



Nusk Application

Name	Task
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0.1 Abstract

The Nusuk application is designed to enhance the Hajj and Umrah experience for pilgrims by providing a comprehensive suite of services, including trip planning, accommodation booking, and updates. This report explains the purpose, functionality, and design of the app, along with an analysis of user and system requirements. Through modern technology and user-centric design principles, the Nusuk app aims to facilitate the Umrah and Hajj experience.

Chapter 1

Introduction

Hajj and Umrah represent significant spiritual journeys for Muslims worldwide, drawing millions of visitors to Mecca and Medina each year. The planning and execution of these pilgrimages can be complex, involving travel arrangements, accommodation bookings, and adherence to specific rituals. The advent of mobile applications has transformed how pilgrims prepare for and experience these journeys, offering tools that streamline logistics and enhance accessibility. Nusuk is one of these applications, as it provides various services to visitors, such as reservations and planning. It can also be used to purchase Internet and communications packages, book electric vehicles, find out the direction of the Qiblah, the prayer schedule, and more.

1.1 Purpose of the Application

The Nusuk app aims to simplify the Hajj and Umrah experience by providing centralized services for planning and executing travel arrangements. It offers features such as scheduling visits, booking telecom packages, and renting electric vehicles. In addition, it provides vital information, including prayer schedules and Qibla direction, ensuring that users have all the necessary resources at their fingertips.

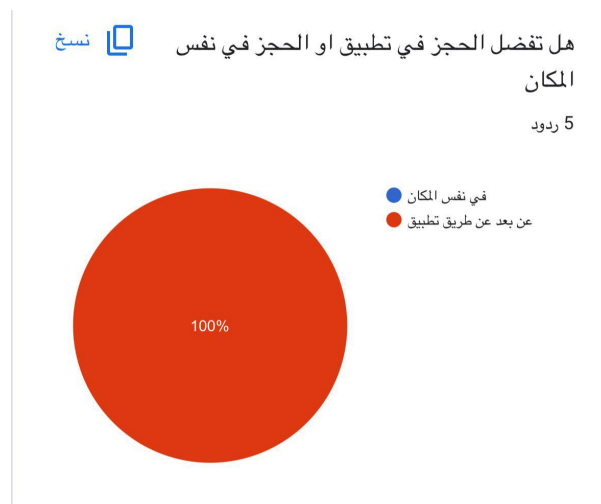


Figure 1.1: User preference for remote booking

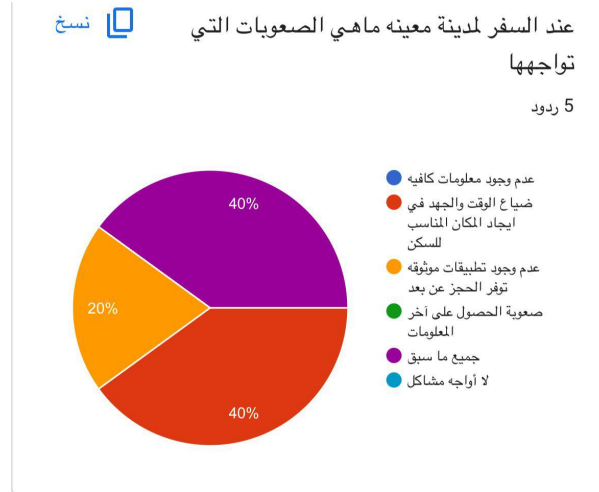


Figure 1.2: Problems facing visitors

1.2 Survey Results

The following two figures show that users prefer to book remotely and also highlight the problems they usually face, which represent the importance of the Nusuk application, as it solves most of the mentioned problems.

1.3 Existing Systems

Several applications exist that aim to assist pilgrims during Hajj and Umrah. These include:

- **Hajj and Umrah Guide App:**

- Advantages: The application contains comprehensive and useful information.
- Disadvantages: The application contains many successive advertisements, which annoy the user, and it lacks regular updates on services.

- **Halal Booking (Hotels around the world):**

- Advantages: Easy to use and reasonable prices.
- Disadvantages: Some users faced problems in the reservation process and poor quality of technical support.

- **IslamicFinder:**

- Advantages: Includes prayer times, Qiblah direction, and community features for connecting with other pilgrims.
- Disadvantages: Lacks specific features for booking accommodations and services, making it less useful for complete trip planning.

These applications illustrate the demand for better resources, as users often report challenges in usability and the need for comprehensive features in one platform.

1.4 What Makes Nusuk Different

The Nusuk application stands out from other similar applications due to several key features:

- **Comprehensive Services:** The Nusuk application contains multiple services, including booking flights, transportation, and knowing the latest updates, in addition to other facilitating services such as the direction of the Qiblah and Internet packages.
- **Notifications:** Unlike many competitors, Nusuk provides real-time notifications and updates, ensuring users are informed of important changes and information during their journey.
- **Local Recommendations:** The application offers curated local insights and recommendations, enhancing the overall experience for users and helping them navigate their pilgrimage more effectively.

These features collectively contribute to a more seamless and enjoyable experience for users, setting Nusuk apart in the landscape of pilgrimage assistance applications.

1.5 summary

The Nusuk application is an integrated application that contains various services and excels in current systems in that it is a reliable, integrated and easy-to-use platform and has solved the problem of not having a single application that brings together the most important services for visitors.

Chapter 2

Analysis

2.1 Functional Requirements and Non-Functional Requirements

2.1.1 Functional Requirements

User Requirements

- Log in: The system shall allow the user to log in and manage their profile.
- Send notifications: The system shall support sending notifications to the user.
- Booking: The system shall allow the user to book a trip ,electric cart.
- payment: The system shall provide the user with the ability to pay.
- Communication services: The system shall allow the user to choose internet services.

System Requirements

- The user shall log in to the system with the user's name and password.
- When the password is forgotten, the system shall provide the option to reset the password.
- The system must send daily notifications and updates.
- The system must allow the user to book the trip and electric cart, specify the date and time, and provide details.
- The system shall allow selection of the communication and internet package and filling in the arrival data.

2.1.2 Non-Functional Requirements

- Usability: The system shall be easy to use and understandable for users regardless of their technological experience.
- Privacy: User data must be well protected and secured.
- Flexibility: The system shall be quick to respond.
- Availability: The system shall be available 24 hours.

2.2 summary

The functional requirements of the Nusuk app include providing information on the latest updates regarding Hajj and Umrah, and flight and accommodation booking services. The non-functional requirements relate to the user experience, such as ease of use, security, and fast performance, to ensure user satisfaction while using the app.

Chapter 3

Application Design

3.1 Application Design

Key pages include:

- Registration and login page: Through it, the user determines whether he wants to create an account or log in.
- Main Service Page: Allows users to select services such as vehicle rentals and communication packages and a map.
- Qiblah Direction Page: Provides real-time direction to the Qiblah.
- Broadcast Page: Users can watch live feeds from the Two Holy Mosques.
- Internet and communication packages page: allows the user to purchase packages.
- Permits page: Through it, the user can create a visit permit.

3.1.1 System Architecture

The Nusuk application is built on a robust architecture that includes:

- Database: Utilizes MySQL and PostgreSQL for data management.
- Server: Node.js and Django are employed for efficient server-side processing.
- Programming Languages: The application is developed using Java, Python, and JavaScript.

3.1.2 used interface

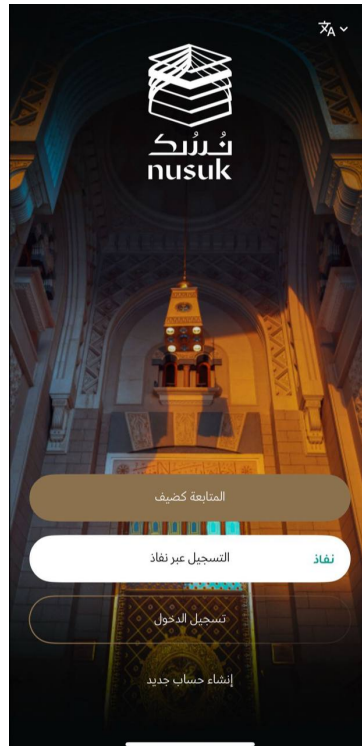


Figure 3.1: the frist page that appears when openig

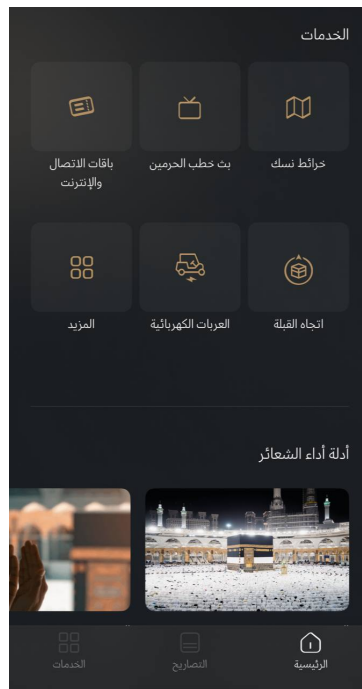


Figure 3.2: main page

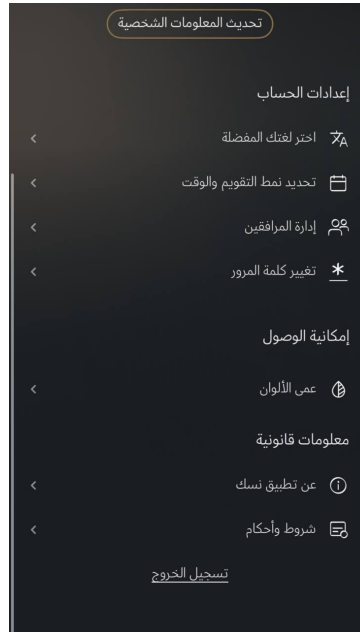


Figure 3.3: profile page



Figure 3.4: services page

conclusion

The Nusuk app enhances the Hajj and Umrah experience by offering a comprehensive suite of services, including trip planning, accommodation booking, and real-time updates. It simplifies the complex processes for pilgrims and Umrah performers, providing features such as prayer schedules, Qibla direction, and vehicle rentals. Unlike other existing apps, the Nusuk app stands out with its user-friendly interface, instant notifications, and local recommendations. Built on a robust architecture, it ensures user security and ease of access, making it an essential tool for modern-day pilgrims and Umrah performers.

References

- "Nusuk." *Nusuk*, <https://www.nusuk.sa/ar>.
- *Nusuk*, <https://www.nusuk.sa/>.
- *IslamicFinder*, <https://www.islamicfinder.org/>.
- "HalalBooking." *HalalBooking*, <https://ar.halalbooking.com/>.
- "Hajj Umrah Guide." *App Store*, <https://apps.apple.com/us/app/hajj-umrah-guide-step-by-step/id1600204458?l=ar>.
- "Nusuk app." *SaudiPedia*, <https://saudipedia.com/article/10459/%D8%AD%D9%83%D9%88%D9%85%D8%A9-%D9%88%D8%B3%D9%8A%D8%A7%D8%B3%D8%A9/%D8%A7%D9%84%D8%AD%D9%83%D9%88%D9%85%D8%A9-%D8%A7%D9%84%D8%B1%D9%82%D9%85%D9%8A%D8%A9/%D8%AA%D8%B7%D8%A8%D9%8A%D9%82-%D9%86%D8%B3%D9%83>.