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CREATION OF MOBILE APPLICATIONS FOR THE SHRINES OF AL-HAKIM AL- TERMIZI

АЛ-ҲАКИМ АТ-ТЕРМИЗИЙ ЗИЁРАТГОҲИ МОБИЛ ИЛОВАСИНИНГ ДАСТУРИЙ ТАЪМИНОТИ

СОЗДАНИЕ МОБИЛЬНЫХ ПРИЛОЖЕНИЙ ПО СВАТИЛИЩАМ АЛЬ-ХАКИМА АТ-ТЕРМИЗИ

Keywords: *software, algorithm, Islam, statistics, Visual Basic, C ++, GPS, SMS, basic databases, website, information technology, resource, electronic resource, library.*

Таянч сўзлар: *дастурлаш, ислом, тарих, GPS, SMS, маълумотлар базаси, веб-сайт ахборот технологиялари, ривожланиш, электрон манбаалар, библиотека.*

Ключевые слова: *программирование, ислам, история, , GPS, SMS, база данных, веб-сайт, информационные технологии, разработка, электронные ресурсы, библиотека.*

Introduction. Preserving our precious national and religious values, studying the priceless heritage of our ancestors, who have made a significant contribution to the development of world science and culture, nurturing young people as a whole, is one of the most important prerequisites for ensuring a stable social and spiritual atmosphere in society. The Center for Islamic Civilization, the International Islamic Academy of

We recognize that the sustainable development of tourism has great potential for the development of cultural and humanitarian ties around the world. We emphasize the importance of information technology in tourism, especially in the areas of advertising, marketing, differentiation and specialization of tourism products. In addition, we reaffirm our commitment to pilgrimage tourism for the individual growth of people and the strengthening of basic social norms and national values. The program uses modern programming languages such as Php, Java, C ++. Al-Hakim at-Termizi is one of the most famous places of worship in Uzbekistan, which is also known for its historical places in Termez, Surkhandarya region. The number of visitors to this temple is growing day by day. Currently, visitors need to use electronic information technologies to provide visitors with information about the pilgrimage site, which is a convenient way for visitors to access information about the pilgrim. And we are talking about the importance of developing an electronic guide for mobile devices during this visit.

Зиёрат туризмнинг барқарор ривожланиши бутун дунё бўйлаб маданий ва инсонпарварлик алоқаларини ривожлантириш бўйича улкан салоҳиятга эга эканлигини эътироф этамиз. Биз ахборот технологияларининг зиёрат туризмга, айниқса реклама, маркетинг, туризм маҳсулотларини реклама қилиш ва ихтисослаштириш соҳасига ўзгаришлар олиб киришини алоҳида таъкидлаймиз. Бундан ташқари, зиёрат туризми шахсларнинг индивидуал ўсиши ҳамда асосий ижтимоий нормалар ва миллий қадриятларни мустаҳкамлашига қатъий ишонишимизни яна бир бор таъкидлаймиз. Дастур Php, Java, C ++ каби замонавий дастурлаш тилларидан фойдаланилган. Ўзбекистон тарихий қадамжоларининг кўпчилиги билан ҳам машҳур Сурхандарё вилояти Термиз шаҳрида ҳам қадамжолар кўпчилиги билан машҳур шулардан бир Ал-Ҳаким ат-Термизий зиёратгоҳи. Бу зиёратгоҳга келувчиларнинг сони кундан кунга ортиб бормоқда. Ҳозирги кунда зиёратгоҳга ташриф буюрувчиларга зиёратгоҳ ҳақида маълумотлар беришни ахборот технологиялари ёрдамида яратилган электрон қўлланмага бўлган эҳтиёж бўлиб, уни хал қилиниши эса зиёратгоҳ ҳақида ташриф буюрувчиларга маълумотлар олишида жуда қулай ҳисобланади. Биз эса ушбу зиёрат ҳақида мобил қурилмалар учун электрон қўлланма ишлаб чиқиш долзарб эканлигидан далолат беради.

Данная статья содержит сведения о разработке мобильных приложений для комплекса Ал-Хакима ат-Термизи, расположенного в город Термез Сурхандаринской области. Данные приложения созданы для рекламы, маркетинга туристических услуг с помощью информационных технологий. Мобильное приложение включает в себя данные о жизни, творчестве, сочинениях Ал-Хакима ат-Термиза, а также самом мавзолее. При разработке программного комплекса были использованы современные языки программирования такие как Php, Java, C ++. Данный продукт был разработан в учетом все возрастающего количества желающих ознакомиться с достопримечательностями комплекса ал-Хакима ат-Термизи в настоящее время. По нашему мнению, с помощью данного программного продукта пользователи заранее могут получить информацию о мавзолее Ал-акима ат-Термизий и достопримечательностях комплекса в целом.

Uzbekistan, Mir Arab High Madrasa, Imam Bukhari and Imam Termizi International Research Centers have been established in our country in recent years to promote and study our rich scientific and historical heritage.

Relevance. From year to year, information systems and technologies are increasingly being used in various areas of human activities. The purpose of their creation, commissioning and wide use is to solve the problems of informing society and human life. Providing the society with information is a comprehensive implementation of measures to ensure full and timely delivery of enriched knowledge, credible information in all socially important areas of human activity (Dadamuhamedov, 2009: 1-5 p.).

The introduction of modern information systems and technologies will increase the effectiveness of decisions made. It is not only the growth of national economic performance but also the achievement of high-quality scientific achievements in fundamental and applied sciences, aimed at developing production, creating new jobs, improving living standards, and protecting the environment (Xodjayeve, 2019).

The concept of socio-political, socio-economic, cultural, and humanitarian development of the country was initiated by the President of the Republic of Uzbekistan Shavkat Mirziyayev during the meetings with representatives of the public, business circles, and government agencies.

Effective measures are being taken to create modern, reliable and secure national sources of information, the development of information resources and services markets, the gradual and gradual transition to electronic forms of information exchange, and access to national and international information networks.

Regular international conferences promoting the development of the industry in our country, the extensive attraction of foreign investments into the sector are another confirmation of this. Based on the aforementioned measures, we can say that our main goal is to make progress in every area of the country using modern programs.

Consistent efforts are underway in the country to develop modern information technologies and communications, to create an integrated system of electronic government services, to introduce new mechanisms for government agencies to communicate

with the public (Xodjayeva, 2019; Dadamuhamedov, 2017; 138 p.).

At the same time, a number of systemic problems and shortcomings in the management and implementation of information technologies and communications impede the rapid development of this sector and the provision of qualitative information services.

First, telecommunications infrastructure is underdeveloped, remote areas of the country lack access to telecommunications networks, and the quality of mobile and Internet services does not meet the needs of the population.

Secondly, due to the ineffective implementation of a single technological approach to the introduction of information technologies and communications into the public administration system, departmental information systems and resources are being introduced separately, which complicates their integration into the single information space.

Third, insufficient attention is paid to the implementation of integrated trading and marketing platforms, e-commerce, payment systems, and logistics systems in e-commerce, which is one of the reasons for the development of the economy and entrepreneurship, and the attraction of foreign investments.

Fourth, weak organization of information security and information protection in government information systems and resources increases the chances of unauthorized access to information, violation of database integrity and confidentiality.

Fifth, the heads of many government agencies and organizations do not pay enough attention to improving the quality and efficiency of public services, the elimination of bureaucratic procedures, the implementation of information and communication technologies and projects aimed at reducing paperwork.

Sixth, no effective measures have been taken to modernize postal services and logistics systems, introduce new methods of national operator of postal services, and increase its activity in the market.

Seventh, the current system of training, retraining and advanced training of personnel in the field of information technologies and communications does not take into account the rapid development of IT-technologies and does not allow effective communication with leading educational institutions of foreign countries to introduce advanced teaching methods.

Eighth, there is no systematic work on the deep study and implementation of e-government, e-commerce, e-government services, their transparency and transparency, as well as the experience of advanced countries in the development of telecommunications infrastructure.

Methods used. The study used monographical, statistical and systematic analysis methods.

Results and their analysis. The results of the current study show that the development of electronic manuals on ancient pilgrimages in Uzbekistan can increase the number of tourist visitors to our country. This elegant tutorial on Al-Hakim at-Termizi's pilgrimage site provides conveniences for tourists visiting. It also provides visitors with complete information about this pilgrimage site. This will help to increase the number of visitors.

Study of the Problem: Uzbekistan is a convenient destination for tourism. Many prominent scholars of the Islamic world lived and worked in our country. At the same time, there are many historic places in our country that are dear to those of other faiths.

Creation of favorable conditions for development of tourism, first of all in the private sector, increasing the competitiveness and quality of services, active and comprehensive promotion of national tourism products in the world market, as well as address by the President of the Republic of Uzbekistan to the Oliy Majlis of the Republic of Uzbekistan dated December 28, 2018 Action Plan on implementation of the abovementioned recommendations and the five priority areas of development of the Republic of Uzbekistan in 2017-2021 goals, including increasing the flow of tourists to "walk" through the direction of the tourism objectives.

We recognize that sustainable tourism development has great potential for the development of cultural and humanitarian ties around the world. We emphasize that information technology is making a difference in visiting tourism, especially in the areas of advertising, marketing, differentiation and specialization of tourism products. In addition, we reaffirm our firm belief that pilgrimage tourism promotes individual growth and consolidates basic social norms and national values.

The shrines of Al-Hakim at-Termezi is one of the famous places of worship in the city of Termez, Surkhandarya region. The number of visitors to this shrine is increasing day by day. Today, visitors need the use of electronic information technology to provide visitor information about the shrine, and the solution is a great way for visitors to get information about the shrine. And we are talking about the importance of developing an electronic app for mobile devices.

Development of electronic manuals for mobile devices providing information about the Al-Hakim at-Termizi pilgrimage.

The following tasks have been identified for the development of the electronic manual:

- ✓ creating a user-friendly interface;
- ✓ the information in the menus is clear, concise, and clear;
- ✓ the user has valuable and necessary information for himself;

- ✓ provide the user with as much detail as possible about the sanctuary;
- ✓ creation of electronic manual.

Scientific novelty of the subject. The Java programming language is the development of an electronic studio application for mobile devices running Android operating systems with the use of an Android studio library and various filters. This library is also developed for Java programming language and Android studios. Java programming language was developed in this language as it has many components to create user graphical interface.

Importance of research results. The practical implications of this study are:

- ✓ study and analyze national resources for android, that is, Uzbek language programs;
- ✓ statistical data on the role of software developed in android in our society today.

The scientific significance of the results of the research is due to the further development of methods for developing electronic applications using effective languages for mobile devices operating on Android operating systems (Jumayev, 2015: 22 p.).

Here are 5 basics for creating an android app for novice learners that are of interest to new users associated with the app. This is because applications make smartphones more “smart”, while also increasing their benefits. This will make our work easier and easier now. Experienced programmers create their own applications, refine their design, and integrate them into a network in a unique, user-friendly way. If you are also interested in programming, we will give you the 5 basics you need to know before downloading android apps (Mirzayev, 2016: 76 p.).

Deep learning programming language Java and XML are the two main programming languages used to create Android applications. Therefore, the knowledge and skills needed in these two programming languages are the first task in developing an Android application. The basics of Java programming language are:

- ✓ packages;
- ✓ objects and classes;
- ✓ Inheritance and Interfaces;
- ✓ systems, numbers and generality;
- ✓ collections;
- ✓ similarities.

A thorough understanding of Java and XML will give you the basics of developing an up-to-date and perfect Android app.

Learn about programming tools and environments. It is important that you have to install and automate programming tools on your device before creating your app. You can use the software (editor) like Android studio and Eclipse for your Android applications. These editors will help you acquire basic knowledge and

apply them in coding. You can also use software tools such as Apache Maven, Apache Ant and Grandle to provide you with the keywords (resources) you need to help you manage your devices (Mirzayev, 2015: 84 p.).

Currently, great attention is paid to tourism. This sector, due to its generosity, contributes to the economies of many countries. One of the most well-developed and developing areas of tourism is pilgrimage tourism. Today, there are more than 7,000 unique historical monuments and magnificent and unique architectural examples in our country. Uzbekistan is a unique country, with its ancient civilization and, with its huge tourism potential, which is not inferior to the best places for leisure and travel in the world. The country’s beautiful nature reserves and national parks are the pearls of its rich and diverse nature. The centuries-old traditions of national culture, arts and crafts are carefully preserved and developed in the country. World-famous national cuisine and culinary traditions are a symbol of Eastern hospitality (Dadamuhamedov, 2019).

Uzbekistan is a convenient destination for pilgrimage tourism. Many prominent scholars of the Islamic world lived and worked in our country. At the same time, there are many historic places in our country that are dear to those of other faiths.

Creation of favorable conditions for development of tourism, first and foremost in the private sector, enhancing the competitiveness and quality of services, active and comprehensive promotion of national tourism products in the world market, as well as the proposals of the President of the Republic of Uzbekistan Action Plan on five priority directions of development of the Republic of Uzbekistan in 2017-2021 iyasida goals, including the “visit” to increase the flow of tourists via tourism objectives.

We recognize that sustainable tourism development has great potential for the development of cultural and humanitarian ties around the world. We emphasize that information technology is making a difference in Visitor Tourism, especially in the area of advertising, marketing, differentiation and specialization of tourism products. In addition, we reaffirm our confidence that Visitor Tourism will promote individual growth and consolidation of basic social norms and national values (Xodjayeve, 2019).

Al-Hakim at Termezi is one of the famous places of worship in the city of Termez, Surkhandarya region. The number of visitors to this shrine is increasing day by day. Today, there is an electronic guide to information about the visitor’s access to information about the pilgrimage site, which is a convenient way for visitors to get information about the shrine. And we are talking about the importance of developing an electronic app for mobile devices (Dadamuhamedov, 2017: 138 p.).

We have developed an electronic guide for mobile devices that provide information about the Al-Hakim at Termizi Pilgrimage. This electronic guide is also available offline. On-line, the program only addresses the map of the pilgrimage to Google Maps. This program offers several advantages and conveniences.

Java and Android studio programming languages and injectors are used to develop this software. The Home Page view is as follows (Figure 1):

The program consists of the following sections:

- Basic Information;
- Museum;
- Pilgrimage Place;
- Translated Works;
- Research;
- Manuscripts;
- Books;
- Al Hakim At-Termizi;
- Basic Uzbek-English-Russian;
- About the program.

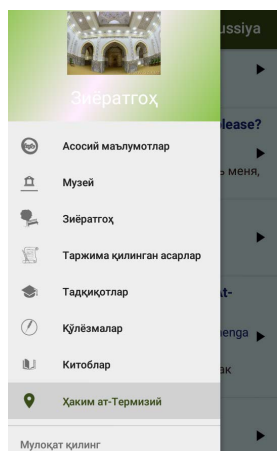


Figure 1. Home page of Al-Hakim at Termizi's e-book.

Basic Information. This section provides a brief overview of the life and work of the album.

Museum. Visitors are provided with pictures and texts about the unique and rare manuscripts and artifacts stored in the museum.

Pilgrimage This section presents pictures of the nature of the shrine.

Translated Works. The works of al-Hakim at-Termez are translated by Uzbek Islamic scholars.

Research. The research section contains articles written by scholars of Islamic studies in Uzbekistan.

Manuscripts; The works written by the scholar are published in Uzbek by Uzbek Islamic scholars.

Books. This section presents the books of Al-Hakim at-Termizi.

Al Hakim At-Termizi. This section provides an online map of the visitor's location using the Google map service.

Basic Uzbek-English-Russian For foreign guests, the Uzbek, English, and Russian languages are listed in the pilgrimage phrases.

About the program. Information about the authors and the developers of this program.

Software requirements:

- ✓ Android 4.4, 5.0, 6.0, 7.0 or higher;
- ✓ 56.36 MB of storage.

This program does not require any special training or knowledge for the users to use it. However, below are examples of the application for users (Figure 2 to Figure 7).



Figure 2. Museum section window.

The program has 6 sections. The first section is called "The Museum," and it contains pictures and texts that give us information about the unique and rare manuscripts and artifacts that are kept in the museum. Select this section to get all the information you need.

The next section is "Visitation". This section presents pictures of nature and text about the shrine.



Figure 3. The "Pilgrimage Place" section window.

The next section contains the translations of Al-Hakim al-Termi's work, translated by Uzbek Islamic scholars.

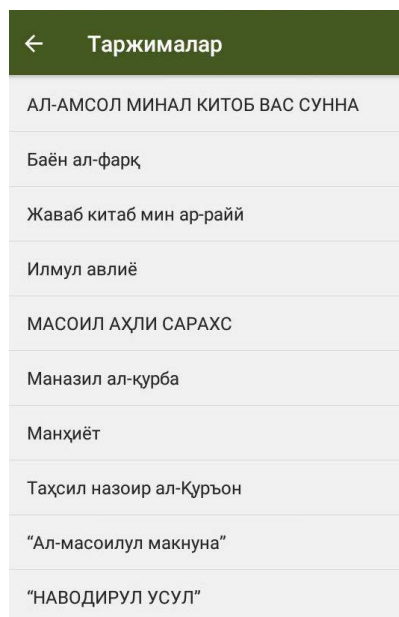


Figure 4. The “Translated Works” section window.

The “Research” section contains articles written by Uzbek Islamic scholars as a result of research.

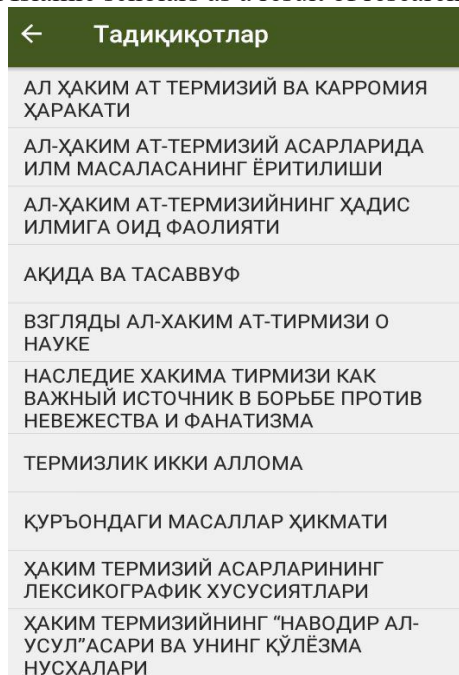


Figure 5. The Research section window.

The “Manuscripts” section contains works by Uzbek Islamic scholars written in Uzbek by Uzbek scholars.



Figure 6. The “Manuscripts” section window.

Hakim at-Termizi In this section, the google map service provides users with an online map of the place of their pilgrimage.

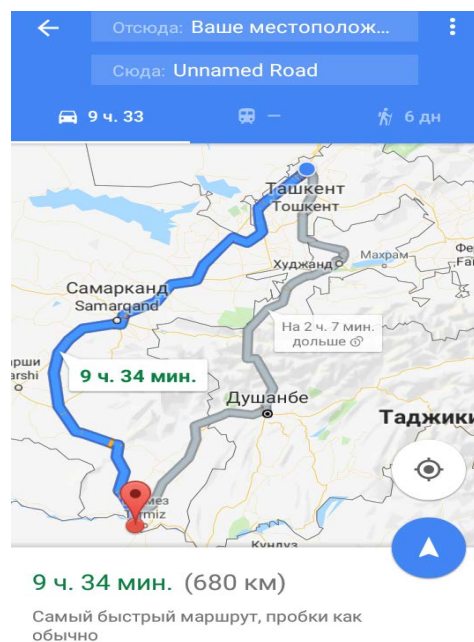


Figure 7. «Location» will have an on-line map of the address.

The following section presents the vocabulary required for visitors from abroad, in Uzbek, English and Russian.

This section provides information on how to connect with the creators of the user-created application. Here is the author information.

The functionality of the electronic version of the Al-Hakim at-Termizi pilgrimage system in the

android system has been considered. It is important that the functionality of each program comes first. We have also tried to make the functionality of this program more user-friendly and simpler. In today's fast information technology, computers and laptops are being replaced by mobile phones. The use of mobile phones is increasing day by day (Dadamuhamedov, 2017: 133 p.).

This program does not require any special training or knowledge for the users to use it. However, we have provided some examples for our users below.

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