Software Requirement Specifications

ReserveIt

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# Supervisor

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# 1. Introduction

## **1.1. Purpose of Document**

This document specifies the general factor like the external interfaces, growth path of the system, user characteristics, functional requirements, dependencies and the risk associate with the ReserveIT.

## **1.2. Intended Audience**

The purpose of this project is to Reserve a seat in a restaurant that would provide a convenient way to reserve a seat.

## **1.3. Abbreviations**

**NA**

# 2. Overall System Description

## **2.1 Project Background** We would like to thankful to our supervisor who has guided and encouraged us to do this project and this project will lead to solve the world problem by Reserve a seat in a restaurant and our main motivation is to complete this project.

## **2.2 Problem Statement** The people were unable to order a reserve a seat in their desire restaurant and people had to call to the restaurant and ask for reservation.

## **2.3 Project Scope** We will develop an android application that would reserve a seat in a restaurant and owner can also register their restaurant.

## **2.4 Not In Scope** We will not include IOS application and Desktop application or web application for this project.

## **2.5 Project Objectives** Our objective is to develop a service which Reserve a seat in a restaurant with proper time.

## **2.6 Stakeholders & Affected Groups** Supervisor and Group Members.

## **2.7 Operating Environment** We are using Windows as an operating system, we are using Java to develop this application.

## **2.8 System Constraints** The system might not always gives the 100% accurate results and using machine learning algorithms can lead to unexpected results in rare cases, and deficiency of memory can be occurred during limitation of firebase.

## **2.9 Assumptions & Dependencies** Our assumptions are that, we have those skills set to develop this project, we will assign accurate time frame for each milestone and our upper management will be conducted by our advisory. Our dependencies are data availability and limited resources on APIs.

## **3. External Interface Requirements**

## **3.1 Hardware Interfaces** Since the application must run over the internet to give a creditability of each tweet, all the hardware shall require to connect internet will be hardware interfaces for the system such as Modem, Ethernet and etc.

## **3.2 Software Interfaces** NA.

## **3.3 Communications Interfaces** The tweet creditability meter shall use HTTP protocol for communication with the Google extension by over the internet.

## 

# 4. System Functions / Functional Requirements

## **4.1 System Functions**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Ref # | Functions | | | Category | | Attribute | Details & Boundary Constraints |
| R1.1 | Authenticate | | | Evident | | Feature extraction time | System will authenticate the user |
| R1.2 | Show all the Restaurant | | | Evident | | Feature extraction time | System will show all the restaurant |
| R1.3 | Register Restaurant | | | Evident | | Feature extraction time | System will enable owner to register their restaurant. |
| R1.4 | | Reserve a seat | Evident | | Feature extraction time | | System will Reserve a seats and cancel it if he wish. |
|  | |  |  | |  | |  |

### 

### **4.1.1 System Attributes/ Nonfunctional Requirements**

|  |  |  |
| --- | --- | --- |
| Attribute | Details and Boundary Constraints | Category |
| Response time | It would take 1 second to reserve a seat. | Mandatory |
| Concurrent User Load | There would be 100 requests in 100 seconds. | Mandatory |

# 5. Non - Functional Requirements

## **5.1 Performance Requirements**

## Hence this project is based on Android development, It does required a heavy CPU and GPU to develop this software and at least it required 8GB of ram and core i5 processor.

## 

## **5.2 Safety Requirements** Not Applicable

## **5.3 Security Requirements**

## Since the data will be read from the Google extension and that extension will give creditability score of a particular tweet, the extension will not read the data from other website except Twitter.

## 

## **5.4 Reliability Requirements**

We will use several test techniques to ensure the quality and reliability of project.

## **5.5 Usability Requirements**

Our project will include Efficiency, Low workload and intuitiveness. These usability requirements are necessary in this project.

**5.6 Supportability Requirements**  The Internet access is required all the time.

**5.7 User Documentation**  **Requirements**

Quad Core 1.2 GHZ Snap Dragon 225

Android Jelly Bean Operating system

1 GB of RAM, 8GB ROM

**Installation Guide**

1. Open google play store
2. Search ReserveIt
3. Press download
4. The software is downloaded in your system

**6. References**

NA