Мамина, Ҳ.Маматраимова, Масъул муҳаррир А.О.Умаров.-Тўлдирилган ва қайта ишланган нашри.-Т.: Алишер Навоий ном. Ўзбекистон Миллий к-наси нашриёти, 2007.-172 б.

2. Ахборот-кутубхона фаолиятига оид меъёрий-ҳуқуқий ҳужжатлар= Нормативно-правовые документы по информационно-библиотечной деятельности / Тузувчилар: В.Борисов, О.Қиличбоев, Л.Нарзиев, В.Полякова; Алишер Навоий ном. Ўзбекистон Миллий к-наси нашриёти, 2012.-216 б.

3. Имомқаримова М.М.Ўткир Ҳошимов асарларида миллийлик қадриятлар талқини: Филология фанлари доктори..... дис.:10.01.02/М.М.Имомқаримова; Ўзбекистон Республикаси Фанлар Академияси, Тил ва адабиёт институти.-Тошкент,2004.-150 в.-Адабиётлар: 141-150.

4.Дусенбаев О.И. Ўткир Ҳошимов ижодида она образи. Филология фанлари номзоди...дис.автореферати:10.01.01./ О.И.Дусенбаев;Ўзбекистон Республикаси Фанлар Академияси, Алишер Навоий номидаги тил ва адабиёт институти.-Тошкент,2011.-114 б.-Адабиётлар:б.133-144.

5. Электрон кутубхона тармоқларида илмий техникавий, илмий-таълимий ахборотлар яратиш ва улардан фойдаланиш технологиялари = Технологии создания и использования научно-технической и научно-образовательной информации в сети электронных библиотек = Technologies of scientific, educational and technical information development and use in the network of electronic libraries: научное издание/ Алишер Навоий номидаги Ўзбекистон миллий кутубхонаси; Масъул мухаррир М.А. Рахматуллаев. - Т.: Алишер Навоий номидаги Ўзбекистон Миллий кутубхонаси нашриёти, 2009. - 132 б.

6. Библиотечное дело-2012: библиотечно-информационная деятельность в пространстве науки, культуры и образования: Материалы семнадцатой международной научной конференции (Москва, 25-26 апреля 2012).- Ч. I. Москва: МГУКИ, 2012.-282 с.

7. Домарев В. Безопасность информации.- Москва: 2003.-568 с.

8. Земсков А.И., Шрайберг Я.Л. Электронные библиотеки: учебное для ВУЗОВ.- Москва: Либерия, 2003.-351 с.

### **Scientific articles:**

1. Агзамова Д.М. Адиблар асарлари корпоратив тармоқда // ICT NEWS .- 2013.- №4 .-Б.40-42.

2. Жапарова А. Масофавий тармоқ ресурсларининг ахборот-кутубхоначилик хизматларини кўрсатишдаги ўрни // ICT NEWS .-2012.- №70.-Б.26-27.

3. Каримов У.Ф., Рахматуллаев М.А. Кутубхоначилар учун янги усуллар // Infocom.uz . – 2012 . - № 3.-Б.12-15.

4. Каримов У.Ф., Рахматуллаев М.А. Эркин Воҳидовнинг электрон кутубхонаси // Infocom.uz . – 2012 . - № 3. - Б.11-13.

5. Кудратов О. Электрон кутубхона-китобхонлар хизматида // ICT NEWS .- 2012.-№71.-Б.-29-31.

6.Васильченко С.Д., Губарец В.В. Авторское право и Интернет // Научные и технические б-теки. - 2000. - № 3. - С. 21- 27.

7.Гусева Е.Н. Международная конференция «Крым»-2010: заметки очевица// Научные и технические б-теки.-2011.-№3.-С.35.

8.Кокойкина О.Н. Преподаватель как компонен внутренней среды вуза культуры // Научные и технические б-теки .-2011.-№3.- С.88.

9.Куракова Е.В. Информационные ресурсы и услуги в электронной среде: эффективность, потребности, преспективы. (По материалам прикладного исследования Научной библиотеки Ульяновского государственного университета) // Науные и технические б-теки.-2011.-№12.- С.35-38.

10.Сухотина М.Л. Электронные сетевые ресурсы Инфрокультуры РГБ в пространстве культуры, науки, образования// научные и технические б-теки .- 2011.-№3.-С.6-7.

11.Швецова Г.Н. Особенности библиотеки как документальной сисъемы// Научно и технические б-теки.-2011.-№9.-С.49-50.

12.Шрайберг Я.Л. Первое десятилетие информационного века: влияние информационно-электронной среды на роль позицию библиотек в развивающемся обществе //Науные и технческие б-теки.-2011.-№1.-С.9-11.

13. Kagan B. Computers, computer systems and networks: monograhy.-M.: Mir Publishers, 1988.-600p.

14.Rochester J. Computers for people.-USA: Homewood, 1991.- 480 p

### **Internet websites**

1. [http:// www.norma.uz](http://www.norma.uz) (Legal site)
2. [http:// www.ebiblioteka.uz](http://www.ebiblioteka.uz) (Tashkent State Pedagogical University 3.named after Nizami)
4. [http:// www. ziyonet//3456=4546.uz](http://www.ziyonet//3456=4546.uz) (Social site ).
5. [http:// www.otherreferats.allbest.uz](http://www.otherreferats.allbest.uz) (Site for pupil of classes 5 and 11)
6. [http:// www.google.co.uz](http://www.google.co.uz). (Uzbek searching site).

7. [http:// www. she'rlar. uz.](http://www.she'rlar.uz)( Social site )
8. [http:// www.forum.ziyonet.com](http://www.forum.ziyonet.com) (Uzbek searching site).
9. [http: // www.connect.uz](http://www.connect.uz) (Social site).
- 10.[http: // www.uzbeklanguage.com](http://www.uzbeklanguage.com) (Searching site).
- 11.[http:// www. mp3uz.](http://www.mp3uz) (Social site).
- 12.[http: // www.studycanada.ru/?action=articlear\\_id=550](http://www.studycanada.ru/?action=articlear_id=550) (Searching site ).
- 13.[http: // www.inke.ca](http://www.inke.ca) ( Site for Copyright).
- 14.[http: // www. chaspik.info/body news/4973.htm](http://www.chaspik.info/body news/4973.htm) (Secury of information).
- 15.[http: // www.izvestia.ruwellness/article312769/](http://www.izvestia.ruwellness/article312769/) (News about all)
- 16.[http: // www.opendoar.org/find.hpp?format+charts](http://www.opendoar.org/find.hpp?format+charts) (Russian IRC)
- 17.[http: // www. socionet.ru](http://www.socionet.ru) (Security issues for digital libraries)
- 18.[http: // www.sinin.nsc.ru](http://www.sinin.nsc.ru) (Security issues for digital libraries)
- 19.[http: // www.chem.msu.su/rus](http://www.chem.msu.su/rus) (Software system)
- 20.[http: // www.usu.ru/usu/opencms](http://www.usu.ru/usu/opencms) (IRC in Valivostok region )
- 21.[http: // www.okrisway.ru/2008/08](http://www.okrisway.ru/2008/08) (IRC in Peterburg)
- 22.[http: // www.ichip.ru](http://www.ichip.ru) (Russian State library)
- 23.<http://shakspeare.mit.edu/works.html> (The complete works of William Shakespeare)
- 24.[http:// eresources.lib.unc.edu/ebook/](http://eresources.lib.unc.edu/ebook/) (African-American poets 1750-1900 years)