COMS3009: Software Design

Requirements Analysis Document

The Restaurant Management System

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1 Introduction

1.1 Purpose Of The System

It is very frustrating as a customer to arrive at a restaurant to and find that all tables are taken, and you have to wait for hours before you can get a table. Sometimes even if you try to book in advance by calling the restaurant, the call does not go through or is never picked up.

The purpose of this project is to create a system that will replace the human effort, on the restaurant staff side, of having to manually take bookings.The system will enable customers to make restaurant bookings via their android mobile devices wherever they are.

1.2 Scope Of The System

The Restaurant booking system is a sofware application from which patrons will be able to book tables, view the menu, order food, make bill payments and even rate the restaurant‘s service.

The system will be running on android mobile devices.

1.3 Objectives and success criteria of the project

The main objective of this project is;

- To create a system that will enable customers to book tables online

Additional features of the system are;

- Users can view the menu and specials for the day
- Users can keep track of their bill
- Users can order online
- Users can check whether their table is ready for occupying

During the process of designing this system, the software designers will be liasing with the restaurant staff and willing restaurant customers constantly to test the current prototype.

Success will be achieved if the following goals are met;

- Users are happy with and can easily use the interface without any training
- The instruction manual answers all user queries
- The system eliminates any kind of interaction between restaurant staff and customers where booking of tables is concerned
- More than 80 percent of the test subjects approve and say they will be using the application everytime they visit the restaurant

1.4 Definitions, acronyms and abbreviations

User Anyone registered on the system

Interface Visual part of the application which the user will interacting with

1.5 References

1.6 Overview

2 Current system

Currently, restaurant bookings can only be made via a phone call or directly at the restaurant. The restaurant has only a single extension for this and during peak periods, the staff fails to handle all potential customers booking on the phone.

The menu is printed on a cardboard paper and updating it requires printing a new set of menus and laminating them.

After decicding on what to eat, the customer has to wait for the waiter to come back to them and take their order.

The customer then asks for and pays their their bill after they are done eating.

3 Proposed System

3.1 Overview

The whole aim of the proposed system is to automatize most of the restaurant‘s processeses so as to make the restaurant run more efficiently.

3.2 Functional Requirements

3.2.1

The system shall allow restaurant staff and customers to register as users.

3.2.2

The system shall allow restaurant staff and customers to log in.

3.2.3

The system shall give staff and customers different user priviledges.

3.2.4

The system shall make available an updated menu for users to choose what to order.

3.2.5

The system shall allow users to make table bookings.

3.2.6

The system shall enable users to order food online.

3.3 Non Functional Requirements

3.3.1 Usability

- The system must be usable on more than 70 percent of Android devices
- Instructions on the system must be unambiguous
- The user must be able to log in and out of their account on any device

3.3.2 Reliabilty

- The software must be bug free by the time it is distributed for public use.
- Each user account must be secure and unique.

3.3.3 Perfomance

- Graphics and text must be clear.
- Logging in must be instantaneous with no flaws

3.3.4 Supportability

- On the first release, the application must run on any Android KitKat or later releases

3.3.5 Implementation

- The project must be implemented on Android.

3.3.6 Interface

- The interface must be attractive, simple and easy to use.

3.3.7 Packaging

- The System must be packaged and distributed freely on the Google Play Store

3.3.8 Legal

- The system must direct the user to the Terms and conditions page which the user must read and accept before installing the application.

3.4 System Models

3.4.1 Scenarios

1. Customer downloads and launches application.
2. Customer registers using their phone number as login name and creates password.
3. Customer logs in and enters wrong password.[What happens when a wrong password is entered?]
4. Customer then enters the correct credentials and logs in.
5. Customer books a table for 2. [What happens when a customer books a table? Do they get an SMS confirmation?]
6. Customer logs out.

3.4.2 Use Case Model