

Software Requirements Specification

Version 1.0

"Hajji"

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Error! Bookmark not defined.

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Error! Bookmark not defined.

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Error! Bookmark not defined.

Revision History

Date	Description	Author	Comments

Document Approval

The following Software Requirements Specification has been accepted and approved by the following:

Signature	Printed Name	Title	Date

1. Introduction

1.1. Purpose

The purpose of this document is to present a description of "Hajji" mobile application. It will explain the purpose and features of the application. This document is intended for the stakeholders of the application.

1.2. Scope of Project

"Hajji" will be a mobile application, implemented on Android, Windows Phone and BlackBerry platform. It aims to provide all the services that a Hajj may need. The application's functionalities shall include News, Hajj Rituals, Weather, Fatawa, Prayer Time, Important Contacts, and Maps and tracking system. Furthermore, Application contains a tracking system, and users can add friends and know their location plus finding a route to them.

2. Description

2.1 Operating Environment

The following devices should be used:

Platform	Device	Operating System
Android	S2	Android OS, v2.3.4 (Gingerbread)
	S3	Android OS, v4.0.4 (Ice Cream Sandwich)
	Ace +	Android OS, v2.3 (Gingerbread)
	Tab 10"	Android OS, v4.0.4
Windows Phone 8	Nokia Lumia 820	Windows Phone 8
BlackBerry		

2.2 Implementation Constraints

- 1- The application should be implemented for Android, IOS, Windows Phone and Black Berry.
- 2- All of the application's features need the mobile to be connected to the internet except showing "Important Contacts", "Hajj Rituals" and "Fatawa" features.
- 3- In case of connection failure, an alert message should be displayed to user.

2.3 Assumptions & Dependencies

- 1- The application should be in Portrait orientation layout.
- 2- We may need to cache some data like maps, to overcome the internet disconnecting.

3. Specific Requirements

3.1 Functional Requirements

The application should allow the user to:

- 1- Switch languages between **English** and **Arabic**.
- 2- Login using his **Mobile Number** and **Password**.
- 3- Check the latest **news** (Local / World) news.
- 4- See a list of "**Fatawa**".
- 5- **Show weather** of the selected city.
- 6- **Show Prayer Time** for the selected city.
- 7- Find a list of important contacts like **Emergences** and **Hospitals**.
- 8- Show **Hajj Rituals**.
- 9- Show the Map of the selected city.
- 10- Detect user's current location.**
- 11- Find and **draw a Route** from the user's current place to a certain chosen place.
- 12- Tracking System
 - 12.1- Register to have an account.
 - 12.2- Login to be able to use this feature.
 - 12.3- Add friend to be able to check his contact information and his current place.
 - 12.4- Check friend's current place and show route from your place to his place.
- 13- **Submit his current place** and choose whether to make it visible to his friends or not.

3.2 Non-Functional Requirements

3.2.1 Security

The application should keep the users' data secured.

3.2.2 Usability

- The application shall be designed to ensure great user experience and instant comfort.
- The application shall be easy-to-use, so that 90% of users should be able to learn system's functionalities within maximum of 15 minutes.

3.2.3 Reliability

- The application shall handle all active users simultaneously.

3.2.4 Availability

- The application should be available to users at all times

3.2.5 Maintainability

- The application should be able to be modified to cope with any upcoming changes.

3.2.6 Performance

- The application should ensure highest performance in all actions.

3.4 Use Cases

3.4.1 UC10- Tracking System:

3.4.1.1 Login

Actors: User

Pre-Conditions:

- 1- Server admin has provided initially an authentication to the user.
- 2- User is not logged in.

UC Primary Success Flow:

- 1- User provides correct phone number and Password.
- 2- User presses "Login" button.

UC Alternative Flow:

1- User provided incorrect authentication.

- a- A message "Invalid authentication, Please provide correct phone number and Password" is displayed.

Post-Conditions:

- 1- User is logged in and can access the application.
- 2- User is redirected to tracking system page.

3.4.1.2- Register

Actors: User

Pre-Conditions:

None

UC Primary Success Flow:

- 3- User provides correct phone number, Password, email address and personal information.
- 4- User presses "Register" button.

UC Alternative Flow:

1- User provided incorrect or invalid information.

- a- A message "please provide a correct mobile number, email and password according to the hint" will be shown.

2- User didn't fill all the required information for registration.

- a- A message "please fill all the required data" will be shown.

Post-Conditions:

- 1- A message "You have successfully registered to the application".
- 2- User is logged in and can use the "Tracking System" feature.
- 3- User is redirected to tracking system page.

3.4.1.3- Add Friend

Actors: User

Pre-Conditions:

- 1- User is logged in.
- 2- User have the mobile number of his friend.
- 3- User's friend also have "Hajji" application installed on his device.

UC Primary Success Flow:

- 1- User clicks on "Tracking System" from the main screen.
- 2- Click on "Add Friend" button from the tracking system page.
- 3- Enter the user's mobile number and click add.

UC Alternative Flow:

6- User entered a wrong mobile number.

- a- Show message box “the mobile number you entered is wrong or not exists.

Post-Conditions:

User has a new friend added.

3.4.2 UC20- Switch Languages:

Actors: User

Pre-Conditions:

- 1- App is initialized in one of the two languages.

UC Primary Success Flow:

- 1- User clicks on the other language tap on the main screen.

UC Alternative Flow:

None

Post-Conditions:

Language Changed.

3.4.3 UC30- Check News:

Actors: User

Pre-Conditions:

User is connected to the internet.

UC Primary Success Flow:

- 1- From the main screen, user clicks on “News” button.
- 2- User choose local or world news from the next screen.
- 3- News is being retrieved from a web service.

UC Alternative Flow:

- 1- *user is not connected to the internet*

- a. Show a message box telling, "Please make sure that you are connected to the internet.
- b. Redirect user to the main screen.

Post-Conditions:

A list of news is being showed to the user.

3.4.4 UC40- Show Fatawa:

Actors: User

Pre-Conditions:

None

UC Primary Success Flow:

- 1- From the main screen, user clicks on "Fatawa" button.
- 2- List of Fatawa are being retrieved from database.

UC Alternative Flow:

- 1- Connection cannot be established between the application and the database , or something went wrong during retrieving data.
 - 1- Show message box telling that "Data cannot be retrieved current now , please try again later".

Post-Conditions:

A list of Fatawa is being showed to the user.

3.4.5 UC50- Show Weather conditions:

Actors: User

Pre-Conditions:

- 1- Mobile is connected to the internet.

UC Primary Success Flow:

- 1- User click on "Weather" button in the main screen.
- 2- Choose city to show its weather.

UC Alternative Flow:

- 1- No Internet connection can be established.
 - a. Show a message box telling, "Please make sure that you are connected to the internet."
 - b. Redirect user to the main screen.

Post-Conditions:

The chosen city's weather is being showed.

3.4.6 UC60- Detect Location and Find a Route:

Actors: User

Pre-Conditions:

- 1- User is connected to the internet.
- 2- User's GPS is turned on

UC Primary Success Flow:

- 1- From the main screen , user clicks on "Detecting and Routing" button.
- 2- Mobile trying to get the user's current place using GPS.
- 3- User select a place to find route to it.

UC Alternative Flow:

- 1- User is not connected to the internet.
 - a. Show message box "please make sure that you are connected to the internet".
- 2- User didn't select place to find a route to it
 - a. Show message box "please Select the place that you want to find a route to".

Post-Conditions:

A drawn route will appear on the screen between the user's current location and the selected place.

3.4.7 UC80- Show Maps:

Actors: User

Pre-Conditions:

- 1- User is connected to the internet.

UC Primary Success Flow:

- 1- User clicks on "Maps" button from the application's main screen.
- 2- Choose city from a list to see its map.

UC Alternative Flow:

- 3- User is not connected to the internet.
 - b. Show message box "please make sure that you are connected to the internet".

Post-Conditions:

The chosen city's map is shown.

3.4.9 UC80- Prayer Time:

Actors: User

Pre-Conditions:

- 1- User is connected to the internet.

UC Primary Success Flow:

- 1- User clicks on "Prayer Time" button from the application's main screen.
- 2- Choose city from a list to see its prayer time.

UC Alternative Flow:

- 1- User is not connected to the internet.

- c. Show message box “please make sure that you are connected to the internet”.

Post-Conditions:

The chosen city’s prayer time are shown.

3.4.10 UC90- Show Important Contacts:

Actors: User

Pre-Conditions:

None

UC Primary Success Flow:

- 1- User click on “Important contacts” button from the main screen.
- 2- Choose whether to see “Emergences numbers”, “Hospital Numbers” or other “Important numbers.
- 3- Connect to database to retrieve data from it.

UC Alternative Flow:

- 1- Failed to get data from the database.
 - a. Show message box “Cannot retrieve data now please try again later”.

Post-Conditions:

Show the list of the chosen subcategory’s numbers.

3.4.10 UC100- Show Hajj Rituals:

Actors: User

Pre-Conditions:

None

UC Primary Success Flow:

- 1- From the main screen, user clicks on “Hajj Rituals” button.
- 2- HTML page contains Hajj rituals will be shown.

UC Alternative Flow:

- 1- HTML document is not available or cannot be found.
- 2- Show message “This page cannot be retrieved for this time, please try again late”.

Post-Conditions:

Page that contains Hajj rituals is shown.