* Requirements-Based on user inter-

action

This section includes the requirements that specify all the fundamental actions of the software system.

3.1 User class 1- The User

ID: FR1

TITLE: User Registration- Mobile application

Description: Given that a user installed the application in mobile and open khujo in mobile, then the user should be able to register through the mobile application. The user must provide user-name, password and email address. The user can choose to provide facebook or google account account for user registration.

RATIONAL: In order for a user to register on the mobile application.

DEPENDENCY: None.

ID: FR2

TITLE: User login

Description: After registration, user should be able to log in to the khujo. The login information will be stored on the browser and in the future, registered user should be able to log in automatically. User will now log in from their Facebook or Google account.

RATIONAL: In order for a user to register on the mobile application.

DEPENDENCY: FR1

ID: FR3

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TITLE: Retrieve password

Description: Given that a user has registered, then the user should be able to retrieve his/her password by email.

RATIONAL: In order for a user to retrieve his/her password.

DEPENDENCY: FR1.

ID: FR4

TITLE: Create list

Description: After successfully logging in to the mobile application, the rst page that is shown should be the create list page. The user should be able to create many list for shopping, User can add / remove items in the list for the purpose to search the shops nearby. User has to save the list. RATIONAL: In order to create list for add items.

DEPENDENCY: FR2

ID: FR4

TITLE: Search by list

Description: Added items in the list will provide a search result for user to locate nearby shops. based on saved item list application will conduct a search to locate shops nearby. The search result will provide user list of nearby shops name, location and other information according to priority of items. A user should be able to select multiple search items in one search. RATIONAL: In order to search for shopping items.

DEPENDENCY: FR2

ID: FR5

TITLE: Sorting results

Description: When viewing the results in a list, a user should be able to sort the results according to items availability, nearest shop.

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RATIONAL: In order for a user to sort results in a list.

DEPENDENCY: FR2

ID: FR6

TITLE: View shop information

Description: User can be able to see not only nearest shops name but also shops information such as About shop , list of items , availability of items , contact number address , view map on google map. RATIONAL: In order to view shop information.

DEPENDENCY: FR2, FR5

ID: FR7

TITLE: View shop direction on map

Description: Users are provided with the shop direction and also shortest route on google map. So that user can able to see the shop direction from their loca-tion.

RATIONAL: In order to view shop location.

DEPENDENCY: FR2, FR5, FR6

ID: FR7

TITLE: Web application - No match found

Description: If no match is found the user should be informed but kept on the search page in order to get the possibility to conduct a new search right away.

RATIONAL: In order for user to conduct a new search if no match is found.

DEPENDENCY: FR2

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* Non-Functional Requirements

The requirements in this section we provide a detailed speci cation of the user interaction with the software and measurements placed on the system perfor-mance.

4.1 Performance Requirements

The smoothness of the system should be very high. User should not be wait too long to just see the search result. Real time should be very low. Search result should be very relevant to the searched keywords.

4.2 Safety requirements

Personal data stored of a user should be very safe from another user. Only administrator will be able to take steps if there is any concern.

4.3 Scalability

Size of the system should be enough to accommodate hundreds of users .

4.4 Availability

Mobile application should be able to accessed from any place .

* Constraints

5.1 SCALE

The application's need of active mobile data communication and an android operator mobile phone.

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5.2 MUST

Android mobile phone, Internet connection, Database

5.3 PLAN

IOS, Web application

* Security

6.1

TAG: Communication Security

GIST: Security of the communication between the system and server. SCALE: The messages should be encrypted for log-in communications, so others cannot get user-name and password from those messages.

METER: Attempts to get user-name and password through obtained messages on 1000 log-in session during testing.

MUST: 100Communication Messages: Every exchanged of information between client and server.

6.2

TAG: Admin Login Account Security

GIST: Security of accounts.

SCALE: If an admin tries to log in to the web portal with a non-existing account then the admin should not be logged in. The admin should be noti ed about log-in failure.

METER: 1000 attempts to log-in with a non-existing user account during test-ing.

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6.3

TAG: User Create Account Security

GIST: The security of creating account for users of the system.

SCALE: If a user wants to create an account and the desired username is occu-pied, the user should be asked to choose a di erent user name.

* Release Plan

The requirements are divided into three releases based on the prioritization and their dependencies. The three di erent releases are assembled so that each would work as a fully functional application. In the rst release the requirements that build up the foundation of the mobile application were included, together with the most highly prioritized requirements and their dependencies. The second release also includes important requirements. However, these requirements are not vital for a functional application. They are more suited to act as additional features that can contribute to making the software product more attractive. The third release includes the requirements that can be a orded to discard if the project gets delayed or overruns the budget.