Software Requirements Specification

for

Presto Resto - A Food Delivery Webapp

Version 1.0 approved

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April 11

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1. Introduction

1.1 Purpose

The project "Presto Resto" is a Food Delivery Platform in which the user can search restaurant options based on location and then place his/her desired order from the restaurant menu. The purpose of this project is to let users order food from home, especially to avoid going outdoors during the pandemic.

1.2 Document Conventions

The Documentation follows specific guidelines which are as follows:

1. *Indexing of the Documentation has been mentioned on the 1st Page excluding the Cover Page.*
2. *The Headings are written using Bold Font Times of size 18*
3. *The Subheadings are written using Bold Font Times of size 14*
4. *The Content is written using Italic Font Arial of size 11*

1.3 Intended Audience and Reading Suggestions

The Documentation is meant for the following categories of People:

- *Project Developers*
- *Project InCharge Faculty*
- *Project Maintainers*
- *End Users*

The Reading sequence suggestions are as follows:

- *The index*
- *Then Intended Audience*
- *Overall Description*
- *System Features*
- *System Requirements*

1.4 Product Scope

The Product consists of a web-based food delivery application that allows users to get restaurant suggestions based on their current location or any other preferred location and then place their orders from the available menu. It also allows new sellers to join the platform by adding their restaurant's location and menu details.

The corporate goals or business strategy of our product is to get maximum and highly rated sellers to provide food delivery services on our platform. This is to provide the best ordering options to our customers/users. We also aim to gain more customers considering the pandemic situation outside. From the developer's perspective, we aim to build a reliable and robust platform which can efficiently handle heavy usage. From the user perspective, we aim to provide an interactive and easy to use platform.

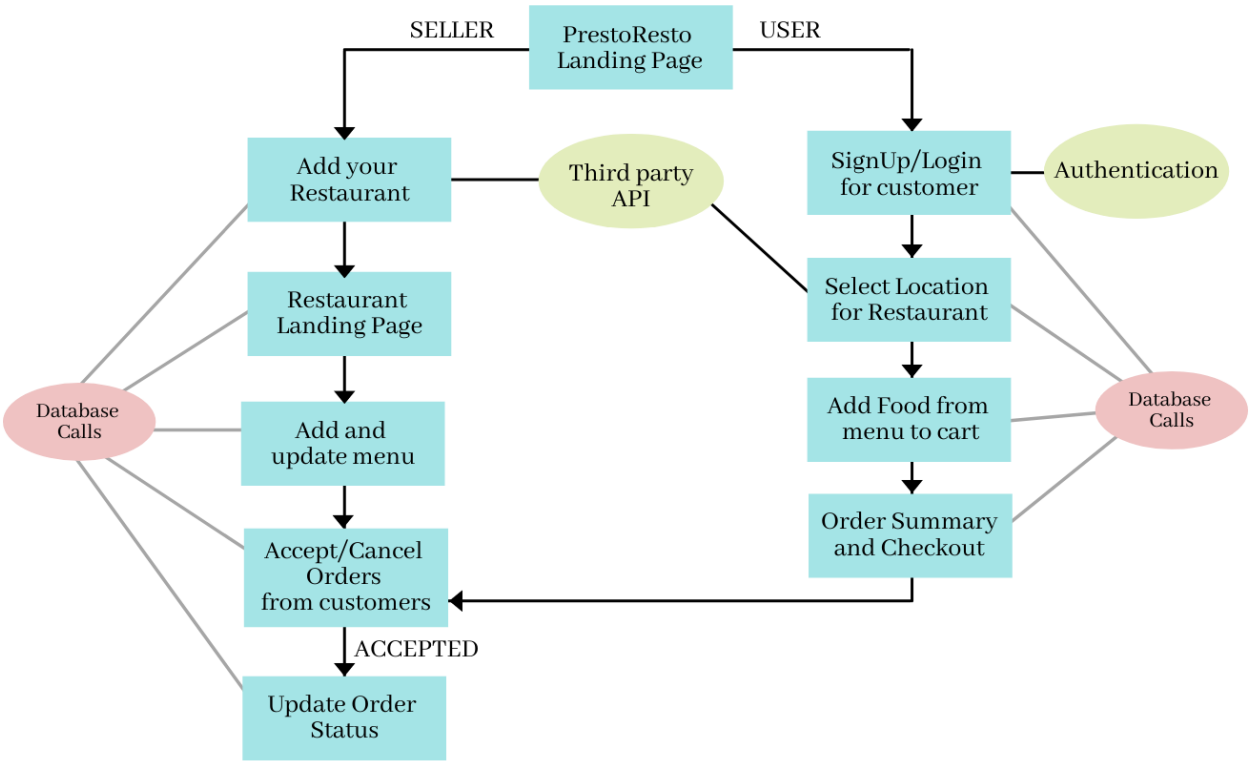
2. Overall Description

2.1 Product Perspective

The origin of the platform comes from the common struggle to start a new small-scale business and live-through the competition from the well-established and settled owners. Moreover, the majority of people are finicky when it comes to placing a food order manually , especially in the times of pandemic, thus preferring to order food online from the comfort of their homes.

Hence, our system greatly simplifies the ordering process for both the customer and the seller.

It is a website designed primarily for use in the food delivery industry. This system will allow hotels and restaurants to increase scope of business by reducing the labor cost involved. The system also allows to quickly and easily manage an online menu which customers can browse and use to place orders with just a few clicks. It also allows Restaurant Employees to quickly go through the orders as they are received and process all orders efficiently and effectively with minimal delays and confusion.



2.2 Product Functions

1. ***Log In / Sign Up:*** *The user can create an account in the system. Also, while logging in, the user will be authenticated across the database data.*

2. ***Foodie System:*** *The user can choose the restaurants available in their entered location and select their desired food dish from the menu options.*

3. ***Build Your Menu System:*** *The seller can add, update and delete items in the menu of their restaurant. They may change the prices of the items when suited.*

4. ***Order Summary****: The user will get an overview of the order details(dish, quantity and price) based on the order placed and proceed to checkout once satisfied.*

5. ***Acceptance System:*** *Once the order has been placed by the users,the seller has the choice to accept or reject the order. The customer will be informed accordingly about their order status.*

2.3 User Classes and Characteristics

It aims to intricately connect with smartphone users , as people order food generally online using either laptop or phone.The various expected users include:

- *Children with the age of 14 and above*
- *Teenagers*
- *Adults*
- *Aged People(Since it is an easy to use platform)*

2.4 Operating Environment

Presto Restro is a Platform Independent Web Application that can be accessed using any Latest Browser that includes but not limited to, Google Chrome, Mozilla Firefox, Microsoft Edge, Brave, Tor, etc. It has no specific requirements for its Operating Environment apart from the fact that it requires a Stable Internet connection and a Javascript enabled browser.

2.5 Design and Implementation Constraints

There are no such constraints observed for the development of the product.
However, based on the popularity and demand of the product, more and more new features can be added to the product.

2.6 User Documentation

- ***Log In / Sign Up:*** *The user can create an account in the system. Also, while logging in, the user will be authenticated across the database data.*
- ***Foodie System:*** *The user can choose the restaurants available in their entered location and select their desired food dish from the menu options.*
- ***Build Your Menu System:*** *The seller can add, update and delete items in the menu of their restaurant. They may change the prices of the items when suited.*
- ***Order Summary****: The user will get an overview of the order details(dish, quantity and price) based on the order placed and proceed to checkout once satisfied.*
- ***Acceptance System:*** *Once the order has been placed by the users,the seller has the choice to accept or reject the order. The customer will be informed accordingly about their order status.*

2.7 Assumptions and Dependencies

The Dependencies that will be used are as follows:

Packager Manager:
- *Node Package Manager(NPM)*

Frontend Development:
- *HTML*
- *CSS*
- *JavaScript*
- *ReactJS*
- *Redux*
- *Material UI*
- *jQuery*

Backend Development:
- *NodeJS*
- *Express*
- *Mongoose*
- *Node Mailer*

Database Management System:
- *MongoDB*

Data Interchange Format:
- *Javascript Object Notation (JSON)*

Third Party APIs:
- *Google Places API*

3. External Interface Requirements

3.1 User Interfaces

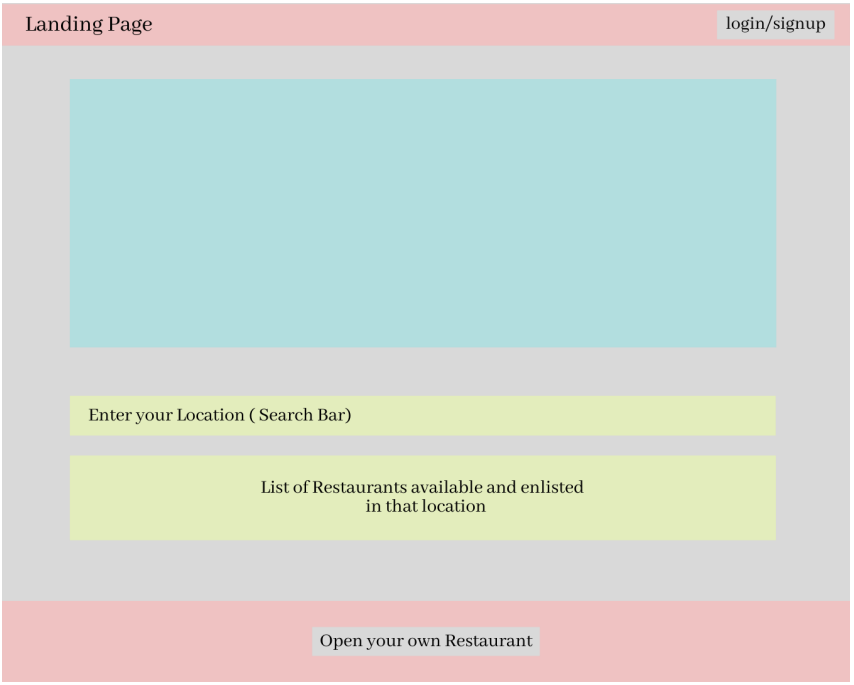


Figure 3.1.1

The user can navigate to the login/signup page in order to order food OR a seller can open their own restaurant when they open the web application.

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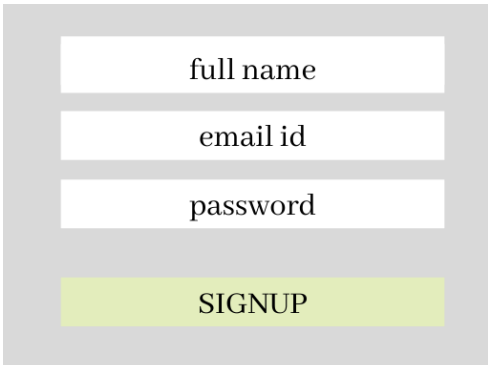


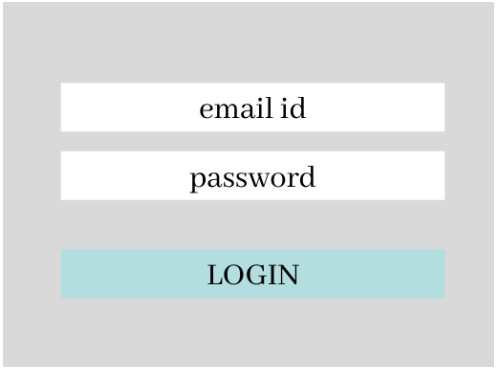


Figure 3.1.2 ***Figure 3.1.3***

Figure 3.1.2 If the user has not registered, he/she should be able to do that on the sign-up page
Figure 3.1.3 If the user has already registered, he/she can login into the platform.

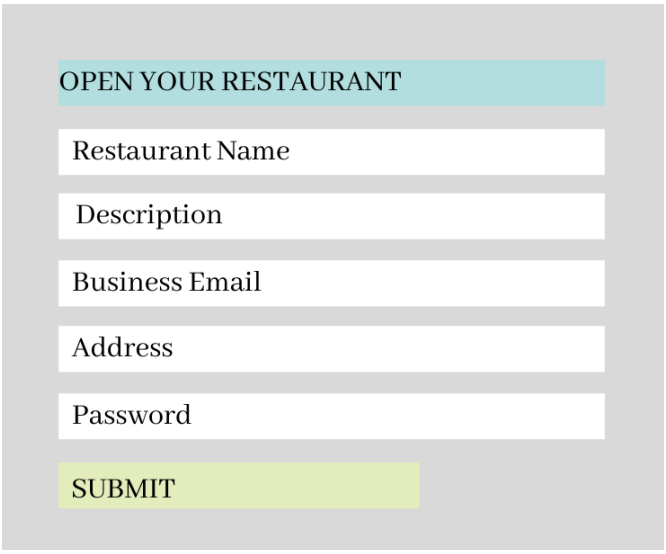


Figure 3.1.4

Figure 3.1.4 The seller can register and enlist its restaurant on the food delivery app and thus manage its menu and receive orders.

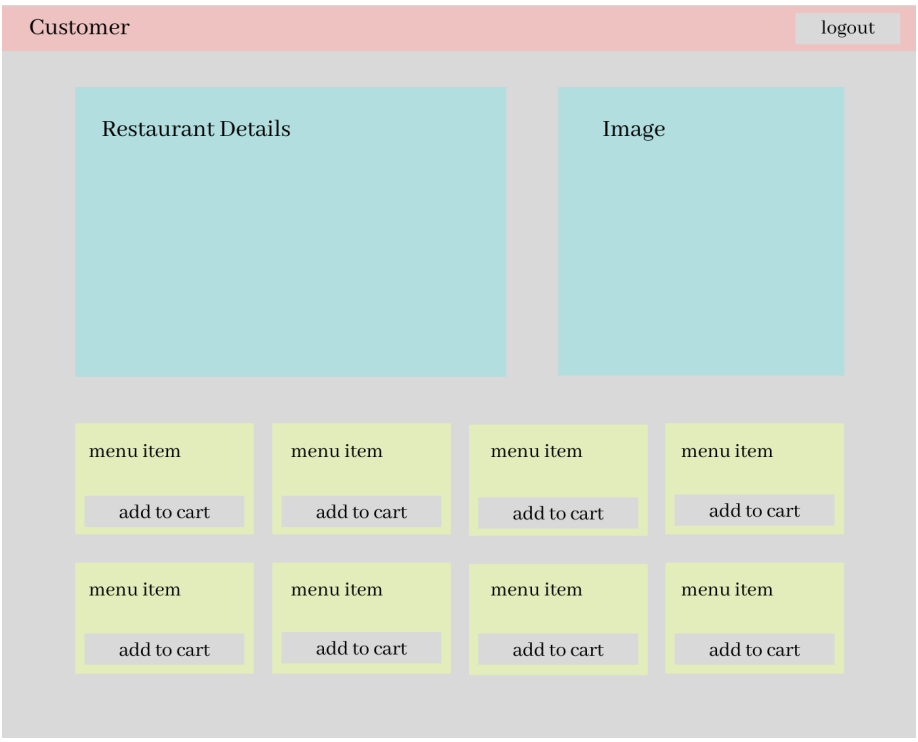


Figure 3.1.5

Figure 3.1.5 The customer can add the menu items available in the restaurant into their cart

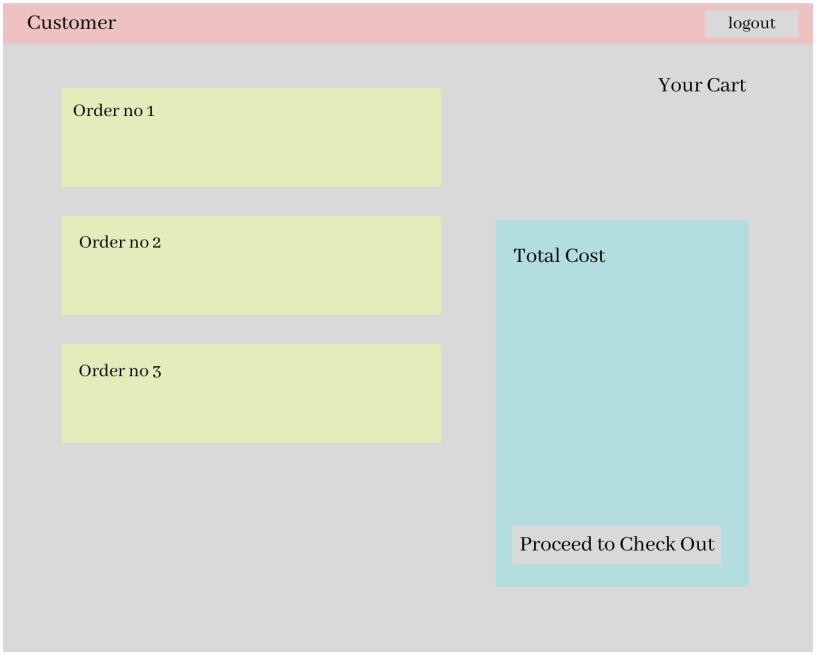


Figure 3.1.6

Figure 3.1.6 The customer can view the order summary, vary the food quantity, check for total cost and proceed to checkout and thus confirm the order.

3.2 Hardware Interfaces

Mouse and keyboard will be used to operate the web application. Mouse will be used for selecting different sections of the application and can be edited using the keyboard.
(No special hardware requirements are required for the following application.)

3.3 Software Interfaces

The web application requires access to the internet to be able to fetch and display all the seller information that is accessed through the API. Data items coming into the system would be coming from the database in response to user queries. JSON file format would be used to store and transmit data objects consisting of attribute–value pairs and array data types between the database and application. The web application does not require any special operating system or software components.

3.4 Communications Interfaces

Users must have a valid-email address to register. The application has cross-browser compatibility and hence does not require any specific browser to operate. The hostname localhost is handled especially by the database.

4. System Features

Following are the System Features that are the core of Presto Resto:

4.1 Log In / Sign Up System

4.1.1 Description and Priority

A user cannot place an order without logging into the system. In case the user is new to the platform he/she needs to signup and verification is done via email. It is a high priority system feature.

4.1.2 Functional Requirements

- *Data validation during registration.*
- *Database Management System Software and backend processing.*
- *CRUD for data access.*

4.2 Foodie System

4.1.1 Description and Priority

The user can choose the restaurants available in their entered location and select their desired food dish from the menu options.The selected items will then be added to the cart. It is a primary priority system feature.

4.1.2 Functional Requirements

- *Third Party API calls for finding the geolocation of the user and showing the restaurants available in that location.*
- *Database Management System and backend processing.*
- *Backend Database Maintenance*
- *UI/UX implementation for easy navigation and better experience*

4.3 Build your menu System

4.1.1 Description and Priority

The seller can add, update and delete items in the menu of their restaurant. They may change the prices of the items when suited.. It is a primary priority system feature.

4.1.2 Functional Requirements

- *Backend Database Maintenance*
- *Database Management System and backend processing.*

- *CRUD operations on menu items*
- *UI/UX implementation for easy navigation and better experience*

4.4 Order Summary

4.1.1 Description and Priority

The user will get an overview of the order details(dish, quantity and price) based on the order placed and proceed to checkout once satisfied. It is a secondary priority system feature.

4.1.2 Functional Requirements

- *Database Management System and backend processing.*

4.5 Acceptance system

4.1.1 Description and Priority

Once the order has been placed by the users,the seller has the choice to accept or reject the order. The customer will be informed accordingly about their order status.

4.1.2 Functional Requirements

- *Database Management System and backend processing.*

5. Other Nonfunctional Requirements

5.1 Performance Requirements

For Optimum Performance, the following System Requirements are necessary:
RAM: 4GB or above DDR4
Processor: Intel Core i3 5th Gen or Above (1.6 GHz)
HardDisk Space: No Additional Requirements apart from OS
Application: Google Chrome, Mozilla Firefox, Microsoft Edge, Brave

The server hardware can be any computer capable of running both the web and database servers and handling the expected traffic. For a small scale restaurant that is not expecting to see much web traffic, an average personal computer may be appropriate. Once the site starts generating more hits, though, it will likely be necessary to upgrade to a dedicated host to ensure proper performance. The exact cutoffs will need to be determined through a more thorough stress testing of the system.

5.2 Safety Requirements

The product is developed with at most precaution to provide a full safe platform to users where they can order their food from restaurants easily and safely. However, the risk of user`s data stealing can be prevented if the user follows the guidance given in this document. Also,we will try our best to ensure that the food managed,delivered and packaged will be done with due consideration of current covid-19 guidelines.

Moreover,We care deeply about the safety of the people who use our apps. We regularly consult with experts in suicide and self-injury to help inform our policies and enforcement, and work with organizations around the world to provide assistance to people in distress.When people post or search for suicide or self-injury- related content, we will direct them to local organizations that can provide support and if someone is at immediate risk of harming themselves, we will contact local emergency services to get them help.

5.3 Security Requirements

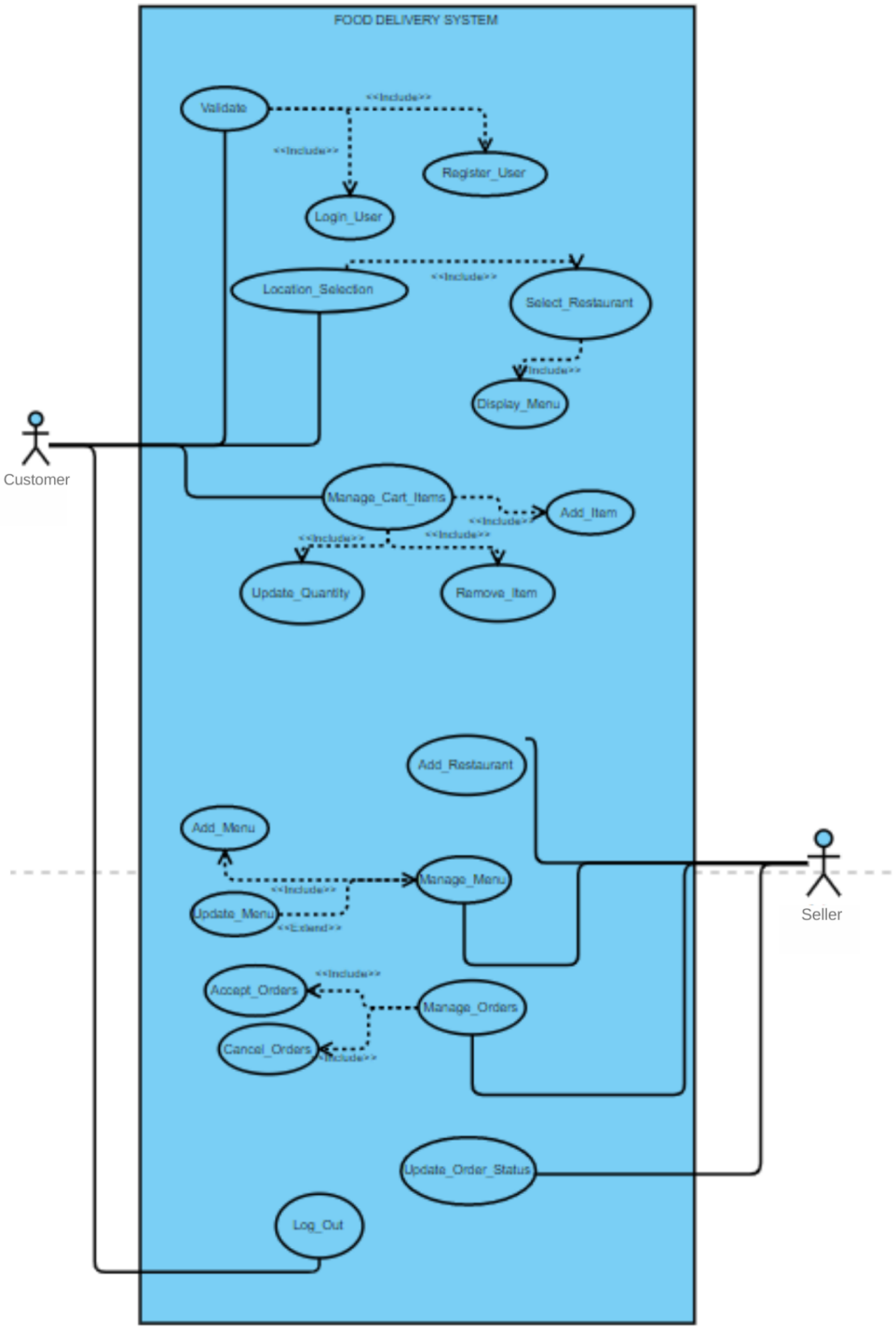
- *Use Secure HTTPS connection while browsing Food Delivery WebApp*
- *Store your Credentials carefully and in a secure manner (Don’t share it with strangers)*

6. Other Requirements

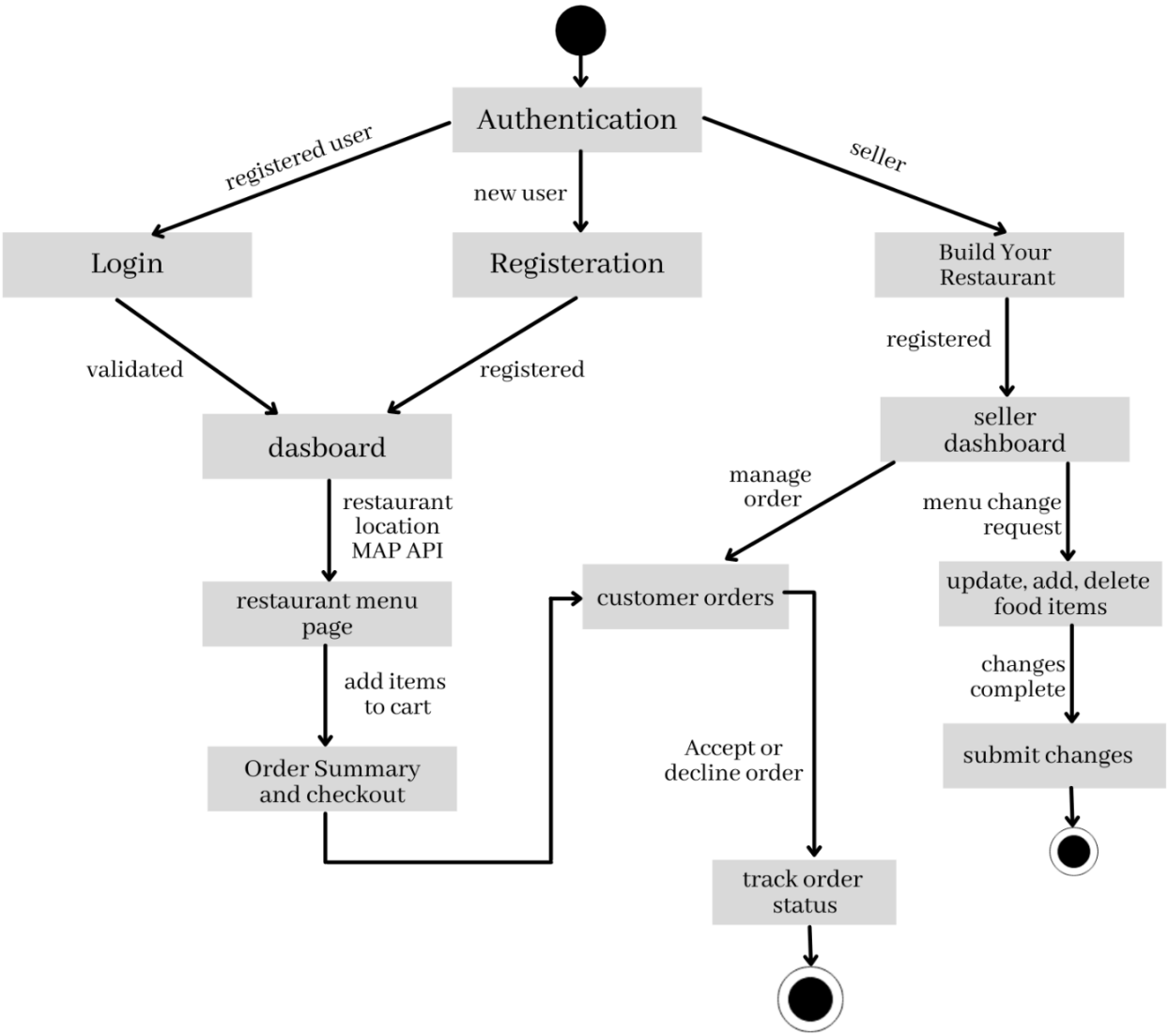
There are no such other requisites for this project.

Appendix A: Analysis Model

Use Case Diagram



State Diagram



Sequence Diagram