

# **SRS FOR FOOD DELIVER APPLICATION**

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## **Introduction :**

This Software Requirement Specification document provides a complete description of all the functionalities and the specifications of the Food Delivery. The developers and the testers can use this document as a reference for developing the design and test plan documents.

### **1. Purpose:**

The Software Requirements Specification (SRS) will provide a detailed description of the requirements for the Food Delivery (FD). The clear understanding of the FD and its' functionality

will allow for the correct software to be developed for the end user and will be used for the development of the future stages of the project. This SRS will provide the foundation for the project.

From this SRS, the FD can be designed, constructed, and finally tested.

This SRS will be used by the software engineers constructing the FD and the Food Delivery receiver

end users. The software engineers will use the SRS to fully understand the expectations of this FD

to construct the appropriate software. The Food Delivery end users will be able to use this SRS as a

“test” to see if the software engineers will be constructing the system to their expectations. If it is

not to their expectations the end users can specify how it is not to their liking and the software

engineers will change the SRS to fit the end users' needs.

#### **1.1. Definitions, Acronyms, and Abbreviations SRS :**

- Software Requirements Specification
- FD – Food Delivery
- Subjective satisfaction – The overall satisfaction of the system End users – The people who will be actually using the system.

#### **1.2. Scope**

The software product to be produced is a Food Delivery System which will automate the major hotel

operations. The first subsystem is an Ordering and Delivery System to keep track of reservations and

room availability. The second subsystem is the Tracking and Selling Food System that charges the customer.

## **2. The Overall Description**

Describes the general factors that affect the product and its requirements. This section does not state specific requirements. Instead it provides a background for those requirements, which are defined in section 3, and makes them easier to understand.

### **2.1. Product Perspective**

The Food Delivery is an independent stand-alone system. It is totally self-contained.

#### **2.1.1. System interface**

The application runs in the latest version of Chrome or Firefox browser on Windows, Linux and Mac and on smartphones android V8.0+.

#### **2.1.2. User Interfaces**

The User Interface Screens are described in table given below.

#### **2.1.3. Software Interfaces**

The system will store all data dividing into 4 parts as per the character of database which are Login, Ordering, Customer Record and payment and customer details. The system shall permit only Management team and database administrator to edit the database and the system will allow customer to cancel the Orders. System will have order detail database which store all the information of order.

Ordering database store the order information and payment database shows all the payment whichever is due from the customer and customer database provide all the information of customers.

The system shall interface with an Oracle or Access database

#### **2.1.3. Hardware Interfaces**

The system shall run on a Microsoft Windows, Apple iOS and Android based system.

#### **2.1.4. Communication Interfaces**

The system shall be a standalone product that does not require any communication interfaces.

## **2.2. Product Functions**

Ordering and Delivery System:

- Allows for typing in customer information
- Has a default price rate that is adjustable
- Includes a description field for the changed rate
- When a customer order, the order number will be changed to occupied in the database
- Ability to modify an order
- When no orders are available and a customer would like to extend their order their information will be placed in a database and when there are order available the first customer on the list will have the order
- When a customer order is fulfilled the amount owed is displayed
- Records payment
- Allows for space to write customer's feedback

## **2.3. User Characteristics**

There are two types:-

- Admin
- User

### **Admin**

- Manage whole Application.
- Manage system database
- Develop, implement, and manage Food items.
- Resolve user complaints and answer user's questions regarding Food items.

### **User**

- User means that use our Application.
- User can observe whole Application (only allowed items for user).
- View available Food item.

## **2.4. Constraints**

The project should be completed within specified time period including Planning, Designing, Development, Testing and Deployment.

The project should be completed within specified budget. All the Entry and Exit criteria of all the stages should be met.

The product should be user-friendly, reliable and should maintain the industry standards without compromising the quality.

The system architecture and design should be open and in a standard way such that additional functionalities can be added later without much effort.

Company will provide only the software; it is the responsibility of the client company to set up hardware for running the application.

System should sync frequently to backup server in order to avoid the data loss during failure, so it can be recovered.

## **2.5. Assumption and Dependencies**

It is assumed that system developed will work perfectly that's going to be developed under the

Windows OS, and Apache Server with Mongo DB database.

If in case of any difficulties, SRS should be flexible enough to change accordingly.

## **3. Specific Requirement**

This section contains all the software requirements at a level of detail, that when combined with the system context diagram, use cases, and use case descriptions, is sufficient to enable designers to design a system to satisfy those requirements, and testers to test that the system satisfies those requirements.

### **3.1. External Interface Requirements**

The Food Delivery will use the standard input/output devices for a personal computer. This includes the following:

- Keyboard
- Monitor
- Mouse
- Printer



## **3.2. Functional Requirements**

Functional requirements define the fundamental actions that system must perform. The functional requirements for the system are divided into various main categories, Registration, Logging in, payment, ordering, etc.

### **3.2.1. Registration**

The Customer should be able to register with their details.  
The system should record following customer details into member database: **name, email, password, order, address**  
The system shall send verification message to email.

### **3.2.2. Logging In**

The system should verify the customer email & password against the member database when logging in.  
After login, member should be directed to Home screen with the menu card with the price range.

### **3.2.3. Ordering**

The system should enable customer to check for availability of Food items.  
The system should display rate for all Food items.  
The system should allow customer to confirm or cancel the order.  
The system should record order details into database.

### **3.2.4. Manager Access**

The system should generate financial and customer report for manager.  
The system should enable manager full modification access to customer, ordering, order information.

### **3.2.5. Payment Management System**

The system should allow customer to pay bill via online using credit or debit card.

## **3.3. Performance Requirements**

Performance requirements define acceptable response times for system functionality.  
The load time for user interface screens shall take no longer than two seconds.  
The log in information shall be verified within five seconds.

### **3.4. Logical Database Requirements**

The logical database requirement include the retention of the following data elements. This list is

not a complete list and is designed as a starting point for development.

#### **Booking/Reservation System**

- Customer first name
- Customer last name
- Customer address
- Customer phone number
- Customer feedback
- Payment received (yes/no)
- Payment type
- Total Bill

#### **Food Services:**

- Meal
- Meal item
- Meal order
- Meal payment (Credit/Check/Cash)

### **3.5. Software System Attributes**

#### **3.5.1. Reliability**

Specify the factors required to establish the required reliability of the software system at time of delivery.

#### **3.5.2. Availability**

The system shall be available during normal hotel operating hours. And everyone can access it for ordering food.

### **3.5.3. Security**

Customer Service Representatives and Managers will be able to log in to the Food Delivery System.

Customer Service Representatives will have access to the Ordering and Food subsystems.

Managers

will have access to the Management subsystem as well as the Ordering and Food subsystems.

Access .

### **3.5.4. Maintainability**

The Food Delivery System is being developed in JavaScript. It is an object oriented programming

language and shall be easy to maintain.

## **4.System Analysis**

Under system analysis we will analyses the system operations, their features, functionalities, and

other parameters of measures.

### **4.1. Study of current system:**

The study of current system for Food Delivery system is fully based on paper work. Food Delivery

has to manage all records of customers and orders in papers.

### **4.2. Problem and Weaknesses of Current System:**

Paperwork is tedious job. There is delay and the problem of human error in ordering system and

providing services

### **4.3. Requirements of New System:**

#### **4.3.1. User Requirements:**

There should be software which allocate orders automatically and maintain records of customers and

generate bill automatically for customers.

#### **4.3.2. System Requirements:**

There should be database backup of food delivery system. There should be Java supported framework for the system. Operating system should be Windows XP or higher version of Windows.

#### **4.4. Feasibility Study:**

Does the system contribute to the overall objectives of the organization?  
Can the system be implemented using the current technology? Can the system be integrated with other system which is already in place?

#### **4.5. Requirements Validation:**

It is concerned with showing that the requirements actually define the system which the customer wants.

#### **Features Of New System:**

Easy management of ordering and other processes.  
Saves time  
Can give accurate information about orders when required  
Billing becomes easy  
Customer information

#### 4.6. Data Dictionar

Field name	Data type	Size	Constrain
User name	varchar	12	Not null
password	Varchar	50	Not null
Id	Numeric	20	Primary key

Table 4.2 Registration Table

Field name	Data type	Size	Constrains
Id	Numeric	-	Primary key
Fame	Varchar	20	Not null
Lame	Varchar	20	Not null
Country	Varchar	30	Not null
City	Varchar	10	Not null
State	Numeric	10	Not null
Gender	Char	15	Not null
Email	Varchar	30	Not null
password	Varchar	100	Not null

Table 4.3 Add Categories

Field name	Data type	Size	Constrains
Catenae	Varchar2	30	Not null
Id	Varcahr2	30	Not null
Cate_code	Varchr2	10	-

Field name	Data type	Size	Constrains
Item name	Char	30	Not null
Item Id	Numeric	10	Not null
Item price	Numeric	-	Not null
Image	Varchar2	100	Not null
descriptions	Char	100	Not null

Table 4.5 Make Order

Field name	Data type	Size	Constrains
Field name	Numeric	5	Primary key
Order no	Numeric	5	Foreign key
Product_id	Numeric	10	Not null
Order price	Numeric	30	Not null
Total amount	Numeric	20	Not null

Table 4.6 Admin

Field name	Data type	Size	Constrains
Admin_id	Varchar2	50	Primary key
Admin_pass	Varchar2	20	Not null
Admin_email	Varchar	10	Not null

Table 4.7 Make Payment

Field name	Data type	Size	Constrains
Payment type	Varchar	10	Not null
Payment_ammount	numeric	15	Not null

## 5. System Design

### 5.1. System Application Design

From first form of login for administrator to corresponding other forms.

#### 5.1.1. Method Pseudo code

Algorithm or flow-chart is generated according to the data and the task to be performed.

## 5.2. Database Design

Relational Database is maintained as we know the data required is the same for all.

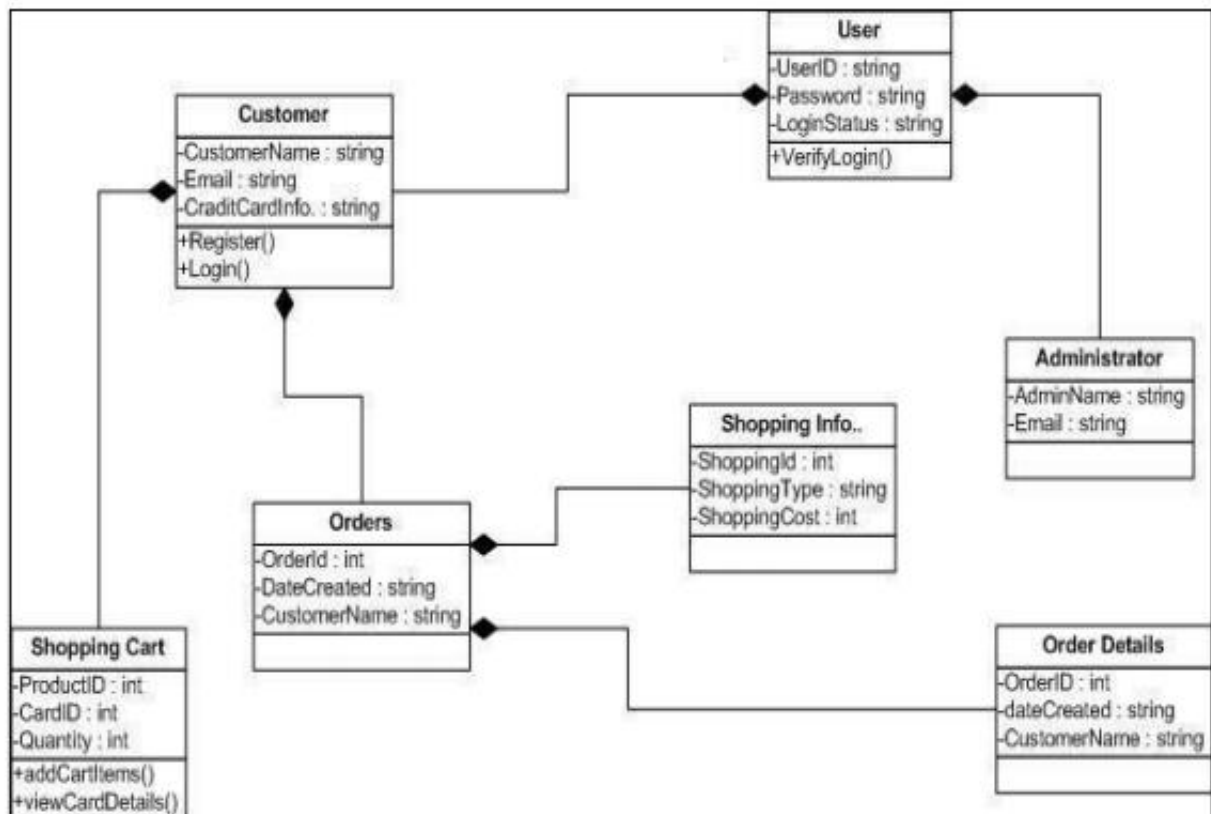
### 5.2.1. Table and Relationship

There are 3 tables maintained in MS Access:

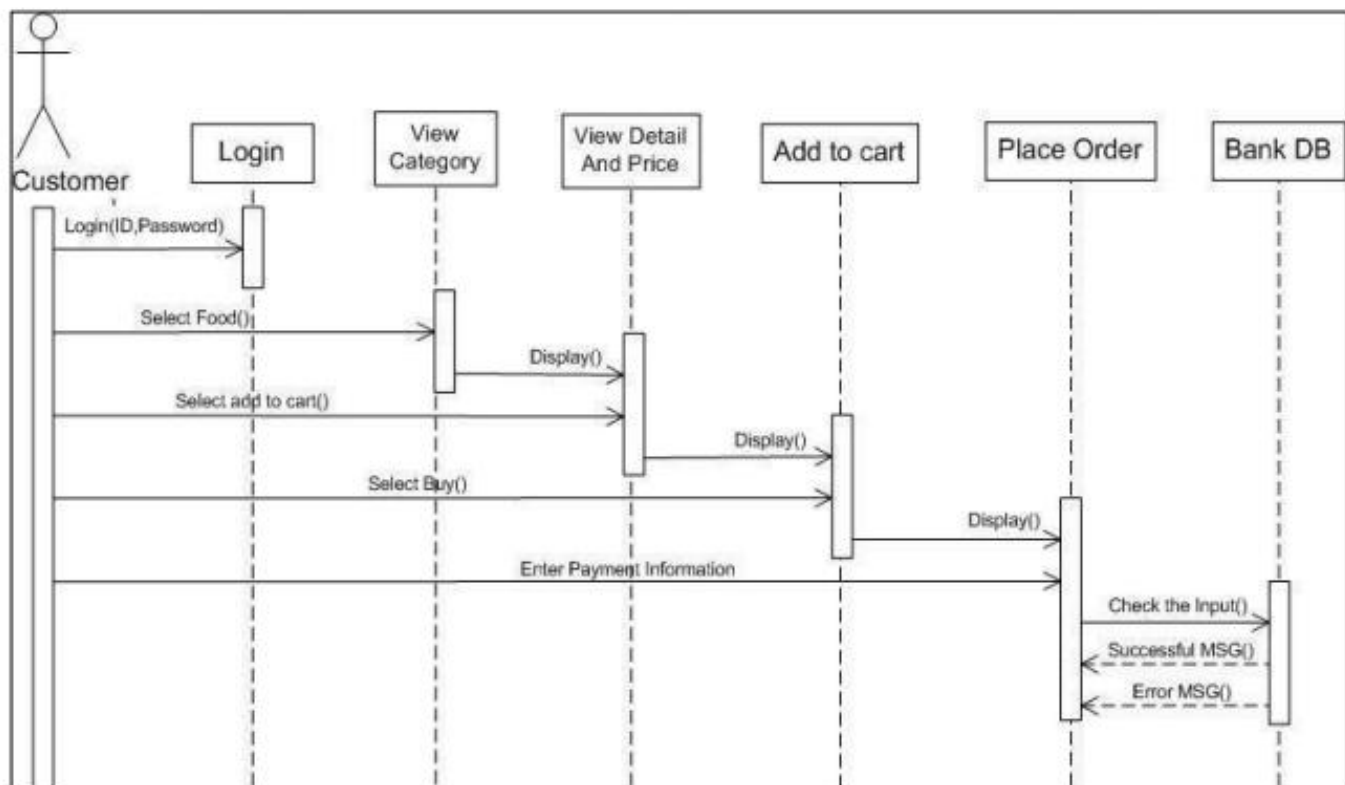
- **Order:** Maintains list of all orders of the hotel
- **Customer:** Information about customer
- **Admin:** Administrator login

## 6. Diagrams

### 6.1. Class Diagram

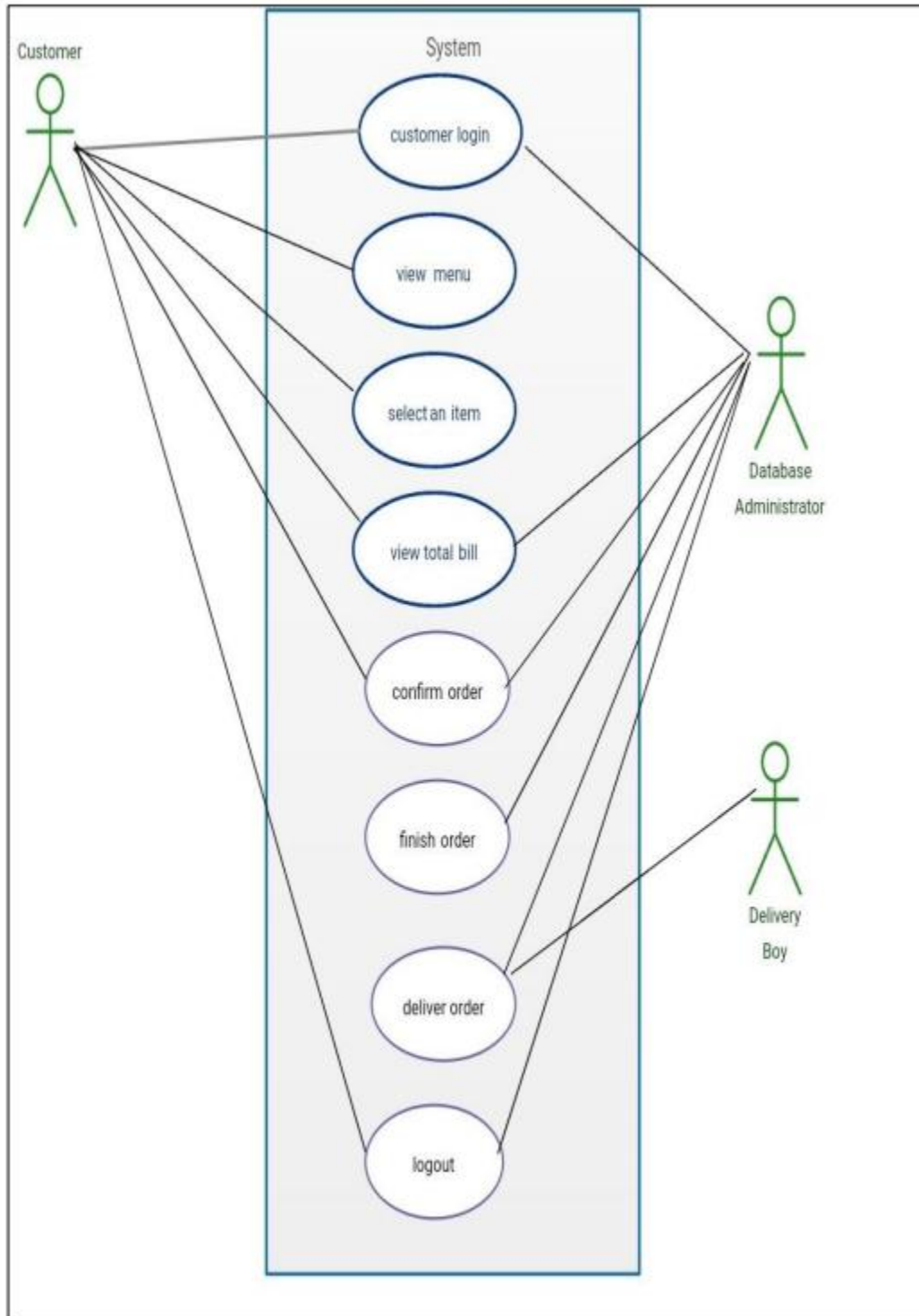


## 6.2. Sequence Diagram





### 6.3. Use Case Diagram:



## 6.4. Activity Diagram

### Login & Registration:-

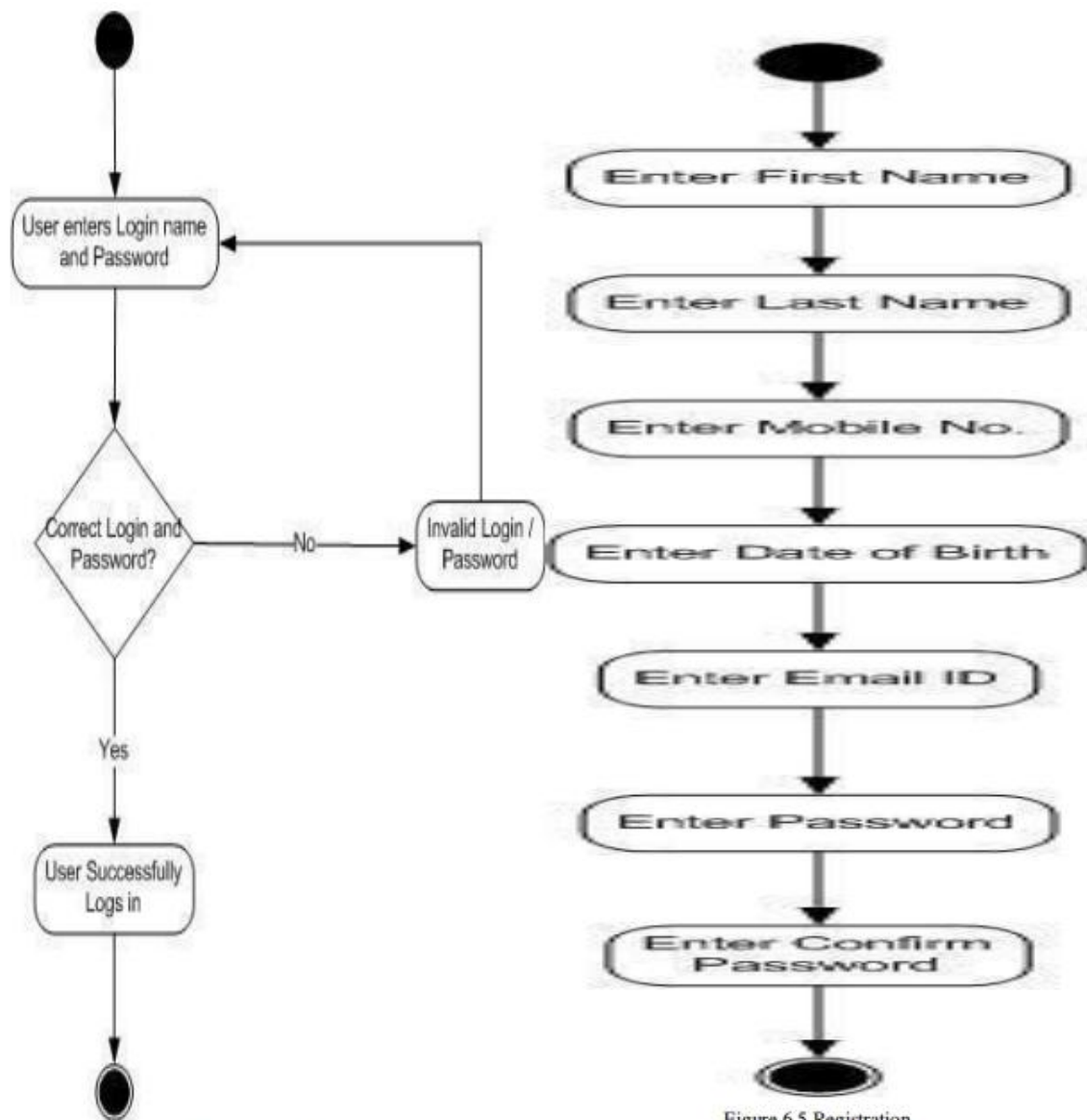
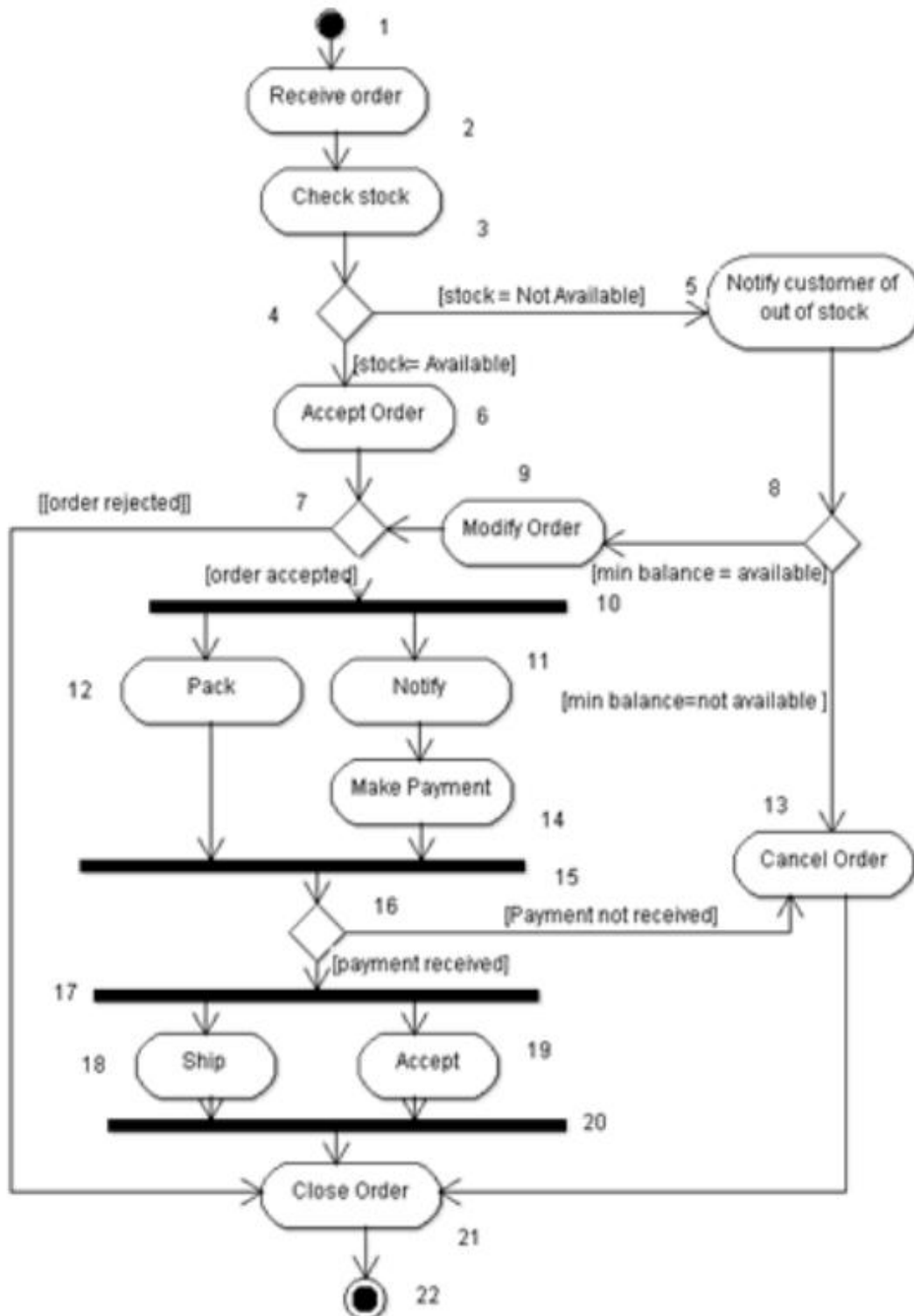
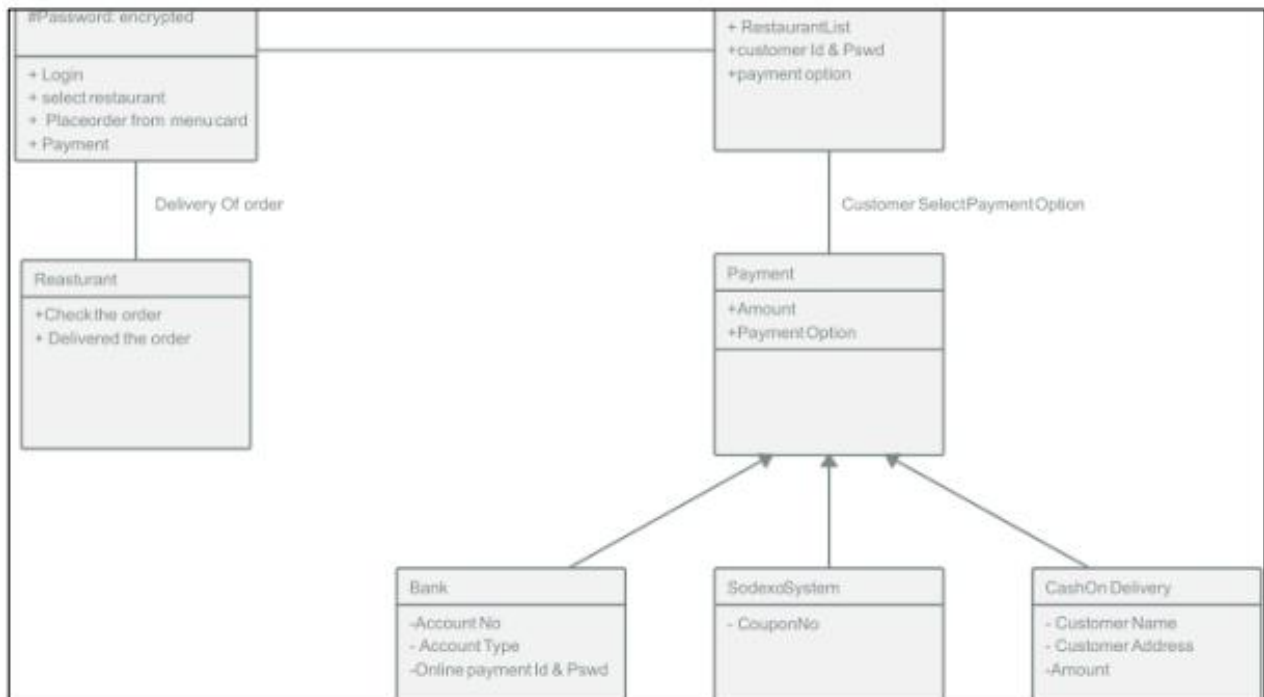


Figure 6.5 Registration

## 6.5. State chart Diagram:



## 6.6. Object Diagram:



## 7. Implementation Planning

### 7.1. Implementation Environment:

Implementations environment is in Java and android software is made in VS code IDE. VS code and android studio provides a user friendly environment for project development.

### 7.2. Program/Modules Specification:

The Food Delivery software is aimed towards the customers that want to computerize their management system. It is user-friendly and easy to learn.

Functions:

- Login for authorized users
- Entry of customer details
- Manage the billing including usage of other services of the order

### **7.2.1. Security Features:**

There is one module for administrator login. First of all administrator has to login to software with his/her user-id and password

### **7.2.2. Coding Standards**

The system is developed in Java which is an Object-Oriented language. Proper validation has been done for various inputs and outputs of the system. Care has been taken about proper indentation of the code

## **8. Testing**

### **8.1. Testing Plan**

First inspection is performed followed by white box testing which is applied by the programmer.

### **8.2. Testing Strategy**

If it is white box testing then all statements are checked whether they are logically correct.

### **8.3. Testing Methods**

Two methods are used: Boundary value checking, Equivalence class partitioning

### **8.4. Test Cases**

Test Case 1: Testing login module

#### **Expected response:**

➤ Error message should be displayed if entered USERID and/or password is not found in database of administrator.

#### **System response:**

➤ “Error: No match for USERID and/or password.” Test Case 2: Testing Check in module “CHECK IN”

#### **Expected Response:**

➤ Error message should be displayed if room is not available for requested period.

#### **System Response:**

- “The following errors were found:
- Items is not available for requested period.”

#### **8.4.1. Purpose**

Checking whether the performance is up to the mark is very important.

#### **8.4.2. Required Input**

First condition to check is to provide valid input which should give valid output

#### **8.4.3. Expected Result**

Through expected results only we can check whether the output is correct.

### **9. Limitation and Future Enhancement:**

**Limitation:** The limitation of our present software is that this is desktop based software and order placing and billing is computer generated so there might occur system errors.

**Future Enhancement:** We are going to make online web based application for this system so customer can automatically find menu and book their orders in advance.

### **10. Conclusion and Discussion:**

#### **Self-Analysis of Project Viabilities**

Review the software often, to check how it's working.

#### **Problem Encountered and Possible Solutions**

If any problem occurs, then solve it.

#### **Summary of Project work**

Planning and design of code is very important while building large software.