Digital Distributed Mobile Application for Religious Diary and Schedule Management

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Submission: 21st May 2022; Revised: 24th June 2022; Published: 1st July 2022

Abstract: Devices like Smartphones, tablets are a part of our daily life. The growth and spread of smartphones have created new opportunities for religious application developers to develop applications that provide utility and easy access to religious information. In this paper, we are focusing on the development of the digital Quran application where all the facilities will be easily available for all end users. This application help users to read the Quran anywhere and anytime with Sindhi, English, and Urdu translation. The most useful and legitimate function is that it provides the nearest Qibla Directions to the user in case if the person could end up in a non-familiar place alone. Another function is the digital diary that will not only keeps the track of your prayers but will also make small tasks easier. The mobile application that has been developed is not only useful as a learning tool but is also suitable for use in the practice of measuring the Qibla direction in various locations.

Keyword: Digital Application, Distributed Mobile Application, Schedule Management, Religious Diary.

1. INTRODUCTION

The Quran is not a book like other books; it is a unaltered guide for life, death and also the hereafter. The Quran is considered the foremost important holy book among Muslims. The Prophet also said “The Quran is an intercessor, is given the permission to intercede, and it is rightfully believed in. Whoever puts it in front of himself, will be led to paradise; whoever puts it behind him, will be steered to hellfire. [1]

Salah also known as Namaz and also spelled salat, are prayers performed by Muslims. The primary purpose of salat is to act as a person's communication with ALLAH. Purification of our heart is the ultimate religious objective of Salah. Because of this practice, we can grow and nearer to ALLAH and in turn we strengthen our faith [2]. Just like as a human being physically we have need of food and supplement to live healthy and alive, same as our soul also need prayers and closeness to ALLAH to stay sustained and healthy. In short, we can say it spiritually sustains our soul [3, 4].

To improve the search capability of the current Quran search systems we propose a Digital Quran translation and Qaza-e-Umri Salah diary, in which all the facilities will be easily available for all the users who are moving away from their city or country where they face difficulties in finding the masjid or checking the direction of Kaaba prayers. The main contributions are discussed as follows:

- Design and deployed an application of digital Quran and Qaza-e-Umri.
- This proposed design eliminates the interoperability issue.

2. PROBLEM STATEMNET

The development of social networks made the users not only encouraged to search on the Web but also to post their opinions and knowledge. Although this is an advantage for sharing knowledge in different fields and massively increasing the data on the Web, it is critical for religious affairs where users may post untrusted or false information. Observing the Arabic Web, we found that this problem is very common for the Holy Quran, where large amount of incorrect data is published on different sites which may provide a spurious view of the Islamic religion [5]-[6].

The objective of search engine is to explore the Holy Quran by meaning and translation. The biggest problems are facing when we go to another country alone, the biggest problem for a Muslim is that he does not know the direction in which to pray.[7]

3. BACKGROUND STUDY

The development of social networks made the users not only encouraged to search on the Web but also to post their opinions and knowledge. Although this is an advantage for sharing knowledge in different fields and massively increasing the data on the Web, it is critical for religious affairs where users may post untrusted or false information. Observing the Arabic Web, we found that this problem is very common for the Holy Quran, where large amount of incorrect data is published on different sites which may provide a spurious view of the Islamic religion. [8], [9]

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4. OBJECTIVES

The Digital Quran translation and Qaza-e-Umri Salat diary is a mobile application that helps users to read the Quran anywhere and anytime with translation [12]. The user is able to translate the whole Quran in different languages. Following are the main objectives of our project.

- Qibla direction (Google map base)
- Multi language translation (easy to operate)
- Digital Diary for Qaza Namaz
- Islamic Calendar

5. SIGNIFICANCE, SCOPE AND LIMITATIONS

Since Qaza-e-Umri is an application based on the framework of digitalized design and easy to use virtuous and adequate project which follows Islamic obligations and guides at its best. The most helpful and the legitimate functions is that it provides the nearest Qibla Directions to the user in case if the person could end up in a non-familiar place alone. Another prestigious function is the digital diary which will be quite an advantageous outcome if used.[13],[14] The key feature that is added to this project of Qaza-e-Umri for the native Sindhi speakers is the ease of language in the name of Translation (Arabic to Sindhi).

6. METHODOLOGY

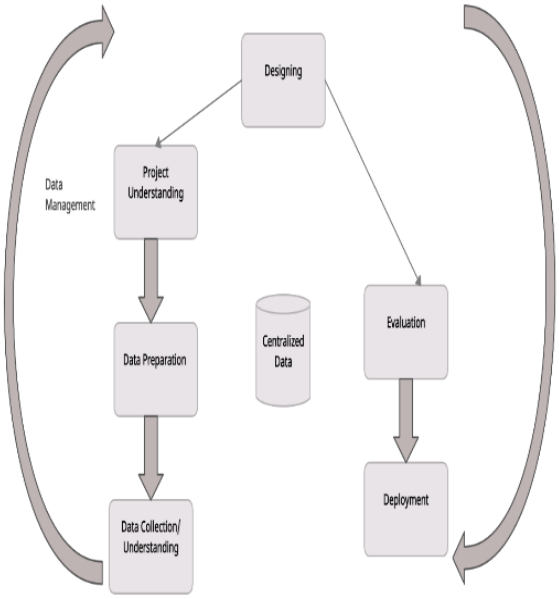

Figure 1: Crisp-DM Process for the Proposed Method

6.1 Project Understanding: The first phase in the CRISP-DM process is to understand what we want to achieve from a project perspective. The purpose of our project is to provide easiness to Muslims and improve the search capability of the current Quran search system [15], shown as Figure 1.

6.2 Data Collection: The second phase is to obtain the data listed in the project resources. List the data sources together, including their location and the method used to retrieve them.

6.3 Data preparation: This is the phase of selecting the data to be used for analysis in the project.

6.4 Designing: In designing phase, we will select the simulation technology we want to use. We design use case for our project.

6.5 Evaluation: The evaluation phase usually focuses on which model is best for the project objectives and what to do next. For our Qaza-e-Umri project, we use the agile model which is best for our project.[16], [17]

6.6 Deployment: In the deployment phase, you record the results of the evaluation and define the implementation strategy.

7. Proposed project

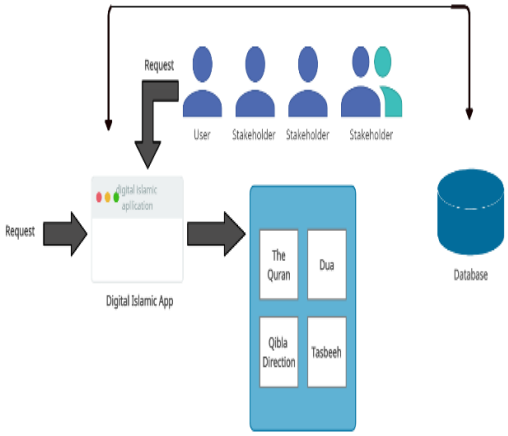

Figure 2: Proposed Architecture

In Figure 2, the architecture shows how our digital Islamic application works. In the application user login into an application and select the feature which the user wants to use. In the digital Islamic application, we add various useful functions for users, including the Qibla direction, Qaza-e-Umri diary, Quran with Sindhi, and English translation. If the user wants to use the Qibla direction feature then he/she open the compass for found the direction of Qibla [18], [19], [20]. If users want to record the Qaza prayers, the user opens the diary to record the Qaza prayers. And if Sindhi speakers want to read Quran in the Sindhi language they read and learn the Quran easily. The user selection is stored in the database and returns the result to the user. [21], [22]

i. Flutter:

Flutter is an open-source mobile SDK for building native looking Android and IOS Applications both from a same code. **ii. Dart:**

Dart language known as the programming language for Flutter, for building natively compiled web, desktop, and mobile application from a same code.

iii. Firebase:

Firebase is a platform for building IOS, web and android apps. It provides real time database multiple APIs, different authentication types and hosting platform. **iv. Google API's:**

We used different google APIs for our project.

8. CONCLUSION AND FUTURE WORK

Technology in an educational manner is not new, and mobile learning applications have become more universal. Therefore, it is important to understand the impact of technology used in learning opportunities. The goal of the development of the "Digital Quran translation and Qaza-e-Umri salat diary manager app" is to provide easiness to people to easily measure Qibla direction, read ayah with Sindhi translation, and improve the search capability of the current Quran search system. The mobile application that has been developed is not only useful as a learning tool but is also suitable for use in the practice of measuring the Qibla direction in various locations.

Acknowledgment

Not Applicable

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