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RestaurantApp

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**INTRODUCTION**

**1.1 Purpose**

This document details the Software requirements specifications, which describes the requirements of our software application, The Regular, which helps us give our customer the product they want!

**1.2 Intended Audience**

Our intended audience is Dr. Lidia Morrison along with our customer. This document is here to help our intended audience understand the functions of The Regular as a system within a bar environment. Consequently our intended customers are owners of bars. The second section of this document will concentrate of describing the functions of the application in reference to bar activities.

**1.3 Product Scope**

The Regular is a piece of restaurant management software directed to bars and small restaurants with bars. This application is here to help manage orders coming in and out of the restaurant/bar. It does this by providing a mobile platform to take orders. The mobile platform will help the waiters/waitresses take orders and is an overall quality of life improvement for them. This will also have an effect of the restaurant/bar by reducing lines at the bar and help disperse your customers across the restaurant to give it more street appeal.

**1.4 References**

# 

# OVERALL DESCRIPTION

## 2.1 User Objectives

The user is provided with an Android application to manage food orders. The user can open and close tabs.

## 2.2 Product Functions

The primary function of the *Restaurant App* is to provide a managing system for a restaurant. The application is designed to allow a restaurant to organize their orders more efficiently.

The default drinks in the menu are: coke, lemonade, coffee, water, tea, and latte. The default foods in the menu are: hamburgers, hotdogs, pizza, tacos, steak, ribs, fish, white fish, and fruit.

The following is a list of functions of the *Restaurant App*:

* Allows the user to load data from a file of their choice
* Allows the user to add drinks and food to a table's order
* Provides ten tables for use
* Provides an order number to match the table
* Gives the ability to close out a table and see the final bill

## 2.3 Operating Environment

*Restaurant App* is an application (app) which runs on an Android device. The Android device must have an Android Operating System (OS) version **4.1.2** or newer. Due to the availability of multiple devices which run the Android OS, restaurants can have greater access to this application.

## 2.4 User Characteristics

Restaurant staff will have access to the app. They will be the only people who interact with the application. Otherwise the app has no restrictions as to who can use it. No special skill is required to operate the app.

## 2.5 Design and Implementation Constraints

The system is limited to the Android platform. The system does not support Apple’s mobile OS (iOS). The system does not support running on a personal computer running either a Windows OS or an Apple OS. The system is designed to run on a specific subset of the different versions of Android OS which are currently released and used. The application may run on older versions of the Android OS, but it will be designed specifically to run on Android OS version **4.1.2** or newer.

The interface of the system will be limited to the touch screen. Keyboard or Mouse are not valid inputs to this system. The user will interact with the system solely through the touch screen on the device.

The application will not be limited by menu items since they can be loaded by the user. The restaurant will be limited to 10 tables.

## 2.6 Assumptions and Dependencies

This SRS assumes that the reader has a basic understanding of the Android Platform and the ability to navigate and operate an Android device (smartphone or tablet). This document will not discuss the requirements of the Android OS or its usability and navigability. This document will focus on the details of the application (*Restaurant App*) which will run on the Android OS.

**FUNCTIONAL REQUIREMENTS**

**3.1 System Requirements - Mobile App (Android)**

**3.1.1.1 The system should allow the user to properly navigate between loading their database, orders, seating, and billing**

1. **Description:** The app should allow the user/waiter/server to choose between assigning an order to the bill, closing out a bill, or assigning seating. The app will display three different buttons for each of theses decisions and the user can use the build in back button to go back and forth.
2. **Precondition:** User opens android app.
3. **Post-Condition:** ORDER SEATING CLOSE OUT LOAD DATA buttons will be displayed.
4. **Risks:** NONE

**3.1.2.1 LOAD DATA should load the customers database**

1. **Description:** The app runs off of a database of the restaurant's food and drink items along with the customers orders and seating availability. Connecting the app(loading your data) via the LOAD DATA function will allow your database to be used.
2. **Precondition:** User opens android app and has a database setup properly.
3. **Post-Condition:** The database will be attached to the app.
4. **Risks:** Improperly designed database will lead to crashes and incorrect results

**3.1.3.1 While ordering, the table number must be entered**

1. **Description:** App will take in a number for the table and seat of the customer, which will later be used to assign their order to them.
2. **Precondition:** user presses ORDER button and enters correct table and seat number.
3. **Post-Condition:** Once SUBMIT ORDER button is pressed the order will be assigned to the table seat number combination that was entered and added to the database.
4. **Risks:** Incorrect table and seat number may be entered.

**3.1.3.2 An order number will be assigned to a table**

1. **Description:** When a customer orders their table number is associated with an order number.
2. **Precondition:** Bill at that table is closed out before new customer is seated. New customer orders a drink or food.
3. **Post-Condition:** All further food or drink ordered at that table are assigned to that table number
4. **Risks:** incorrect table number may be entered and the order will go on the wrong bill. The bill from the previous customer may not have been closed out.

**3.1.3.3 While ordering the user may select a drink**

1. **Description:** The user scrolls through a drop down menu to select the customers drink order.
2. **Precondition:** User presses ADD DRINK button and then selects a drink from the drop down menu.
3. **Post-Condition:** When SUBMIT ORDER is pressed the drink order is saved and associated with the table and seat number in the database.
4. **Risks:** Incorrect drink may be selected from list and the wrong seat table combination may also have been entered.

**3.1.3.4 While ordering the user my select a food item**

1. **Description** the user scrolls through a drop down menu to select the customer's food order.
2. **Precondition:** User presses enters the correct table number then presses the ADD FOOD button and then selects a food item from the drop down menu.
3. **Post-Condition:** When SUBMIT ORDER is pressed the drink order is saved and associated with the table and order number in the database.
4. **Risks:** Incorrect Food may be selected from list and the wrong table number may also have been entered.

**3.1.3.5 The user must be able to submit the order for the table**

1. **Description:** The user uses a SUBMIT ORDER button to assign the food and drink to a table and bill combination.
2. **Precondition:** User enters desired order and correct table number.
3. **Post-Condition:** The food/drink order is associated with the table bill number combination in the database.
4. **Risks:** Incorrect or missing table number, incorrect food or drink selected.

**3.1.4.1 After Selecting CLOSE OUT button the seat and table number must be entered for the bill to be saved and the table to be opened**

1. **Description:** After selecting the CLOSE OUT button the table number is entered and the bill table number combination is saved.
2. **Precondition:** Enter the table number press the CLOSE OUT button.
3. **Post-Condition:** The bill will be saved in the database for the cash handling app.
4. **Risks:** Incorrect table bill combination entered or order was inputted incorrectly.

**3.1.5.1 After selecting SEATING button seating chart is displayed and shows open and closed seats**

1. **Description:** Seating chart is displayed and shows what seats are open or taken.
2. **Precondition:** SEATING button is pushed.
3. **Post-Condition:** Seating chart and availability is displayed.
4. **Risks:** Improperly entered table at close out or food order.

**3.1.5.2 Open a seat when customer closes out their tab and leaves**

1. **Description:** When a customer closes out their tab their
2. **Precondition:** Seat and table number are entered and then OPEN SEAT button is pushed.
3. **Post-Condition:** Specified seat is made to display that it is open.
4. **Risks:** Seat or table number is entered incorrectly.

**3.1.5.3 Close a seat when a customer is seated and orders anything**

1. **Description:** Once a customer is seated, the table number is entered and drinks are orders and the seat is closed
2. **Precondition:** Table number is entered, food is selected, and SUBMIT ORDER button is pushed.
3. **Post-Condition:** Specified table is made to display that it is taken on seating chart
4. **Risks:** Table number is entered incorrectly, customer is sitting in wrong seat.

**3.1.6.1 User presses Load data button**

1. **Description:** The user selects the LOAD DATA button and is given an option to enter the address for their database.
2. **Precondition:** They have a populated database.
3. **Post-Condition:** Database can be synced with application.
4. **Risks:** Improper database implementation.

**3.1.6.2 User enters data base information**

1. **Description:** The user enters the database address and selects the LOAD DATA button to sync the database with the application
2. **Precondition:** They have a populated database, enter the address and select the LOAD DATA button
3. **Post-Condition:** Data is synced with the application.
4. **Risks:** Incorrect address or improper database implementation

**3.2 USE CASES**

|  |  |
| --- | --- |
| **3.2.1 Load Data** |  |
| Use Case # | 1 |
| Objective | User loads their database of food and drink |
| Priority | Very High |
| Actor | Business Owner |
| **-Flow Of Events-** |  |
| 1 Basic Flow | 1. User launches app 2. User selects load data 3. User types in address of database 4. User selects load data and database is loaded |
| 2 Alternate Flow | NONE |
| 3 Includes | NONE |
| 4 Precondition | User must have a database |
| 5 Postcondition | Database will be loaded |

|  |  |
| --- | --- |
| **3.2.2 Add Drink** |  |
| Use Case # | 2 |
| Objective | Order a drink for a customer |
| Priority | High |
| Actor | Wait Staff |
| **-Flow Of Events-** |  |
| 1 Basic Flow | 1. User loads data 2. User hits order button 3. User enters table number 4. Order number is generated 5. User presses add drink and selects from drop down menu 6. User hits submit order |
| 2 Alternate Flow | NONE |
| 3 Includes | Load Data |
| 4 Precondition | 1. Data is loaded 2. Customer is seated and ready to order |
| 5 Postcondition | Drink order will be filled by wait staff |

|  |  |
| --- | --- |
| **3.2.3 Add Food** |  |
| Use Case # | 3 |
| Objective | Order food for the customer |
| Priority | High |
| Actor | Wait Staff |
| **-Flow Of Events-** |  |
| 1 Basic Flow | 1. User load data 2. User hits order button 3. User enters table number 4. Order number is generated 5. User presses add food and selects from drop down menu 6. User hits submit order |
| 2 Alternate Flow | NONE |
| 3 Includes | Load Data |
| 4 Precondition | 1. Data is loaded 2. Customer is seated and ready to order |
| 5 Postcondition | Order will be sent to kitchen |

|  |  |
| --- | --- |
| **3.2.4 Close Out** |  |
| Use Case # | 4 |
| Objective | Close out a customer’s tab |
| Priority | High |
| Actor | Wait Staff |
| **-Flow Of Events-** |  |
| 1 Basic Flow | 1. Customer had ordered items 2. Customer wants to close their tab 3. Hit close out button 4. Enter table number 5. Hit close out |
| 2 Alternate Flow | NONE |
| 3 Includes | Load Data  Order Drink  Order Food |
| 4 Precondition | 1. Data is loaded 2. Food or drink is ordered 3. Customer is ready to close out |
| 5 Postcondition | Customer will be given bill |

|  |  |
| --- | --- |
| **3.2.5 Check Table Availability** |  |
| Use Case # | 5 |
| Objective | Visual aid for seating |
| Priority | Low |
| Actor | Host |
| **-Flow Of Events-** |  |
| 1 Basic Flow | 1. Press seating button 2. View seating chart |
| 2 Alternate Flow | NONE |
| 3 Includes | Load Data  Order Drink  Order Food |
| 4 Precondition | 1. Data is loaded 2. Seated customers have ordered |
| 5 Postcondition | Customers are seated properly |

**4 EXTERNAL INTERFACE REQUIREMENT**

**4.1 User Interfaces**

The user interface is made up of a series of buttons, inputs, drop down menus. The buttons, along with the build in back button for android devices, help the user navigate between different parts of the application along with submitting input. The inputs allow the user to input things like table numbers, item quantity, and their web hosting. The drop down menus allow the user to select between different food and beverages.

**4.2 Hardware Interfaces**

The device used to run the application must have a minimum of:

1.5 GHz cpu

512 MB RAM

30 MB Internal Storage

**4.3 Software Interfaces**

This application runs on Android OS versions 4.4-8.0.

**5 NONFUNCTIONAL REQUIREMENTS**

**5.1 Performance Requirements**

The system should have near real time results on everything except for the load data action.

**5.2 Software Quality Attributes**

**5.2.1 Compatibility**

This application will run on any device with the required hardware and software requirements.

**5.2.2 Maintainability**

The application will be delivered with a fully functioning database based on your specifications. However if the database needs changing, the application is delivered with an instructional document that details how to maintain the database that supports the application. Our in house admin will also be available for instruction/question via appointment.