APP_Name

Software Requirements Specification

Version-1

20/01/2019

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Prepared for
CS 258 Software Engineering
Spring 2019

Revision History

Date	*Description*	*Author*	*Comments*
<date>	*<Version 1>*	*<Your Name>*	*<First Revision>*

Document Approval

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

Signature	*Printed Name*	*Title*	*Date*
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1. Introduction

This SRS (Software Requirements Specification) provides a complete idea on how to design and implement the app as well as a basic idea of its usage and benefits. It provides a complete idea of the classes of users who will be using this app and how they will be benefited by it.

1.1 Purpose

The SRS (Software Requirements Specification) gives a comprehensive idea on the design, implementation and usage of the app. This SRS document provides a detailed overview of our app, its parameters and goals. This document describes the project's target audience and its user interface, hardware and app requirements. Any app developer can design and implement the app using this document. Also the regular users can get a basic understanding of its usage.

1.2 Scope

The purpose of the APP ('APP_Name')is to provide fast, free ,reliable and comprehensive information to users and connect buyers and sellers. APP_Name bridges the gap between the users and businesses by helping users find relevant providers of products and services quickly, while helping businesses listed in APP_Name's database to market their offerings. This project is a prototype for the app and it is restricted within the college premises. It can be further expanded to work on much bigger scales.

- *The app can also filter the results according to the users preferences.*
- *The app can also navigate the users to respective destination.(if the google API is provided)*
- *This app can also be used to register new businesses by some selected users.*

1.3 Definitions, Acronyms, and Abbreviations

SRS : Software Requirements Specification.
GUI : Graphical User Interface.
App : Application(Android).
OS : Operating System.
JAVA : Java is a programming language(Object oriented programming language)

1.4 Overview

The next section, Overall Description, of this document gives an overview of the functionality of the product. It describes the informal requirements and is used to establish a context for the technical requirements specification in the next section.

The third section, Specific Requirements, of this document is written primarily for the developers and describes in technical terms the details of the functionality of the product.

Both sections of the document describe the same software product in its entirety, but are intended for different audiences and thus use different language.

2. General Description

2.1 Product Perspective

Surfing through different sites for our daily requirements can be quite vexing and it is possible that the information we get may not be relevant or reliable. So we are building an app to provide all the information at one place. This App is a local search engine to provide users with information across various categories like restaurants,hospitals...etc

2.2 Product Functions

The application functions vary with the user using it.

1.General User

- *On clicking the app icon, a sign-in and register options are displayed. Accordingly the user will either sign-in or register with the specified details.*
- *Once, the user has signed in several buttons corresponding to different categories are displayed on the screen.*
- *On clicking the buttons we will get the list of corresponding business.*
- *Now the user can filter the list according to his/her preferences*
- *After short listing he can find out the details of his destination by clicking on it.*
- *User also has an option to navigate to the destination.*
- *User also has a sign out option from every page.*

2.Employee

- *On clicking the app icon, a sign-in screen is displayed. And the employee will sign in with the specified details provided by his employer.*
- *Once, the user has signed in several buttons corresponding to different categories are displayed on the screen.*
- *On clicking the buttons the employee will have the options to add/delete/update the information.*
- *The employee will also have a sign out option from every page.*

2.3 User Characteristics

1. General User

- *The user should have basic knowledge of using android phones.*

2. Employee

- *The Employee should have the knowledge to update / add / delete information to the database through the app i.e., he should be able to add or remove businesses and also update the previously added information.*

2.4 General Constraints

- *The App is expected to perform in real-time environment so it is to be developed keeping that in mind.*
- *This App is designed in such a way that it provides information about various business of a single city at a time.*
- *This App is designed with a assumption that the google API is provided.*
- *The App made does not include any payment or booking options.*
- *Employee needs to update the database regularly.*
- *The App will function only when the smartphone is provided with internet access.*

3. Specific Requirements

3.1 External Interface Requirements

3.1.1 User Interfaces

- *The interactions of the application is to be carried out through graphical icons , instead of a text-based user interface, typed command labels or text navigation.*

- *Thereby, a simple GUI (Graphical User Interface) is to be created which enables the user of the " APP_name" to access every feature provided to them by the application with just a few clicks and text entries.*

3.1.2 Hardware Interfaces

Smartphone working on Android OS.

3.1.3 Software Interfaces

Front-end : Android Studio(uses Java)
Back-end : Firebase and wherever used JavaScript.
Technologies used : XML,JAVA,Firebase(Nosql).

3.2 Functional Requirements

Given are the basic features of the product being developed.

3.2.1 Sign In and Authentication

- *User needs to make an account and sign in in order to use the app.*
- *User needs to input name, dob, phone number, email-id, password.*
- *This data will be stored on the firebase servers. At the time of sign in email-id and password will be required which if checks with the database, the user will be granted access to his/her dashboard.*
- *In case of forgotten password a link to reset will be sent on the email address.*

- *There will be same method of sign in for both Employee as well as user, however the dashboard will be different where a user can only retrieve information, an Employee can also edit.*

3.2.2 Filter

- *User can filter the services on the basis of their choice i.e. cost, distance etc.*
- *User needs to select the type of filter from the different choices of filters provided.*
- *The app will take users choice and sort the available services accordingly.*
- *The app will then show a sorted list of services.*

3.2.3 Search Bar

- *The user can search a particular keyword of the service or a category using the search bar provided on the GUI.*
- *The user needs to input a text keyword in the search bar.*
- *The server will run the keyword through the database and find matches accordingly.*
- *The app will show a list of categories/services that match the keyword.*

3.2.4 Navigation

- *The user can navigate to the selected services using the app.*
- *The user needs to select the service the want to finally opt.*
- *The app will then redirect to google maps(if API is provided).*
- *Route to the selected service will be shown on google maps which can be used for navigation.*

3.3 Non-Functional Requirements

3.3.1 Performance

The App is created mainly using Android studio(uses Java) and makes use of various powerful modules (like Firebase etc). These modules are well-optimized and provides for quick and accurate executions.

We provide for a user-friendly GUI which does not hinder the performance of the software, hence ensuring high performance.

3.3.2 Reliability

The information in the database is updated regularly by the employees so the information you get is very reliable.

3.3.3 Availability

The application will run 24 X 7 if internet connection is available once installed.

3.3.4 Security

The data obtained from the users is safely stored in the Firebase(provided by google). As long as Firebase server is secure, the software remains uncompromised.
(for more see in this link:https://firebase.google.com/support/privacy/)

3.3.5 Maintainability

The software is created by collaborating using a free and open source distributed version control system, Git, and hence contributions of various other programmers and thereby remains updated.
Competent documentation should assist a new programmer to understand the functionality added by each code and the goals we aspire to achieve.
Maintenance of the database has been made easy by the employee login.

3.3.6 Portability

The APP_name can work on any smartphone that runs on Android(version greater than X), so it is super portable.

3.4 Inverse Requirements

- *The App should not mix the the information from two cities.*
- *The App should not be heavy and slow.*

3.5 Design Constraints

- *We will be using a Nosql database(Firebase) so there will be no tables.*

3.6 Logical Database Requirements

We shall use databases to store the results of experiments on google server so that it can be easily altered, managed and retrieved and the database used is Firebase which is a cloud hosted database and data is stored as JSON and synchronized in realtime to every connected client.