



**Department of Computing & Information System**

**Title of the Project**

**Seat & Eat**

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## APPROVAL

This Project titled “**Seat & Eat**”, Submitted by **Shovon Howlader**, ID No:**182-16-314** to the Department of Computing & Information Systems, Daffodil International University has been accepted as satisfactory for the partial fulfillment of the requirements for the degree of B.Sc. in Computing & Information Systems and approved as to its style and contents. The presentation has been held on- 21-11-2022.

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I hereby declare that; this project has been done by me under supervision of **Abdullah Bin Kasem Bhuiyan**, Lecturer, department of Computing and Information System (CIS) of Daffodil International University. I am also declaring that this project or any part of there has never been submitted anywhere else for the award of any educational degree like, B.Sc., M.Sc., Diploma or other qualifications.

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## Acknowledgment

First and Importantly I would like to thank everyone who encouraged and help me to develop this project. I would also like to thank my parents and all family members for their support and sympathy without their sincere cooperation this project would not have been possible to complete successfully.

For the success and final outcome of this project I needed advice and support from many people and I am very fortunate to have received this encouragement throughout the project. I have got a lot of advices form my teachers, senior and batchmates.

I would like to show special gratitude to all my respected teacher and my supervisor **Mr. Abdullah Bin Kasem Bhuiyan**, Lecturer of Daffodil International University. Because I could not have completed this project successfully without his guidance, advice and the vast knowledge he has given me on various things.

Lastly I would like to thank my parents and teachers, friends who have supported me and given me the courage to complete this project.

## Dedication

I have dedicated this project to secure my better future in software engineering. Special thanks and gratitude to my parents who have motivation and determination and co-operation courage inspired me to give my best efforts to this project.

Not to forget my family and family members who supported me throughout the process while I was working on this project so I dedicate it to them as well. At the same time I also dedicate to my supervisor sir **Mr. Abdullah Bin Kasem Bhuiyan**, because without his guidance I feel the completion of the project would not have been possible at all. Especially the way some of my friends have supported me whenever I faced various problems they have given me courage.

## Executive Summary

**Seat& Eat** is a restaurant seat and food reservation project. The main purpose of this system is to manage a complete restaurant through online. From all **Seat& Eat** in a restaurant to table booking systems through which a customer can book a table or even a single chair as per their specific date and time.

The value of time in people's life is immense and I have created my project keeping this thought in mind. Because restaurant reservation system is exactly such a system where you can save your time and eat the food of your choice in the restaurant of your choice, as a result of which you do not have to suffer. You don't even have to go for a seat or stand for a table.

There are four types of users for this system. The first one is the owner panel. The panel means that the owner of the restaurant must first register in this system and as a result, he will get all the access. The second user is the admin panel, he also has to register in this system and as a result he will get all the access, and he can control all the work himself.

In the third step, there is the manager, which means the manager panel. The manager of a certain restaurant, if he wants to access everything in his restaurant, he must first register and after registration, he can add and delete chairs and tables from the restaurant food menu through this system. Through this system, he can keep track of his daily income and expenses and even the salary of his staff.

The last step is the customer of the restaurant. If you want to reserve a table in a restaurant and select the food menu, you must register in the system and provide your name, phone number, and email to submit this system. Then they select the restaurant according to their choice and will be able to select a table for the restaurant. They can even choose when they want to eat. Then they have to pay the cost of the food through the Bkash or Nogod made payment method after which the system accepts the payment and the customer will receive a confirmation email on his/her email.

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## Chapter 1 – Introduction

### **1.1 Introduction**

The present age is the age of technology. Everything is managed on internet basis and the world is moving fast in pace with technology not outside of our country. We have also grown with the help of technology day by day every sector is focusing on the use of technology in their premises and moving forward in tandem.

**“Seat& Eat”** is a system that will replace the manual system with an online based solution. Through this system the restaurant will be operated online.

This system is designed to provide convenience to restaurants and customers. The main objective of this system is to provide online ordering and reservation services to the customer. Each menu item has a name, price and associated recipe. After successful login customer can access menu page with listed items as per desired time. The main point of developing this system is to help the restaurant administrator to manage the restaurant business, help the customer to order online and reserve table and all the methods to manage the restaurant well can be used and benefited by the restaurant authorities. In the proposed system the user can search a menu according to his choice. They can even book their desired table and chair, even a single chair and booking by themselves. According to the range and category of food and then he can order the food. They then have to pay for the meal using a payment method that the system accepts. After making the payment the customer will receive a confirmation e-mail in his/her email. Using this system will save a lot of valuable time of the customer.

Currently there are many restaurant reservation systems but this one stands out from others due to advanced technology.

## **1.2 Documents contents**

### **Chapter-1: Introduction**

The proposed proposal and project details.

### **Chapter-2: Initial Phase**

This chapter details the initial study of the projected system with its main goals and objectives, drawback areas, various solutions and project background.

### **Chapter 3: Literature Review**

In the literature review chapter, I will explain details about the problem domain that is occurred and the solution for this specific problem.

### **Chapter-4: Methodology**

This chapter discusses the subject domain, solutions, analysis of existing solutions and final recommendations.

### **Chapter-5: Planning**

This chapter covers various project planning topics such as project approach, look ahead, risk and change management etc.

### **Chapter-6: Feasibility**

Recorded here, is a point-by-point feasibility study report and investigation.

### **Chapter-7: Foundation**

Evidence of issue space differences, general requirements lists, sorting innovations, and validations have been observed to be archived within this chapter.

### **Chapter-8: Exploration**

It contains the required catalog, including some old system and basic UML diagrams and prototypes of new systems.

### **Chapter-9: Engineering**

This chapter contains the logical and activity modeling of the planned system.

### **Chapter-10: Deployment**

Core module development coding samples and development issues are discussed here along with development priorities.

**Chapter-11: Testing**

Various test strategies and outcomes are connected to the present chapter.

**Chapter-12: Implementation**

In this chapter all types of implementation strategy coaching models and associated problem area units are mentioned here.

**Chapter-13: Critical Appraisal and Evaluation**

This section will discuss each essential evaluation and appraisal.

**Chapter-14: Lessons Learned**

Any problems I encountered and what I learned during the development of the project will be covered.

**Chapter-15: Conclusion**

An outline of the project with goals and achievements and experiences is recorded here.

## Chapter 2 – Initial Study

### **2.1 Project Proposal**

#### **Introduction**

In today's age there is no substitute for internet. Everything is managed on internet basis and the world is moving fast in pace with technology not outside of our country. We have also grown with the help of technology day by day every sector is focusing on the use of technology in their premises and moving forward in tandem.

Restaurant reservation is a system that will replace the manual system with an online based solution. Through this system the restaurant will be operated online.

This system is designed to provide convenience to restaurants and customers. The main objective of this system is to provide online ordering and reservation services to the customer. Each menu item has a name, price and associated recipe. After successful login customer can access menu page with listed items as per desired time. The main point of developing this system is to help the restaurant administrator to manage the restaurant business, help the customer to order online and reserve table and all the methods to manage the restaurant well can be used and benefited by the restaurant authorities. In the proposed system the user can search a menu according to his choice. They can even book their desired table and chair, even a single chair and booking by themselves. According to the range and category of food and then he can order the food. They then have to pay for the meal using a payment method that the system accepts. After making the payment the customer will receive a confirmation e-mail in his/her email. Using this system will save a lot of valuable time of the customer.

### **2.2 Background Study**

Dhaka city has many well reputed restaurants which are popular for their delicious food. Sometimes this popularity creates a problem for their customers, that is, so many customers come to eat that the restaurant cannot allow them to sit, as a result customers have to wait outside the restaurant because all the tables and chairs are full. This wastes the customer's time. And our project is going to solve this problem.



## 2.3 Problem Areas

### Description of the Proposed System

This project is mainly designed keeping in mind the customers of the restaurant. It mainly focuses on restaurant customers and restaurant authorities.

In our metropolis of Dhaka, there are various restaurants that are well-known for their wonderful food. Customers may have to wait outside the restaurant because all of the tables and chairs are always taken because of this establishment's popularity. And this issue will be resolved by our project. A restaurant can be managed very easily using this system.

The main objective of this system is to provide online ordering and reservation services to the customer. Each menu item has a name, price and associated recipe. After successful login customer can access menu page with listed items as per desired time. The main point of developing this system is to help the restaurant administrator to manage the restaurant business, help the customer to order online and reserve table and all the methods to manage the restaurant well can be used and benefited by the restaurant authorities. In the proposed system the user can search a menu according to his choice. According to the price range and category of food and later he can order the food. They then have to pay for the meal using a payment method that the system accepts. After making the payment the customer will receive a confirmation e-mail in his/her email.

### Feasibility Study

#### ❖ Operational Feasibility (Based on different solutions):

The project is not only marketable, but also the expectation of every restaurant customer. The main objective of this system is to provide online ordering and reservation services to customers in restaurants. Each menu item has a name, price and associated recipe. After successful login the customer can access the menu page with the desired items by selecting the listed restaurants according to the desired time. Another key development of this system is to help the restaurant administrator to manage the restaurant business, help the customer to order online and reserve table and all the methods to manage the restaurant well can be used and benefited by the restaurant authorities. In the proposed system the user can search a menu according to his choice. According to the price range and category of food and later he can order the food. They then have to pay for the meal using a payment method that the system accepts. After making the payment, the customer will receive a confirmation email in his email. This will save the customers a lot of valuable time.

❖ **Technical Feasibility (Based on operational feasibility for different solutions):**

Web based users can use this method very easily. The majority of web-based responses imply that the victim's browser will be able to access this technique. The user can direct the browser to the system by entering the Uniform Resource Locator. Web-based solutions are most suitable for this method. The system is accessible from mobile, laptop, desktop, and other devices if it is web-based.

**Web Based:**

Instead of directly on the device's memory, a web-based application can be accessed through an HTTP network connection. The most common tool for running web-based software is a web browser.

A small part of the software is installed on the user's computer in a web-based application, also known as a client-based application, and most of the work is done by an external server.

Equipment	Cost per unit	Cost
Web, Email, server	6000 BDT per month	6000 BDT
Laptop (AMD Ryzen 7 4800H Processor (8M Cache, 2.9 GHz up to 4.2 GHz) 8GB DDR4 3200MHz SO-DIMM RAM)	115000 BDT	150000 BDT
	Total Cost=	121000 BDT

Table 1 Cost Estimation of the web -based

### ❖ **Economic Feasibility (Cost benefit analysis for different solutions based on operational and technical feasibilities):**

Web-based solutions are very easy to access from any type of device. And there is no additional cost for these devices. Restaurant authorities and restaurant customers can access them through their mobiles or computers.

From an economical perspective, a web-based approach makes sense because apps sometimes utilize RAM as well. By providing precise information, the suggested system will improve performance, which should lead to higher profit.

### ❖ **Market research analysis based on the feasibility factors:**

I am researching various restaurant reservation management which has basic features like food menu show, food menu can be selected, food can be ordered, bill can be prepared, report can be generated but no table or even single chair booking option in any system no. Apart from this, I have not found in any system the option to choose the food of that restaurant by selecting one of your choice from among multiple restaurants, but I have it in this system.

## **2.4 Problem Solution:**

Sometimes, because it is a necessary process, users run into serious issues and get themselves into problems. The solution should offer the opportunity for the controller, the user, to control the entire system through a database. Users should be able to find what they need, and the system should display items based on their needs. Automatic user screening, eligibility checking, and request verification are all necessary. All of these can be implemented using a web-based application, a desktop application running on a server, or a web-based system.

## Chapter 3 – Literature Review

### 3.1 Discussion on the problem domain

**Seat& Eat** is basically a web based software application. There are many other such web based software applications which are based on two panels. One is the user panel and the other is the admin panel. But at no place is the owner panel thought of and the complete satisfaction of the customer is not thought of.

Other such system software mainly have only food menu selection to food ordering and payment options but in this software application I have worked on a plan keeping in mind the customer satisfaction so that they can save their valuable time. The issue is seat reservation and this seat reservation is an amazing part.

Customers can select the food menu from the seat booking of the restaurant according to their choice and pay according to their time and date. As a result, he can reach the restaurant on time and eat at the designated seat, saving him time and suffering. Earlier the booking system was done manually which resulted in wasting a lot of time but nowadays due to the use of this software the booking system is done through online and saves time.

Some of the major issues are discussed below:

- Wait a long time after ordering restaurant food.
- Preferred seating is not available so many times one has to stand to sit in a certain place.
- You can't find the food you like most of the time.
- Favorite restaurants cannot be accessed from the same platform.

### 3.2 Discussion on the problem Solution

**Seat& Eat** is an online based restaurant management system providing all kinds of resources to the users. Now a day's technology is ubiquitous and everything is computerized, data based and internet based. Some solutions to the following problems should be considered:

### ❖ Access:

There are four types of panels that can be accessed in the system that I have created, the most important of them is the owner panel, which means that an owner can have different types of restaurants, so it is very important to have access to it, followed by the admin panel. He also gets the express of the complete system. Then there is the manager panel, the manager's job is to delete and delete everything in the north restaurant and monitor the daily income and expenses.

The last step is the user panel. He/she can select the food according to his/her choice can book table or even single chair can link foot order and make payment.

### ❖ Privacy:

Privacy is always an important issue. Especially in online based systems, if privacy is not protected then huge threats have to be faced. System users must ensure that no one can access the system without authentication. In that case, network access servers, external firewalls and VPNs should be used to securely access the system.

### ❖ Security:

Security is an important issue and a big issue for every system. In this system that I have created, not only user panel and manager panel will have access to everything but also owner panel and admin panel will have access to everything.

So keeping security reasons in mind only his panel and admin panel will be given access to everything.

### ❖ User Identity Verification:

Account register must be created with all the information to login to the system. Be it admin panel, owner, manager or even user panel. Everyone must first create an account with correct information. Moreover, you will not be able to login later without providing correct information.

### 3.3 Comparison among the leading solutions

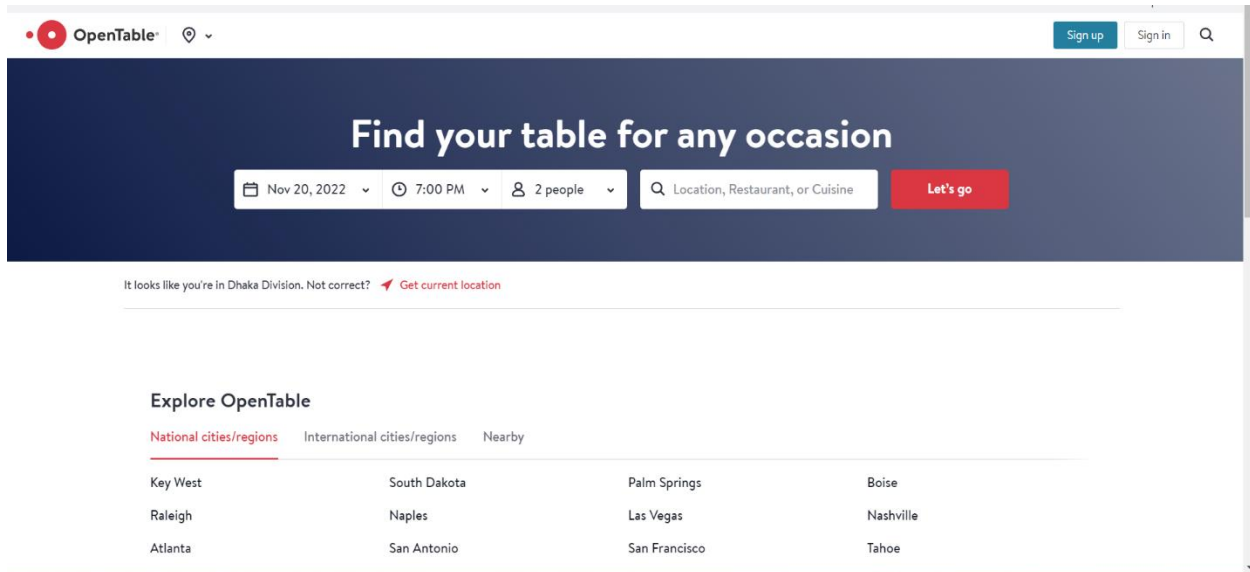
Unexpected advancements are coming in this modern era overhauling and making life easier. Nowadays the web has become like a city in the world. There are thousands of systems to solve the same problem in completely different ways. Restaurant reservation system may be a special system but there are few that work in this space. There are systems.

Currently, all the system software that exist are managed and used by the restaurant authorities and their own private companies, but it is very rare to find these software online in Bangladesh. There are some restaurants such as Star Khabab, xinxian.

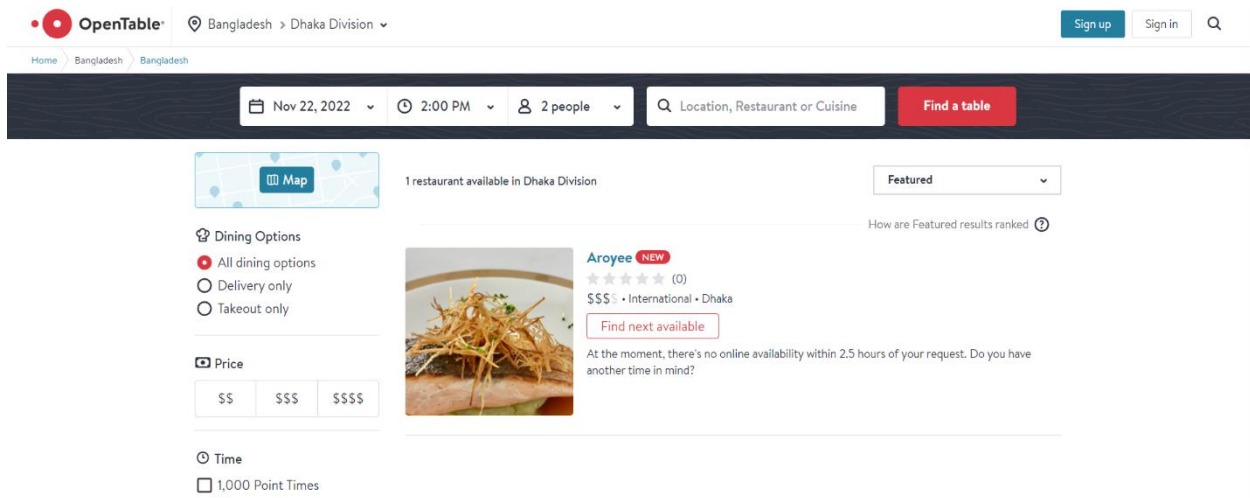
They use gardening in their own way but the common people order their food for this and cannot eat by reserving tables and chairs. Most of them provide food to their own restaurants through Facebook pages. But if I apply this system, all the restaurants will be in one system and the restaurant can be selected and selected according to the need, online seat reservation, table booking, ordering food and paying in advance can be eaten.

Website:<https://www.opentable.com/s?dateTime=2022-11-22T14%3A00%3A00&covers=2&metroId=3485&regionIds%5B0%5D=9955&neighborhoodIds%5B0%5D=&term=&originCorrelationId=b0962300-7661-485e-943d-71f506439ca2>

## Information



**Figure 1 The overview of the site-1**



**Figure 2 The overview of the site-2**

**Best Features :**

- The information is very easy to see and find.
- The design is beautiful

**Limitations :**

- In case there is no option of personal logging, registration must be done first. Only owner panel and admin panel will have access to everything.
- Not all features work properly.
- The texts are very short.
- No food images are provided in the menu system.
- Reservation system is there but not working properly.
- Do the same thing over and over again.
- No fixed table and chair booking facility.

**3.4 Recommended Approach**

From the above discussion it is clear that the features of the existing website do not need to be considered in the new system by clarifying the functionality. Listed here are the features of the new system:

- This system is user friendly and very easy to use
- Each user has restricted access.
- PHP Laravel based web system.
- As a result, all the management of the restaurant can be controlled.
- Food can be ordered and eaten by booking tables and chairs as per specific time and date



## Chapter 4 – Methodology

The team responsible for program development selects the approach to computer program development that serves the project's best interests and ensures successful project management. All methods have unique characteristics and drawbacks, and they are selected for reasons that are specific to their claims. The chosen approach for the purpose of advancement frequently affects the success rate of advancement. This chapter will go into great detail about the selected strategy and the suitable justifications for the selection of the approach with the necessary data.

### **4.1 What to use**

Ways of software development through computer code development methods play a really important role. There are square measurements on different computer code development, board of water model, agile computer code development, image model, rapid application development, spiral model, joint application development and dynamic system development model. etc. Here I can describe three ways.

#### **Structured System Analysis and Design Method (SSADM) or Waterfall Model**

The first widely used SDLC model in computer code engineering to ensure project success was the waterfall methodology. It might be the most important all-encompassing model for writing computer code. This strategy is organized and adheres to the traditional manner of writing computer code. The output of one phase is utilized as the input for the following phase in this model, which is broken up into several phases. There is no phase overlap; each phase must be finished before the next one starts. This model method actually follows a linear sequence, so a section can only begin to function once the previous part is finished. It also does not permit going back to a previous stage if any adjustments are required to match the requirements.

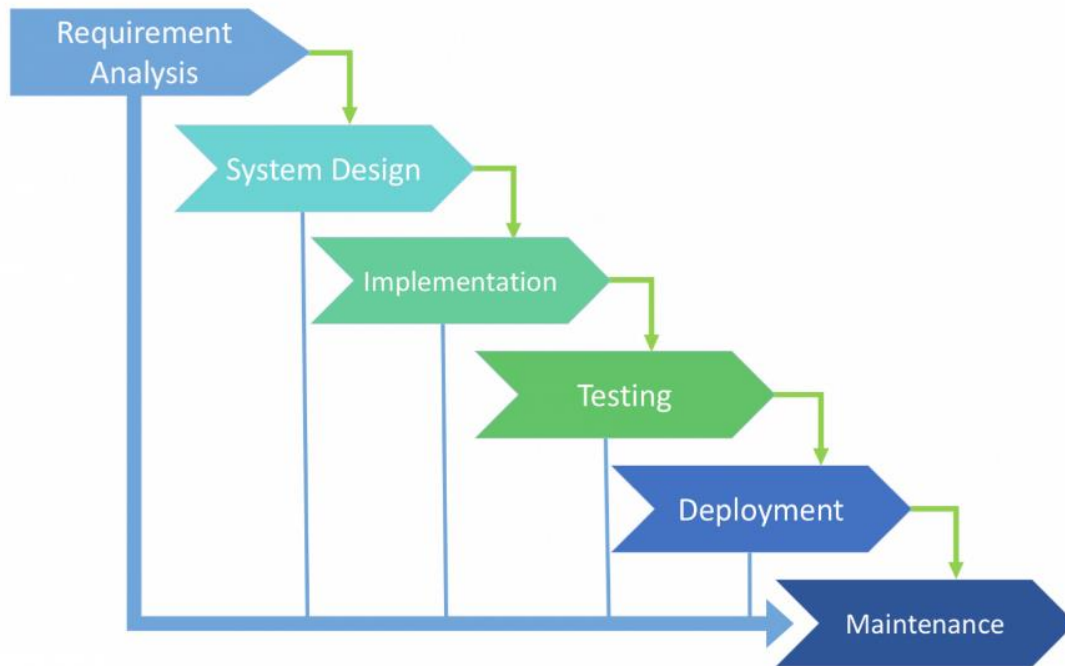


Figure 3: Structured System Analysis and Design Method (SSADM) or Waterfall Model

### **Advantage of Structured System Analysis and Design Method (SSADM) or Waterfall Model:**

- The waterfall model is easy to understand and use.
- This model follows a neat structure.
- This model has to be worked on by setting goals first.
- Each step should be completed to develop the next step.
- This model initially sets the end goal.
- This waterfall model works very well for smaller projects where the projects are well defined and understood.

## **Disadvantage of Structured System Analysis and Design Method (SSADM) or Waterfall Model:**

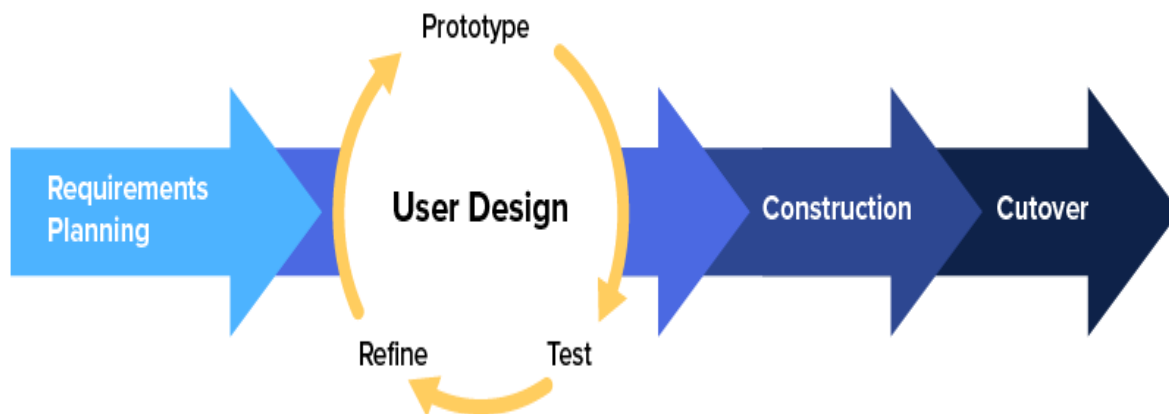
- Once an application moves to the test phase means there is no going back from there means no change is supported by this model.
- This model is not recommended for complex projects. Because there are many cases that need to be changed frequently which this model does not accept.
- The testing period of the developmental process comes very late.
- Valuable feedback from clients cannot be incorporated in any way during this process.

## **Rapid Application development**

Rapid application development (RAD) approach is a variant of agile software development software development methodology. Which is rapid application development is an effective method that works faster than other software development methods and provides quality development work.

It prioritizes repetition. Another model, in contrast to the waterfall approach, emphasizes rigorous planning and requirements recording of software and user feedback. It is designed in a way that maximizes software development through a simplified approach.

## Rapid Application Development (RAD)



**Figure 3 Rapid Application development Model.**

### **Advantage of Rapid Application development**

- It is easily modifiable and very flexible.
- It comes into play when you need to reduce the overall risk of the project.
- By using this prototyping, there is less chance of error.
- Bringing fewer people together and in less time increases productivity.
- Each step gives top priority to the client.

## **Disadvantage of Rapid Application development**

- It is not useful for small projects.
- It is not suitable when the technical aspect is superior.
- RAD projects can fail if developers are not committed to using the software on time.
- Not all applications are compatible with RAD.

## **Choosing Methodology**

Out of the above two methods I have decided to use the DSDM (Dynamic System Development Method) method for my project. Because I think DSDM (Dynamic System Development Method) will be good for my project **Seat& Eat**.

DSDM(Dynamic System Development Method) ensures product quality within specified time limits which is admittedly essential and is a versatile approach to use for any system.

Sometimes in developing the system there is no shortage of customer needs and sometimes many changes are made keeping in mind their needs. And this method plays a very important role and helps in bringing about this change.

## **4.2 Why to Use**

As required, the system should be successfully specialized within the given time frame and within the budget.

It is difficult to choose the best strategy because it must help the project achieve its maximum goals while retaining tried-and-true scheduled stages. A specific thank you might be selected for an educational project strategy like this one in order to complete the project and give the results.

## Sections of Methodology

DSDM (Dynamic System Development Method ) has certain sections that the development team must follow. They are:

### ❖ **Pre-project stage:**

This phase includes the initial project concept and conditions, budget and basic requirements.

### ❖ **Feasibility study Stage :**

This phase measures the economic technical and operational feasibility of the proposed project

### ❖ **Requirement Gathering Phase:**

In this way various techniques are used to identify project performance inefficiencies, needs and requirements.

### ❖ **Requirement Analysis and Prioritization Phase:**

In order to employ a priority strategy in Moscow, the aggregation of these parcels necessitates assessment and prioritization of the requirements.

### ❖ **Search and Engineering Stage:**

By far the most unchanged section explores requirements.

### ❖ **Review stage:**

In this part, the developed system is tested with users and if necessary, returns the required items to the next stage for modification.

### **4.3 Implementation Plans**

From the final stage of the project to the implementation stage, the developed applications are released for use. The newly developed system should be realized to use the system and if they find any problem associated with it and identify the problem should be solved simultaneously. The system will turn on.

## **Chapter 5 – – Planning**

### **5.1 Project Plan**

This category is usually determined by the arrangement of the completion of the extension. Basically the initiative is divided into certain areas. And after arranging all work to be completed within a specific time frame which may be taken more at this stage.

#### **5.1.1 Work Breakdown Structure**

This is a system where the extension can be broken down into smaller assignments. And through this the initiative can be completed in a less complex and more productive way while maintaining a valid timeline. In this step we have to make a valuable chart by dividing the tasks using time

knowledge so that we can complete the project within the specified time. This framework will give us an assessment of the time structure. -Divided into sections.

Serial Number	Task Name	Durations	Start Date	End Date
1	User Authentication System	7 Days	10/05/22	16/05/22
2	Search Restaurant module	9 Days	17/05/22	25/05/22
3	Booking Tables & Chairs module	19 Days	26/05/22	13/06/22
4	Ordering Food module	6 Days	14/06/22	19/06/22
5	Payment System module	10 Days	20/06/22	29/06/22
6	Booking Confirmation System	6 Days	01/07/22	06/06/22
7	Provide Rating & Review system	7 Days	07/06/22	13/06/22
8	Tables and & Chairs module	15 Days	14/06/22	29/06/22
9	Food's & Menus System module	10 Days	30/06/22	09/08/22
10	Employees Information System Module	7 Days	10/08/22	16/08/22
11	Tracking report for asset module	6 Days	17/08/22	22/08/22
12	View & Manage Report & History module	5 Days	23/08/22	27/08/22
13	Booking Management System	9 Days	28/08/22	05/09/22



14	Daily Purchasing Data Module	6 Days	06/09/22	11/09/22
15	Daily Food Making History Module	7 Days	12/09/22	18/09/22
16	Regular Selling Management Module	6 Days	19/09/22	24/09/22
17	Staff Salary Module	5 Days	25/09/22	29/10/22
18	Calculate Regular Expenses	6 Days	01/10/22	05/10/22
19	Generate Reports Module	9 Days	06/10/22	15/10/22
20	<b>Totals</b>	<b>115 Days</b>		

Table 2 Work Breakdown Structure of DSDM

### 5.1.2 Resource Allocation

To the whole proposed stretch, all resources are allocated and managed in an ordered manner. The allocation of resources is one of the most important and fundamental aspects of project planning. Since there is no ensemble, I shall play each part for each time because this is often a scholarly solo project. In order to complete the task by the predetermined task delivery deadline, the following resources have been allocated to the restaurant reservation project:

<b>Time box</b>	<b>Task</b>	<b>Resource</b>
TB 1	User Authentication System	Analyst, User
TB 2	Search Restaurant Module	Analyst
TB 3	Booking Tables & Chairs module	Analyst, User, Developer
TB 4	Ordering Food module	Analyst, User
TB 5	Payment System module	Analyst, Developer
TB 6	Booking Confirmation System	Analyst, Designer, Tester, User
TB 7	Provide Rating & Review system	Analyst, User
TB 8	Tables & Chairs module	Designer, Developer
TB 9	Food's & Menus System module	Analyst, User
TB 10	Employees Information System Module	Designer, Developer
TB 11	Tracking report for asset module	Designer, Tester, Developer
TB12	View & Manage Report & History module	Analyst, Designer, Tester
TB 13	Booking Management System	Analyst, Designer, Tester
TB 14	Daily Purchasing Data Module	Designer, Tester, Developer, User
TB15	Daily Food Making History Module	Designer, Developer

TB 16	Regular Selling Management Module	Designer, Tester
TB 17	Staff Salary Module	Designer, Tester
TB 18	Calculate Regular Expenses	Designer, Tester
TB 19	Generate Reports Module	Designer, Tester

Table 3 Resource Allocation list

### 5.1.3 Time Boxing

Time boxing is a time management technique where you allocate a specific amount of time for a planned activity.

It is an important part of DSDM project planning. DSDM divides tasks into time boxes to meet targets on time.

As a result, you work on the activity for a certain period of time and stop working on it when the time is up. These tasks must be completed within the allotted time for the iterative process and self-assess whether you have reached your planned goals.

Time box	Task	Duration	Resource
1	User Authentication System	7 Days	Analyst, User
2	Search Restaurant Module	9 Days	Analyst
3	Booking Tables & Chairs module	19 Days	Analyst, User, Developer

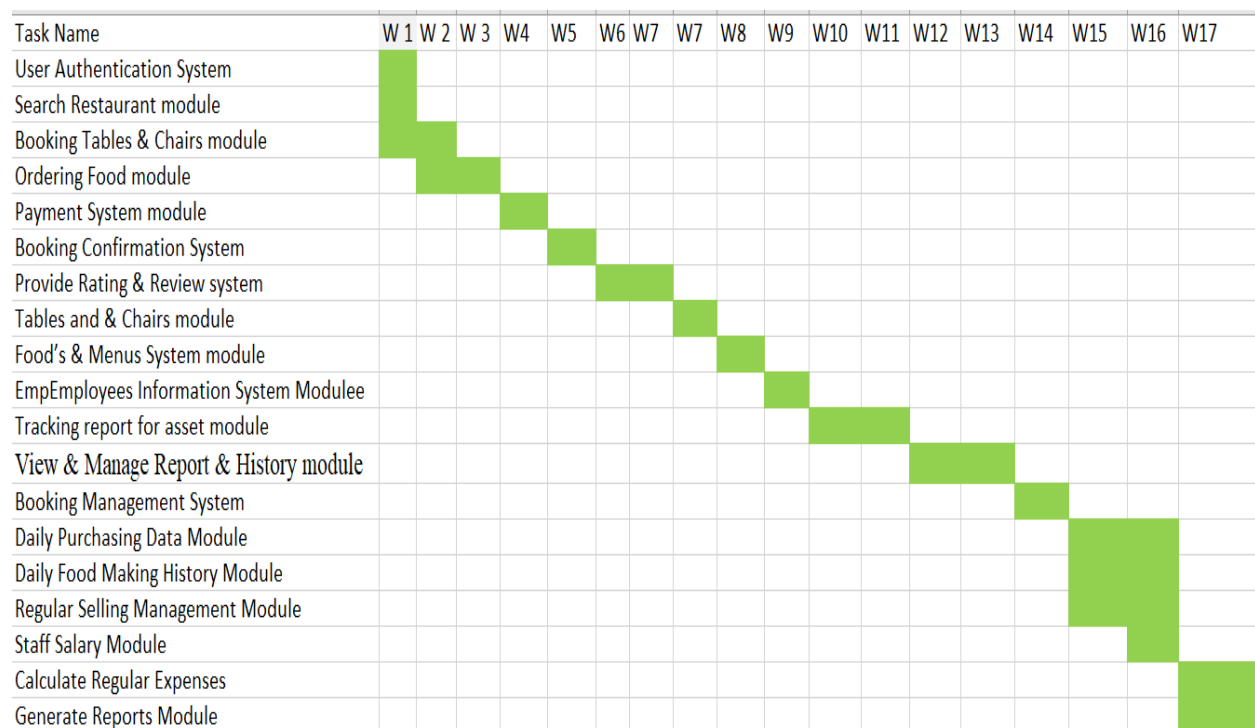
4	Ordering Food module	6 Days	Analyst, User
5	Payment System module	10 Days	Analyst, Developer
6	Booking Confirmation System	6 Days	Analyst, Designer, Tester, User
7	Provide Rating & Review system	7 Days	Analyst, User
8	Tables & Chairs module	15 Days	Designer, Developer
9	Food's & Menus System module	10 Days	Analyst, User
10	Employees Information System Module	7 Days	Designer, Developer
11	Tracking report for asset module	6 Days	Designer, Tester, Developer
12	View & Manage Report & History module	5 Days	Analyst, Designer, Tester
13	Booking Management System	9 Days	Analyst, Designer, Tester
14	Daily Purchasing Data Module	6 Days	Designer, Tester, Developer, User
15	Daily Food Making History Module	7 Days	Designer, Developer
16	Regular Selling Management Module	6 Days	Designer, Tester
17	Staff Salary Module	5 Days	Designer, Tester
18	Calculate Regular Expenses	6 Days	Designer, Tester
19	Generate Reports Module	9 Days	Designer, Tester

Table 4 List of time boxes

### 5.1.4 Gantt Chart

One of the most well-liked and practical methods for showing activities against time, which is widely used in project management, is the Gantt chart. An enterprise activity plan may be graphically represented using a Gantt chart.

The chart has an appropriate time scale at the top and a list of activities on the left side. A bar is used to symbolize each activity, and the position and length of the bar correspond to the starting, middle, and finish dates of the activity.



**Figure 4 Project life cycle gantt chart**

## 5.2 Test Plan

A test plan is a written document that lists the test methods, timetables, suppositions, goals, deadlines, and resources needed to execute a certain project.

In order to assure and confirm that program improvements are attempted, designed, and anticipated to deliver desired results, testing methods are usually based on differences between supplied inputs and expected results of specified structures.

### 5.2.1 Testing against the time boxing

Time boxing is a time management technique where you allocate a specific amount of time for a planned activity. Now will check against timeboxing:

User name	Example	Role	Example
Time box ID			
Time box content			

Test Type	Test steps	Expected result	Actual Result	Comment
Unit test				
Integration Test				
System Test				
Acceptance Test				
Security Test				
Usability Test				
Reliability rest				

Table 5 Sample of testing against the time boxing

## 5.2.2 Required Test

There are different types of testing modules but there are mainly two types of testing module systems based on functional and non-functional testing. The testing modules of these two are described below:

### 5.2.2.1 Functional Testing

Simply put functional testing is a test where an application, website or system is tested to make sure it does what it is supposed to do. So I must do functional testing on my built system. Functional Testing include are:

1. Unit Testing:
2. Smoke Testing: :
3. Integration Testing:
4. Regression Testing :
5. Beta/ Usability Testing:

#### **Unit Testing**

This is usually performed by developers. Those who write scripts that test whether an application meets individual component or unit requirements usually include writing tests that call each unit's methods and validate them when they match those requirements.

#### **Smoke Testing**

After each build is released, such testing is done to ensure that the quality and stability of the software is intact and no inconsistencies are encountered. This is also commonly called build verification testing.

#### **Integration Testing**

When a system requires multiple functional modules to function, integration testing is performed to ensure that the individual modules work as expected when working in combination with each other. This typically verifies that the end-to-end result of the system meets these required standards. whether it fulfills.

#### **Regression Testing**

This testing is usually done to check whether new code is added, enhancements fix bugs, break existing functionality or cause any instability, and to ensure that somewhere is working according to a specification.

#### **Beta/ Usability Testing**

This phase usually involves customers testing the product in each production environment. This phase is necessary to gauge how comfortable a customer is with the interface. Their feedback is usually taken so that further improvements to the code can be implemented.

### **5.2.2.2 Non-Functional Testing**

Non-functional testing is a type of testing that is used to test the non-functional aspects of a software application. It verifies that the behavior of the generated system is as required. Non-Functional Testing include:

1. Performance Testing:
2. Security testing:
3. Usability Testing:
4. Reliability testing:

#### **Performance Testing**

Performance testing basically eliminates the reasons behind the limited and slow performance of the software through testing. Software reading speed should be as fast as possible. One must be well organized and specific about the desired pace for the exam. Otherwise the test results will not be clear.



### **Security testing**

Security testing is one of the most important tests of software applications. Security testing is used to identify security flaws in software applications. The test is done by investigating the architecture of the system and the mindset of the attacker.

It protects a system from intentional, unintentional and accidental attacks both internally and externally.

### **Usability Testing**

This test generally confirmed how user friendly the system is and how easily users can interact and access all the services. Usability and validity testing is done through this test.

### **Reliability testing**

Reliability testing is a step that assesses whether the software system continues to operate without failing under specified conditions.

It is tested by reliability. The reliability test will fail if the system fails under these specified conditions.

### **Portability testing**

Portability testing is done on the software to check whether the developed software can run on different operating systems without any bugs.

### 5.2.3 Test Case

Test case no., test sort, test portrayal, and test procedures were included.

Test case number			
Test type			
Test Description			
Test Steps	Expected Result	Actual Result	Comment

Table 6 Sample Test case

### 5.2.4 User Acceptance Test Plan

The last phase of the user acceptance test. It describes the test in detail and evaluates its efficacy using the user.

Test case number			
Test type			
Test Description			
Precondition of testing			
users Name			
Act as			
Test Steps	Expected Result	Actual Result	Comment

Table 7 User Acceptance Test plan

## 5.3 Risk Management

Risk management is the process which identifies, analysis & response to any risk which may occur in an ongoing project in the life cycle of the development of the project.

Track down the remaining project & meet the goal & expected outcome. The risks of the project may include project timeline, budget & project effectiveness. There are different types of risk management involved. Risk management can take many different forms:




- ❖ Risk identification
- ❖ Risk assessment
- ❖ Risk precaution
- ❖ Steps taken for attainable risks.

### 5.3.1 Risk identification

Risk identification is a documented process that can prevent an organization or program from reaching its goals. Risk identification is a first step in the risk management process that helps companies understand and plan for potential risks so that they know that everything is designed properly. Whether. When you identify risks, remember to look for events that could prevent a project from achieving its goals. Examples of risks include theft, business downturns, natural disasters, accidents and data breaches etc. There are several situations in which you need to identify risks including:

- ❖ Along with identifying potential risks, there is also documentation trucking risks.
- ❖ It usually supports an investment decision.
- ❖ It can analyze multiple alternative systems.
- ❖ Before committing to a new program, all potential risks to the program should be evaluated and tested.
- ❖ Always keep in mind that there will be different types of risks in the future.

Risk identification and tracking of project risks are discussed in detail below:

Type of Risks	Causes	Impact and consequence
 Database Error and Destroy	<p>There are four panels in this project, the first is the admin panel, the second is the owner panel, the third is the manager panel and the fourth is the user panel. As a result, sometimes it becomes very difficult to manage.</p>	<p>Due to this the user does not find his specific and expected place exactly.</p>
 Unauthorized Access	<p>Many a times it is seen that a user completes the registration of the project by hiding all his information and tries to enter the system without permission which can be difficult to contain the risk. User can change his information if he wants.</p>	<p>Anyone can hack the secret information as well as change the information</p>
 Scheduling	<p>The program covers a variety of risk factors;</p> <ul style="list-style-type: none"> <li>• All over the world, the Corona pandemic has caused dire conditions.</li> <li>• Due to the pandemic period, there has been a lot of trouble in doing research.</li> </ul>	<p>Due to this project submission is very late.</p>

<p>Technical problem</p> <p>✚ Hardware</p>	<ul style="list-style-type: none"> <li>• Sometimes hackers can attack.</li> <li>• Viruses and other malicious programs can attack.</li> <li>• Power outages and failures may also occur.</li> <li>• Lack of necessary configuration that requires configuration.</li> <li>• Lack of necessary performance.</li> </ul>	<p>Automatic management in the system tray may fail at times</p>
<p>✚ Project Backup</p>	<p>Various online platforms and GitHub lack backups of these related projects.</p>	<ul style="list-style-type: none"> <li>• Test data backup plan.</li> <li>• Budget for backup plans.</li> </ul>
<p>✚ Network Failure</p>	<p>Unfortunately many times in a network especially WANs with line loss, hardware failure and power loss, the integrated API can fail at times.</p>	<p>Project users may not always receive timely information.</p>

Table 8 Risk identification Table

### 5.3.2 Risk assessment

Risk assessment is a systematic process of identifying, analyzing and controlling risks. Various workplaces have measures in place to eliminate or control any potential hazards. It is performed by a person qualified to conduct it. Risk assessment is one of the steps involved in risk analysis. Risk analysis is a multi-step process that identifies and analyzes supportable issues that are detrimental to a project or business. It is an ongoing process that can be updated as and when required. The risk assessment procedure's other goal is to remove operational risks and enhance workplace safety generally, in addition to meeting legal requirements. A risk assessment in a system is thus:-

- Introducing new steps in the workplace.
- Changes are made to existing processes in the project.
- Risk assessment can be done by the auditor while planning the procedure of a project.

### 5.3.3 Risk precaution

In this step the risk is identified and assessed and after completing the assessment the risk action is planned. And in this phase many steps are taken to complete the mediating technology process.

- Organized and prevented potential risks in advance.
- Reduces potential risk in many cases.
- It presents well the risks that have already occurred and the risks that are likely to exist.

Risk precaution are discussed in detail in the project:







<b>Types of risks</b>	<b>Action</b>	<b>Action Taken By</b>	<b>Action Required</b>
 Database Error and Destroy	<ul style="list-style-type: none"> <li>• Normalize essentials.</li> <li>• Creating the required relationships in the table.</li> </ul>	involved developer	Incorporating, updating and deleting information as needed.
 Unauthorized Access	<ul style="list-style-type: none"> <li>• The code is executed while maintaining consistency.</li> <li>• This project has a multi-verification framework that can be easily deployed</li> </ul>	involved developer	When the authentication segment is set.
 Scheduling	<ul style="list-style-type: none"> <li>• Accurate time estimation is done using Gantt chart.</li> <li>• There is extensive use of technology.</li> </ul>	Involved developer	Project development is done before starting the project.
Technical problem  Hardware	Lack of necessary configuration that requires configuration.	Involved Developer.	management in the system tray may fail at times.
 Project Backup	Various online platforms and GitHub lack backups of these related projects.	involved developer	update as often as you like.
 Network Failure	Unfortunately many times in a network especially WANs with line loss, hardware failure and power loss, the integrated API can fail at times.	involved developer	In terms of development during the project.

Table 9 Risk precaution Table

### 5.3.3 Steps Taken for Attainable Risk :

After identifying and assessing all possible risks in a project, the responsible person usually takes the necessary steps. These are:

Types of risks	Description	Likelihood	Impact	Steps Taken
Database Error and Destroy	Duplicate entries are likely which indicate invalidity.	Likely	High	Used images for simple form normalization and cheap correlations and created data dictionaries
Unauthorized Access	Unauthorized access to the system.	Unlikely	High	Implementing access authorization requires proper authentication mechanisms.
Scheduling	Among the many risks, the most common risk is the possibility of missing project schedules and deadlines	Rare	High	Time boxing and creating Gantt charts to break down project work.
Technical problem ✚ Hardware	Hardware can crash due to various process malfunctions	Frequent	Medium	Regular maintenance and monitoring is ensured with backups
Network Failure	Sometimes there are internet failures or connection problems	Frequent	Low	High speed bandwidth allocated and backup server configured.

Table 10 Risk dealing steps



## 5.4 Change Management

Change management is a management process that involves working on changes or transformations in organizational goals, core values, processes or technologies.

This management is defined as those methods and practices used to describe changes in a project both internally and externally. These include supporting staff preparation, taking necessary steps for change, and monitoring post-change activities to ensure successful implementation. Change management helps in accepting and adapting to these changes.

### 5.4.1 Factors that might cause change

The different types of conversion units required for this method include area units Changes the project's programming principles.

- Makes external changes as per requirement.
- Technology changes.
- The project changes to a completely different module.
- Competitiveness makes changes in innovation.
- Social changes in between.
- Changes to the security-related part of the project.

### 5.4.2 DSDM welcomes change

Generally the project management life cycle should be mostly modified based on the project requirements.

For this reason we should follow some procedures that can take different types of challenges supported by certain systems.

Therefore, DSDM is one of the most applicable, suitable, reliable and effective techniques. By following this system, if we want to make any changes in our system during the course of our project, it is possible to make changes through it. The procedures to be followed in making this change are:

- Following that any system module is updated.
- It can make various changes in the dynamic roles by checking the details and reviews of the users.
- All the while it ensures a safety function.
- It never compromises on quality.
- By this it is possible to develop repetitive tasks.
- It ensures quantitative competence and responsibility.

### 5.4.3 Considering business value

Business value is a very important consideration. Changes are made keeping in mind the business objectives as well as meeting the expected goals and objectives.

For this reason, we should prioritize the effectiveness of the change and the reasons for the change, which will include prioritizing the strong benefits expected from the users involved. Therefore, work should be done with the business value in mind and different expected outcomes should be considered at each step. Priorities are included:

Area if topic	Priority Level
Booking System	6
Functional requirements	5
User Interface	7
Tracking report for asset	6
Generate Reports	7

### **5.3.4 Change workshop**

Knowing the profile of all the team members included in the project as well as their interaction will be firmly established.

Developers must be involved in making necessary changes and additions to the data and stuff. A workshop can also be organized to raise questions about what changes are needed to add to this system for project improvement.

### **5.3.5 Changes that are allowed**

Changes must be adjusted accordingly depending on the priority of the change. Different costs, schedules, resources and quality of work must be modified in light of risk. While this system is still in the early stages of development we need to allow adjustments on a priority basis or else we will face a lot of trouble later.

### **5.3.6 Key Decision takers of change**

Different experts in different fields will make key decisions for change. This project includes individual decision makers for change here.

- Developer
- Requirements Analyst
- Tester

The analyst can observe the requirements and make changes as needed and the developer can make the changes relevant to the needs and the tester can test the system before releasing it.

## 5.5 Quality Management

Quality management refers to the practice of overseeing operations, which is used to create services to a system, so that they retain a source and consistent value. Quality management has four main components namely: 1. quality planning 2. quality assurance 3. quality control and 4. quality improvement. The process of implementing these four components is called total quality management.

- Quality management depends on numerous features included:
- Generally improves organizational processes.
- Keeping in mind the customer satisfaction and convenience, the system makes improvements in various areas.
- Maintains constant communication between group individuals and clients.
- Different times are constantly changing due to customer requests.
- This usually improves the documentation.

### 5.5.1 Rules Applied to Maintain Quality

There is always one rule or system to keep in mind when controlling, that is, applied from user to user and from system to system.

Certain rules need to be followed in maintaining the quality along with ensuring the quality of the product.

### 5.5.2 DSDM Standard Quality Measures

#### ❖ Process quality:

The quality of the strategy is ensured by registering the vision on the organization. Two types of approaches have been defined and used for total strategy quality.

- CMMI
- DSDM

**❖ Solution quality:**

The quality of the system is ensured by keeping in mind the user requirements and the expected business needs and user wishes. Mainly two types of priorities are used in this strategy;

- MoScow
- Time Boxing

**5.5.3 Quality Plan and Measuring Meter**

A variety of high quality setups are maintained within this organization.

- Tests are deleted after completion of each phase module.
- Allocated schedules and resources are completed accurately.
- As all changes are made over time, all changes must be tracked and saved for any continued implementation.

## Chapter 6 – Feasibility

### **6.1 All possible types of Feasibility**

#### **6.1.1 Operational Feasibility**

The operational feasibility of the proposed system measures how successfully a proposed system manages its problems, how well the system fits the requirements identified during the project scope statement, and how well it can exploit the opportunities. The organization is evaluated for employing the proposed system. This is perhaps the most difficult task to assess. Management must be committed to project effectiveness in order to be evaluated. It is likely to be approved and used if management requests it. But it is also important that the employee base accepts the change. As operational feasibility is always concerned with the required functionality of the **Seat& Eat**. **Seat& Eat** should facilitate their use with proper validation of user inputs and validation navigation systems. The request option should be easy and the **Seat& Eat** should be user-friendly. It should increase the usability and location-based search for the recommended system, the **Seat& Eat** is effortless and easy to use.

#### **6.1.2 Technical Feasibility**

Technical Feasibility It calculates the technical secrecy of the proposed project. Then the organization's technical capabilities are compared with the technical requirements. If the existing technical skills are sufficient to meet the requirements of the project, then the system project is considered technically editor.

Technical feasibility tests show that **Seat& Eat** users can manage their operations more easily than the old manual system. The system is developed and developed using modern technology. This

ensures that any software that supports a connection to the Internet is compatible with the latest web browser.

To ensure that the application data is securely accessible, the web-based and software-based application implements strong authentication architecture, ensuring an acceptable and cost-effective software platform and resource. Its technical acceptance is very important.

Following are the technical aspects in the context of this **Seat& Eat** project

❖ **Hardware:**

- Wi-fi Router
- HP laptop

❖ **Software:**

- XAMPP
- Microsoft office
- Google chrome
- Windows 11
- PHP Laravel

❖ **Database:**

- MySQL

❖ **Technology:**

- HTML
- CSS
- Bootstrap
- JavaScript
- PHP

### ❖ Server Side:

- PHP
- Laravel
- 

### 6.1.3 Economic Feasibility

Economic feasibility of a project is a very important issue because before planning a project its cost benefit analysis has to be done.

Recommended Framework Calculation There are various choices for developing web based applications, desktop applications etc.

**The cost of web based applications is given below :**

<b>Equipment</b>	<b>Cost per unit</b>	<b>Cost</b>
Internet	1500 BDT per month	1500 BDT
Laptop AMD Ryzen 7 4800H Processor (8M Cache, 2.9 GHz up to 4.2 GHz)	110000 BDT	110000 BDT
Web, File and Email Servers	14500 BDT per month	14500 BDT
<b>Total :</b>		<b>126000 BDT</b>



**The cost of desktop based applications is given below :**

<b>Equipment</b>	<b>Cost per unit</b>	<b>Cost</b>
Desktop pc (core i7, 1.60 GHz up to 3.40 GHz, 32GB DDR4 RAM, HDD, SSD)	122000 BDT	114000 BDT
Web, File and Email Servers	14500 BDT per month	14500 BDT
<b>Total:</b>		99500 BDT

## **6.2 Market Research Analysis Based on the Feasibility Factors**

Typically this category includes market and user needs. Restaurant reservation system is a very important part for every customer. There are a large number of restaurants around us, in many busy restaurants we have to go and stand to eat but we get a seat. And that is very boring and time wasting and to avoid this time wasting I created my project.

This project will save people's time. The reality is that when we go to a restaurant, we often do not get a table to sit on, so we have to stand or take a lot of time to prepare and serve the food after ordering the food. This is a very annoying thing for everyone. But through my system, the customer will be able to order the desired meal, book table, time and date before going to the restaurant and even make advance payment. And the restaurant authority will be able to delete and update all their data. My project is a little different from other projects. Keeping in mind that an owner has many restaurants, he can manage his work by opening accounts in his various restaurants and all

the work of a restaurant can be edited through this system. Here you can book tables and food menus in advance which no other project has been able to implement.

### 6.3 Cost Benefit Analysis

Cost benefit analysis is usually based on estimating revenues and costs. Comparing the total cost and gross income of the project provides benefits. The estimated income and expenses for the next five years are shown below:

SL no	Equipment Cost	1 <sup>st</sup> year	2 <sup>nd</sup> year	3 <sup>rd</sup> year	4 <sup>th</sup> year	5 <sup>th</sup> year	Cost
1	Web based application cost	12,6000 BDT	-	-	-	-	12,6000 BDT
2	Email, Domain & Hosting	16000 BDT	16000 BDT	16000 BDT	16000 BDT	16000 BDT	80,000 BDT
3	Desktop-based Application	150000 BDT	-	-	-	-	150,000 BDT
4	Employee Expenses	35000 BDT	35000 BDT	35000 BDT	35000 BDT	35000 BDT	175,000 BDT
5	Maintenance	40000 BDT	40000 BDT	40000 BDT	40000 BDT	40000 BDT	200000 BDT
6	other cost	20000 BDT	20000 BDT	20000 BDT	20000 BDT	20000 BDT	100000 BDT
7	Total Cost	352000 BDT	111000 BDT	111000 BDT	111000 BDT	111000 BDT	83100 BDT

Table 11 **Total cost Estimation for the project**

**Total Earn:**

SL no	Sector of earning	1 <sup>st</sup> year	2 <sup>nd</sup> year	3 <sup>rd</sup> year	4 <sup>th</sup> year	5 <sup>th</sup> year	Earning in total
<b>1</b>	<b>Software Selling</b>	260000 BDT	290000 BDT	330000 BDT	570000 BDT	750000 BDT	2200000 BDT
<b>2</b>	<b>Total</b>	260000 BDT	902000 BDT	330000 BDT	570000 BDT	750000 BDT	<b>2200000</b> <b>BDT</b>

Table 12 Earning estimation for the project

**Total Revenue:**

SL No	Sectors	1 <sup>st</sup> year	2 <sup>nd</sup> year	3 <sup>rd</sup> year	4 <sup>th</sup> year	5 <sup>th</sup> year	
1	Total Earning	280000 BDT	340000 BDT	410000 BDT	500000 BDT	620000 BDT	2150000 BDT
2	Total Equipment Cost	330000 BDT	75000 BDT	75000 BDT	75000 BDT	75000 BDT	630000 BDT
	Total Revenue	50000 BDT	265000 BDT	335000 BDT	425000 BDT	545000 BDT	<b>1520000</b> <b>BDT</b>

Table 13 Estimation Revenue on a five-year scale

Now it is seen that by promoting this method the organization will continue to generate huge amount of revenue every year. Every year the revenue will increase thus this initiative will benefit the organization.

#### **6.4 Is DSDM Good or Bad for this Project**

All key features should be completed in a typical educational interval and break in a challenging and fast time. The length may vary favorably over events, thus it must be generated iteratively.

The **Seat& Eat** guarantees an unaltered procedure. And directions are strictly enforced. It guarantees a computable value regardless of the interval.

It ensures quality in working on time and customer interaction through all queries so it is clear that the reservation system is a leading restaurant management technique.

Given the size of the project, **DSDM** can carry out a variety of troubleshooting tasks. Developers now have access to end users thanks to **DSDM**. It is therefore evident that the **DSDM** technique is the best for the **Seat& Eat**.

## Chapter 7 – Foundation

### 7.1 The problem area identification

While most software is built on a problem, creating usable software requires identifying the real problem. Correct solution will not be possible without knowing the real problem. For this reason identification of problem areas is a key to building a system.

In this case software users help the software company by providing their information. So the user will use a solution and he knows for which problem he needs specific solution his information will be suitable to create the solution.

There are many alternative methods for identifying problems. Two of them are used to create this solution.

#### 7.1.1 Interview

Interview is one of the best alternative method if you want to gather information or find out the real problem and goal of the project. Interviewing is a process in which two or more people talk face to face about solving a specific problem. It is one of the best problem identification techniques. In the proposed system some questions will be set for the interview:

- **For User:**
  - User Can get notification .
  - User Can get feedback confirmation.
  
- **For Admin:**
  - View user information.
  - Can solve any type of user problem

### 7.1.2 Observation

Observational method is defined as a technique for observing and describing the behavior of a subject. Observation techniques help to gather user requirements and find and know the exact problem. Mainly observation techniques are used to visit the work place and find solutions to various problems for the users. The main points of observation method are:

- Admin can be see all the user data .
- User email verification system.
- Owner can view all details of restaurant staff.
- Manager can see ordering food.
- Manager can see restaurant selling management.

### 7.1.3 Questionnaires

Questionnaire is an effective technique for collecting data .Interviewers are asked a set of questions to elicit information in the process. Below are some question sets created for users.

	<b>Question for problem identification</b>
1 .Question	Will the owner have access to all the work on the project?
Answer	
2 .Question –	Tell us what you think a new user can do with this system
Answer	
3 .Question –	What is the main purpose of using this system?
Answer	
4 .Question	Will the customer really save time?

Answer	
5 .Question –	How will the average customer benefit from using it?
Answer	

## 7.2 Rich Picture

### Key Actors

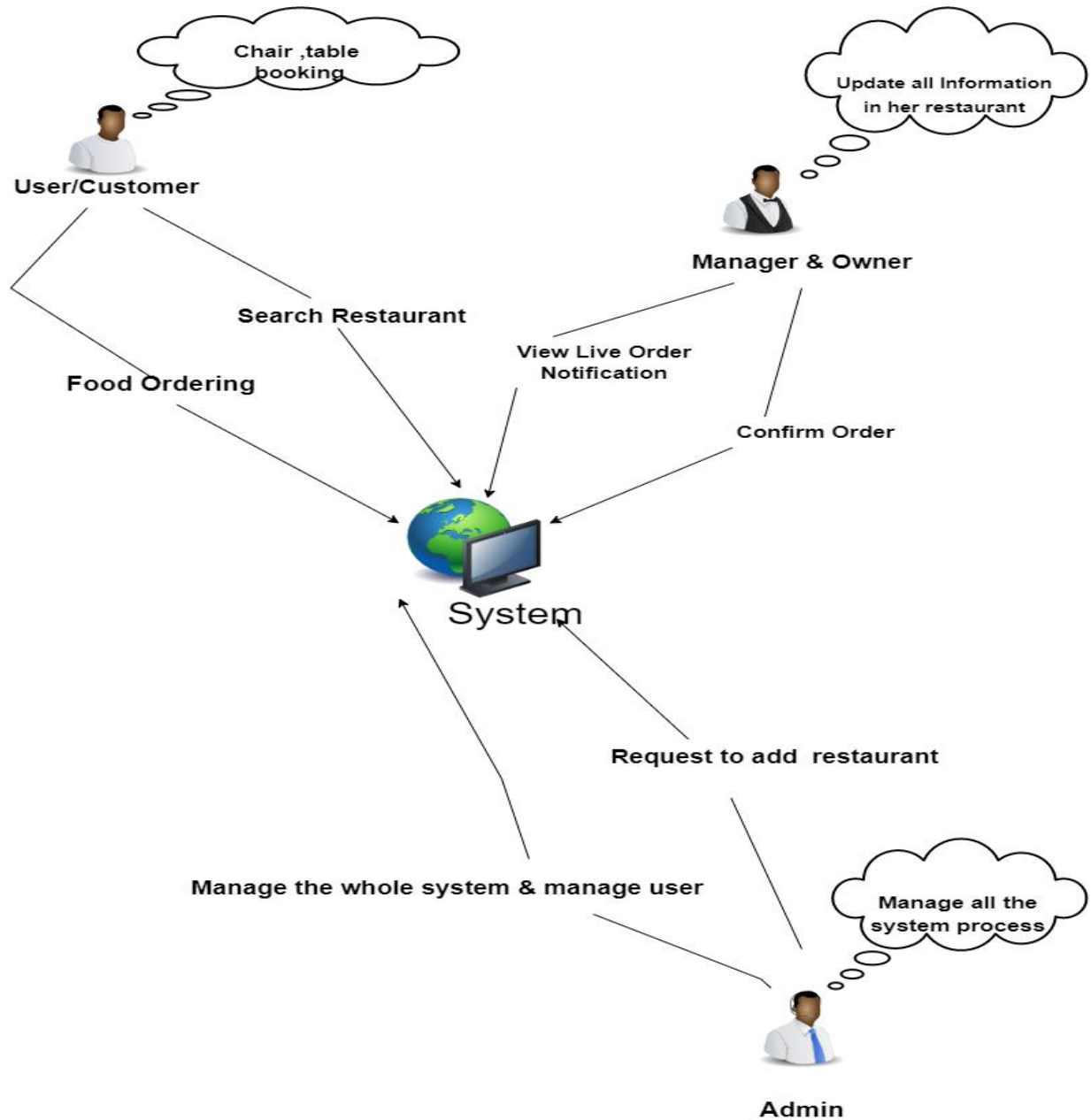


Figure 5 Rich picture



## **Key Actors**

There are many of actors in restaurant reservation system. The most important actors are:

- ✓ Admin
- ✓ Customer
- ✓ Owner
- ✓ Manager

## **Short description of rich picture**

Various problems are encountered while using data collection techniques in the detection section.

While creating rich picture diagram for my project restaurant reservation system I faced some problems of the system and found out the problems are:

- Food ordering module.
- Food selection process.
- Multiple admins can access if desired.
- In updating the food menu.

## **7.3 Specific Problem Area Identification**

A variety of problems are encountered when using identification category data collection techniques. Rich picture diagram describing the complete system of restaurant reservation system Analyzing these I found some specific problems which are:

- Multiple admins have access to the system.
- Food menu selection process

- Table and chair selection system
- Online payment module

## 7.4 Possible Solution

Some possible solution for the identified problems is:

- Also updated the food order module.
- Simplify the food selection process.
- Enable option No admin can access without registration.
- A review section can be created for the owner authority.

## 7.5 Overview Requirement list

The final requirement list is given below:

### Functional Requirements:

Functional requirements describe the identity that is an integral part of the software and that this part must provide.

- User Authentication System
- Customer can be Select Restaurant
- The food category will be viewed by customers.
- Food will be ordered by customers.
- Payment can be processed by customers.
- Manage booking confirmation status
- Owner & Manager can Manage Tables &Chairs.
- Owner &Manager can Manage Food's &Menus.
- Owner & Manager can Manage Employees.

### **Non-Functional Requirements:**

The quality of a software system is defined in terms of specifications and non-functional requirements.

- Manager Generate invoice to the Staff for Salary.
- Manager can Calculate Regular Expenses.
- Owner Can Track reports for asset.
- Food Quality can rated and reviewed by customers.
- Owner Can see Report &History.
- Generate Reports by Manager.

## **7.6 Technology to be implemented**

A restaurant reservation system can be implemented using a variety of technologies, but choosing the right technology is very important to achieve success.

The technology that will be implemented is software based and web application based technology. Which can be run and accessed by using the internet in a server based system. But choosing the right technology is very important for the success of the system.

Below are the available options:-

### **Client-server Application Technology**

If an application uses the term client-server, the term refers to the connection between the programs, both client and server.

An application framework that connects servers and clients to a computer network or the Internet and distributes work is known as the client-server architecture, simply called the client-server architecture.

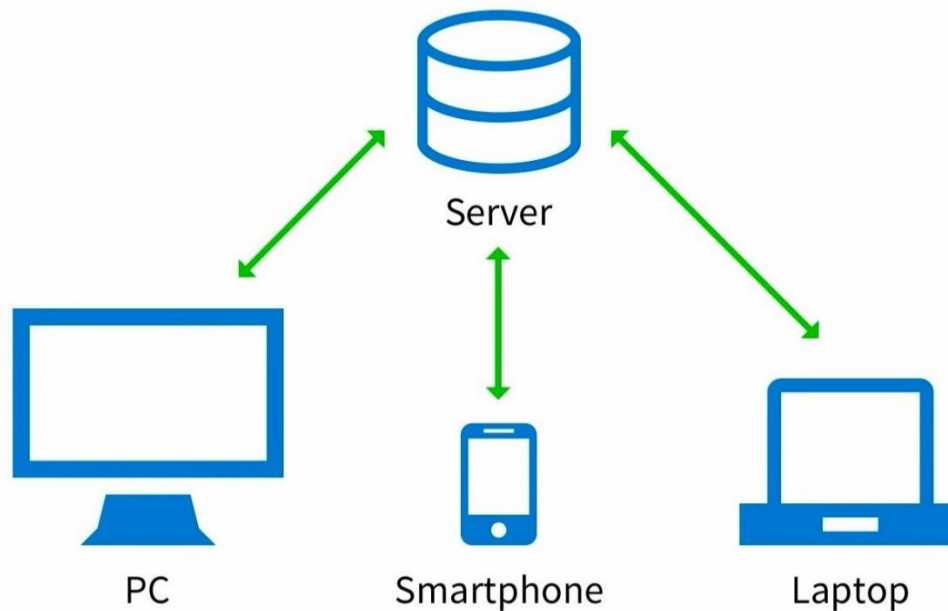


Figure 6 Client-server model

**The feature of the client-server model application is given below:**

- A client-server computer works with a response system. The client sends a request to the server and the server responds with the correct information of its choice.
- It is very easy to add any feature to the server without facing any kind of obstacles.
- Servers generally require less maintenance.
- Client and server should follow a protocol in communication so that they can easily communicate with each other.
- A client-server system can be upgraded, replaced and migrated because they are completely independent and only communicate with the server to receive data.

## Web application

In computer science, computer software that performs certain tasks using a web browser and the Internet is called a web-based application. Data storage and retrieval in web applications are often done using a server-side language and a client-side language, respectively. Not required as it is hosted on remote server. Features of web application are:

- Web apps are browser based and can be used on different devices and operating systems.
- No installation hassles.
- Can be accessed anywhere through internet
- There are no limitations because they do not take up space on the hard-disk.

### 7.7 Recommendation and justification

My proposed system **Seat& Eat** should be accessible anytime from anywhere. Different types of users will be using this system from different places so it has web based solution.

In order to access from this system, users should be able to easily access and benefit from the internet. So I think that web based application will be recommended for the proposed system and all types of users will be able to access the system.

## Chapter 8 – Exploration

### 8.1 Old system Use Case:

Now I'm provide the old system use case.

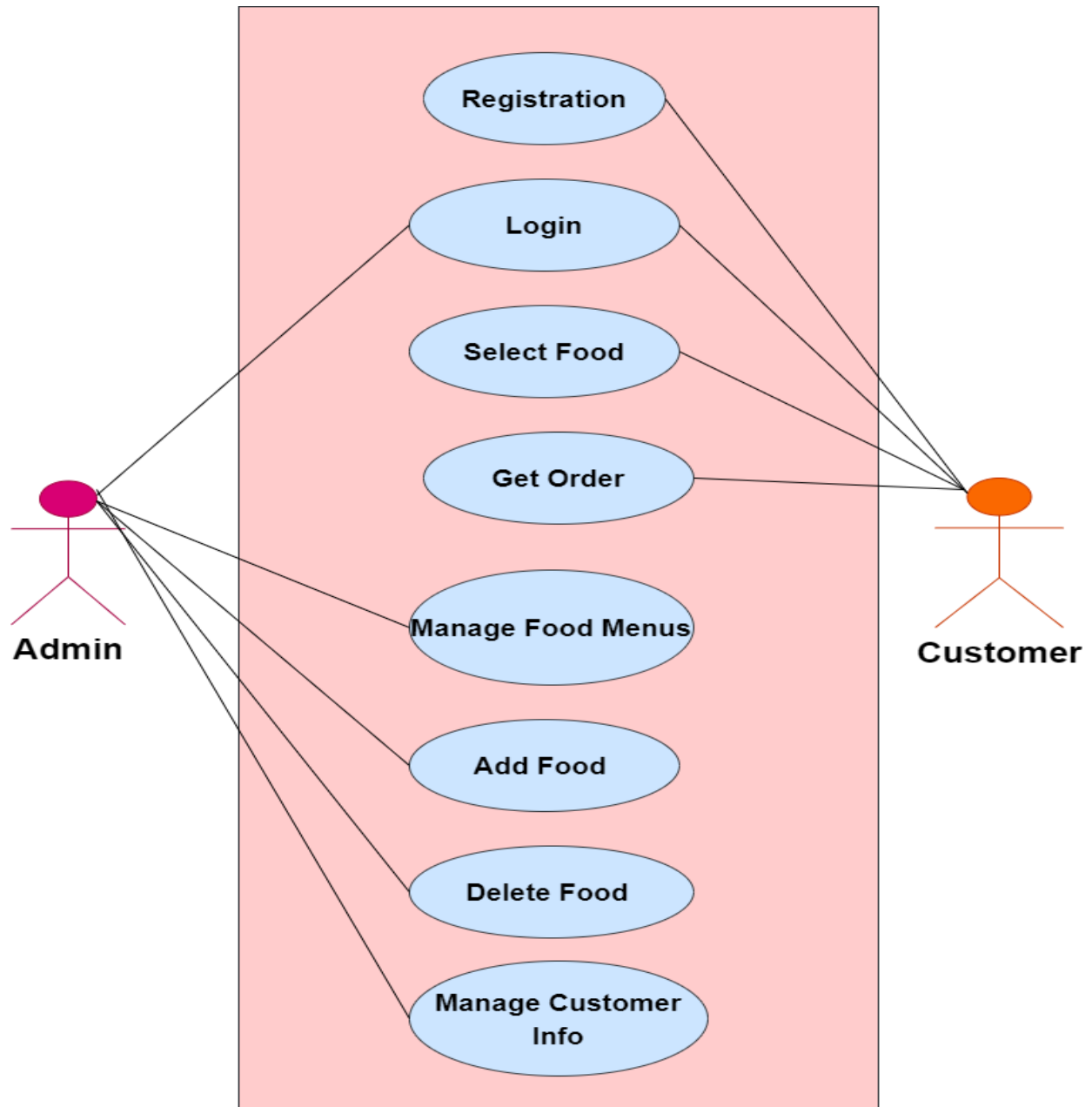


Figure 7 Old system User case

### 8.2 Full System Use Case Diagram:

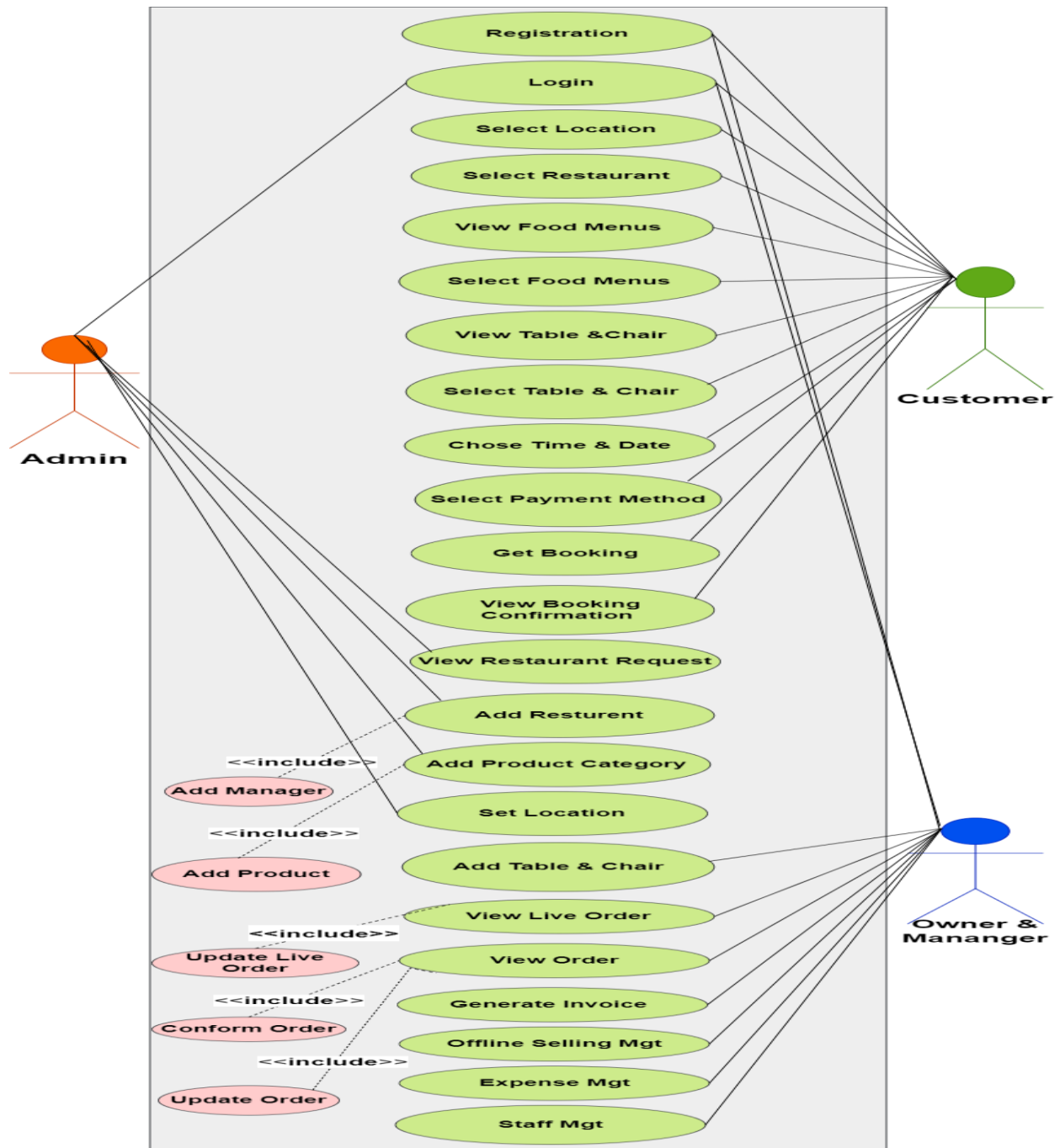


Figure 8 User case of the proposed Seat & Eat

### 8.3 Full system Activity Diagram:

Action graphs of 'Seat & Eat' are given below:

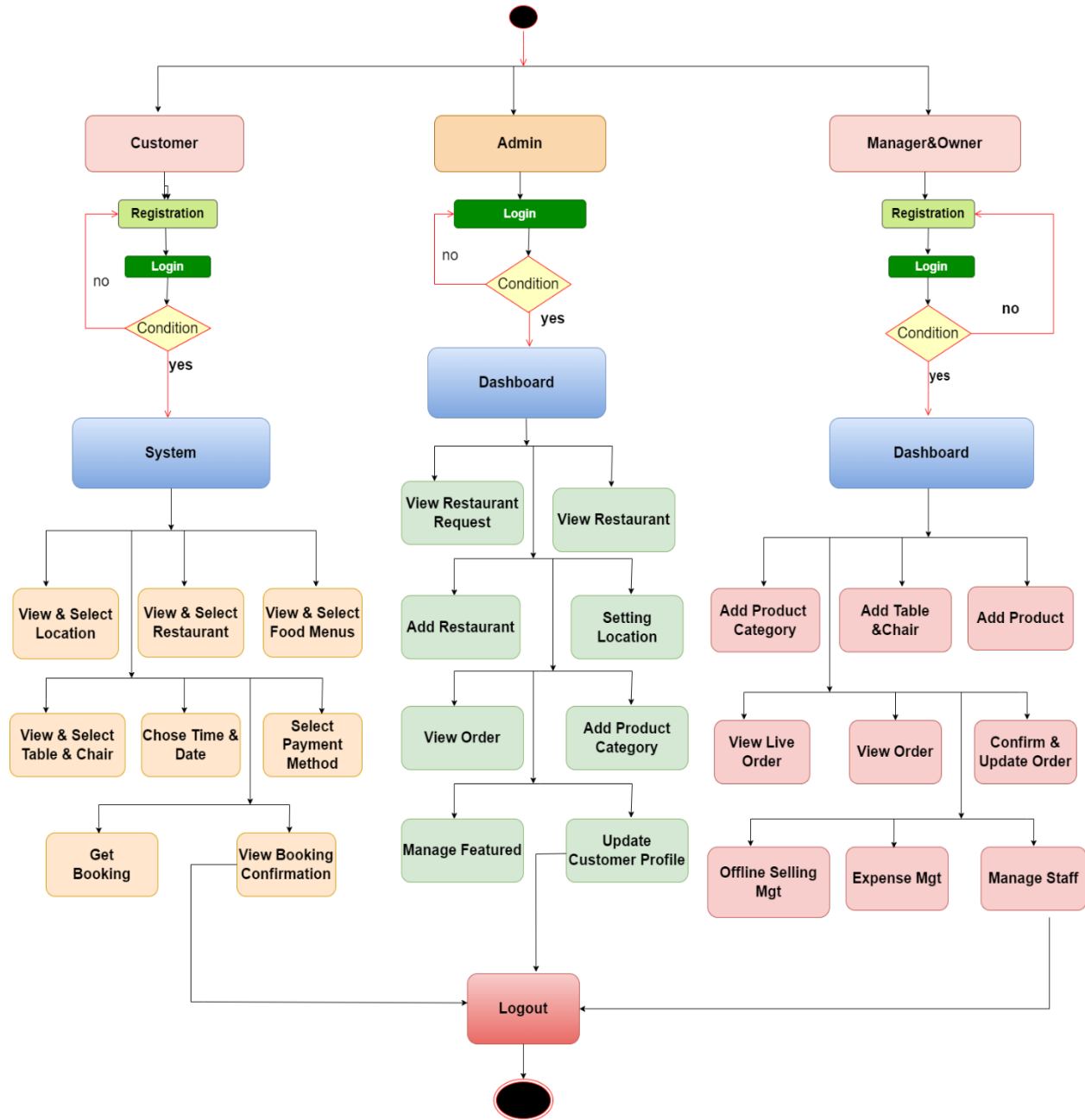


Figure 9 Full System Activity diagram of Seat& Eat.



### 8.4 Activity Diagram:

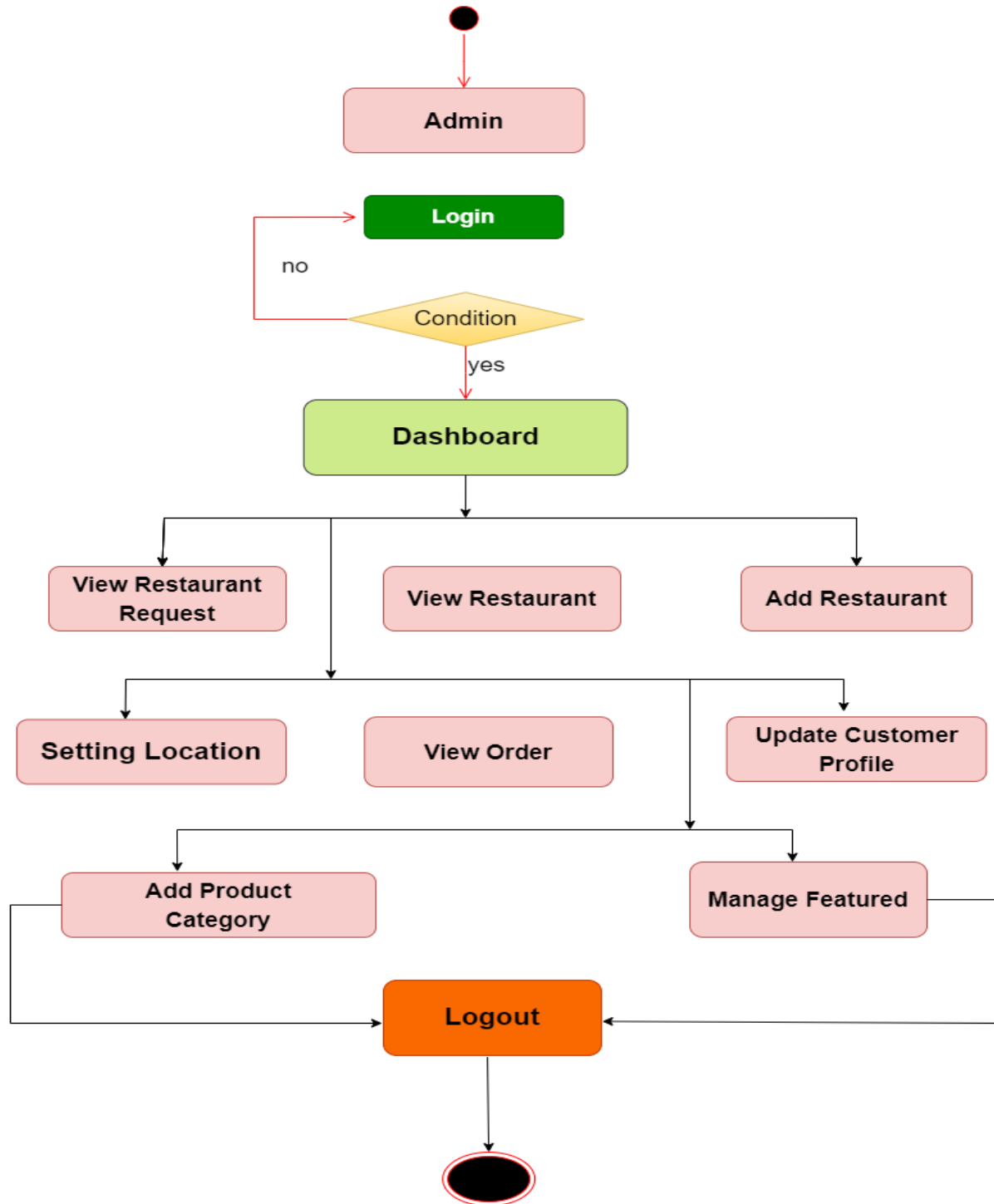


Figure 10 Admin Activity diagram of Seat& Eat

### 8.5 Activity Diagram:

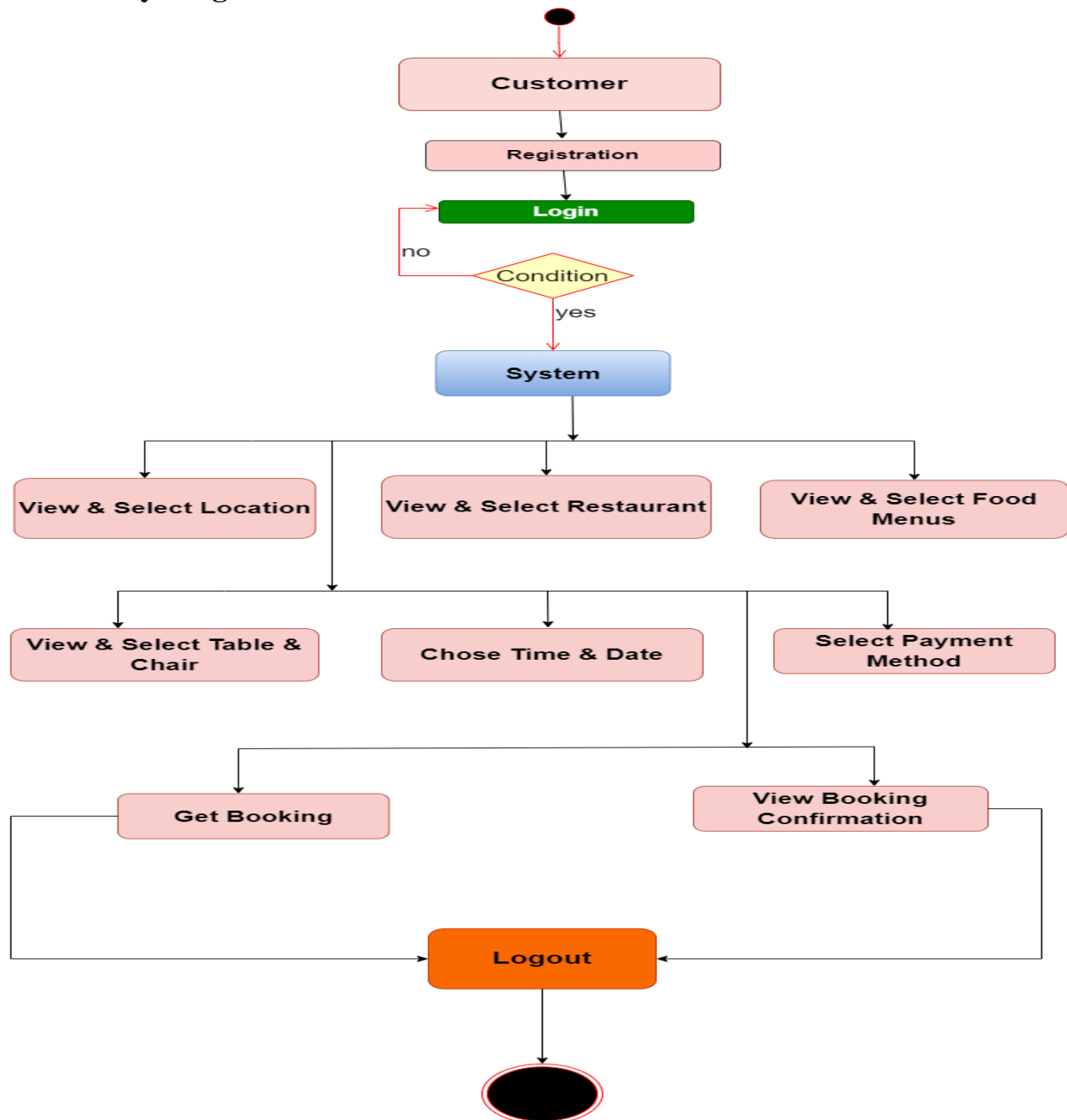


Figure 11 Customer Activity diagram of Seat& Eat.

## 8.6 Activity Diagram:

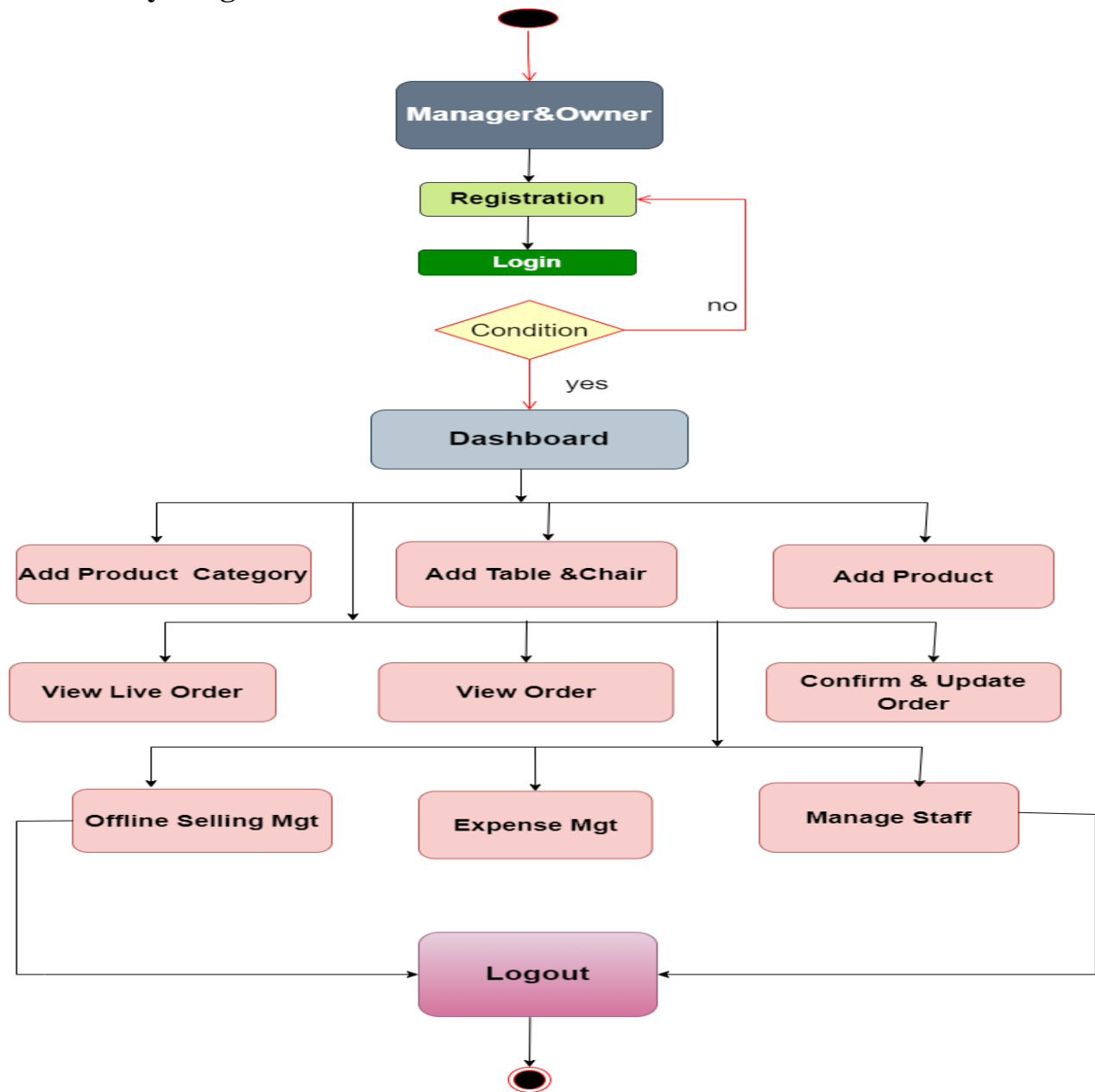


Figure 12 Owner & Manager Activity diagram of Seat & Eat.

## 8.7 Requirement catalog

The list of criteria defined for the project is called a requirements catalog. I am now going to make a simple visualization of the requirements identified in the requirements catalog:

### User Authentication Requirement Catalog:

Source	Sign in	Priority	Requirements
Admin	All user	Must	01
Customer Authentication Requirement	Admin will enroll all the users in the system and all the users have to work all their information correctly otherwise they can't.		
Functional Requirement			
Nonfunctional Requirements			
Description	Target value	Acceptance value	comment
Login registration per day	45	60	

Table 14 Requirement catalog for login registration

### Customer Requirement Catalog:

Source	Sign in	Priority	Requirements
Admin	All user	Must	01
Customer Requirement	It must be ensured that the customer can access everything he wants and can finally do what he wants to do		
Functional Requirement			
Nonfunctional Requirements			
Description	Target value	Acceptance value	comment
Customer registration per day	50	70	

Table 15 Customer Requirement Catalog

## 8.8 Prioritized Requirements List (PRL)

I prioritized the requirements list following the MoSCoW prioritization strategy. Now I am showing below priority list for Instant Food system:

No	Functional Requirements	Priority
1	User Authentication System	Must have
2	Search Location	Must have
3	Customer can be Select Restaurant	Must have
4	The food category will be viewed by customers.	Must have
5	Food will be ordered by customers.	Must have
6	Payment can be processed by customers.	Must have
7	Manage booking confirmation status	Must have
8	Owner & Manager can Manage Tables & Chairs.	Must have
9	Owner & Manager can Manage Food's & Menus.	Must have
10	Owner & Manager can Manage Employees.	Must have
11	Manager Generate invoice to the Staff for Salary.	Should have
12	Manager can Calculate Regular Expenses.	Should have
13	Owner Can Track reports for asset.	Should have
14	Food Quality can rated and reviewed by customers.	Could have
15	Owner Can see Report & History.	Could have
16	Generate Reports by Manager.	Could have

## 8.9 Prototype of the new system

### Admin Panel Prototype

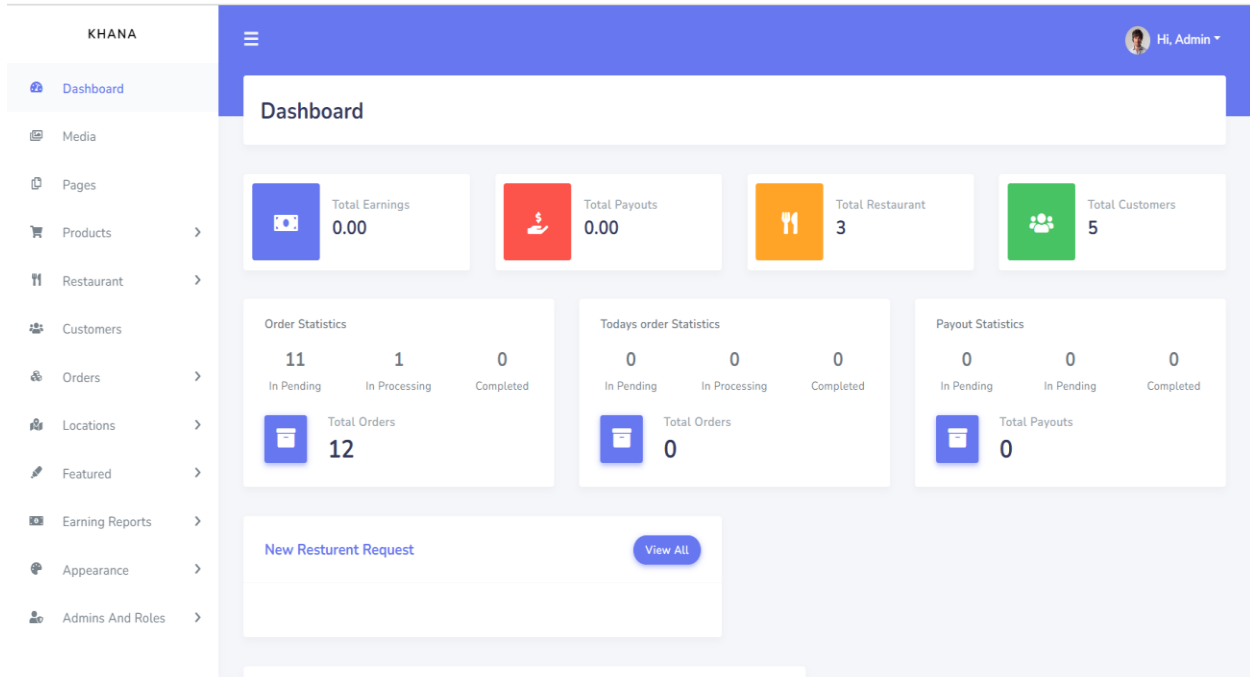


Figure 13 Admin Panel Prototype

### Login Page Prototype



Figure 14 Login Page Prototype

## Media Prototype

The screenshot displays the 'All Media Files' page in the KHANA system. The page features a sidebar with navigation options: Dashboard, Media, Pages, Products, Restaurant, Customers, Orders, Locations, Featured, Earning Reports, Appearance, and Admins And Roles. The main content area shows a table of uploaded media files. The table has the following columns: File, User Id, Url, Directory, and Uploaded At. The data rows are as follows:

File	User Id	Url	Directory	Uploaded At
	#25	//localhost/khana/uploads/22/1...	uploads/22/11/	20 hours ago
	#1	//localhost/khana/uploads/22/1...	uploads/22/11/	20 hours ago
	#25	//localhost/khana/uploads/22/1...	uploads/22/11/	1 day ago
	#25	//localhost/khana/uploads/22/1...	uploads/22/11/	1 day ago
	#25	//localhost/khana/uploads/22/1...	uploads/22/11/	1 day ago

Figure 15 Media Page Prototype

## Products Prototype

The screenshot displays the 'All Products' page in the KHANA system. The page features a sidebar with navigation options: Dashboard, Media, Pages, Products, Restaurant, Customers, Orders, Locations, Featured, Earning Reports, Appearance, and Admins And Roles. The main content area shows a table of products. The table has the following columns: Title, Price, Total Sales, Status, Last Modified, and View. The data rows are as follows:

Title	Price	Total Sales	Status	Last Modified	View
Chef's Special Shrimp Pizza	240	0	Published	Last Modified 20 hours ago	
Rice One Person	30	0	Published	Last Modified 1 day ago	
Pepsi	40	0	Published	Last Modified 1 day ago	
chocolate	100	0	Published	Last Modified 1 day ago	
Chicken With Sausage Burger	200	0	Published	Last Modified 1 day ago	
Mountain Dew Can 250ml	45	0	Published	Last Modified 2 days ago	

Figure 16 Product Page Prototype



## Menu Category Prototype

The screenshot displays the 'Menu Category' page in the KHANA system. The left sidebar lists various navigation options, with 'Products' expanded to show 'Menu Category'. The main content area features a table with the following data:

<input type="checkbox"/>	Title	Created By	count
<input type="checkbox"/>	Drinks Edit	Savoury Green Cafe	1
<input type="checkbox"/>	Dessert Edit	Savoury Green Cafe	1
<input type="checkbox"/>	Main Menus Edit	Savoury Green Cafe	3
<input type="checkbox"/>	Drinks Edit	Handi Karai	4
<input type="checkbox"/>	Dessert Edit	Handi Karai	6
<input type="checkbox"/>	Main Menus Edit	Handi Karai	8
<input type="checkbox"/>	Drinks Edit	Trump Cafe	6
<input type="checkbox"/>	Dessert Edit	Trump Cafe	4

Figure 17 Menu Category Page Prototype

## Cuisine Category Prototype

The screenshot displays the 'Cuisine Category' page in the KHANA system. The left sidebar lists various navigation options, with 'Products' expanded to show 'Cuisine Category'. The main content area features a form for adding a new cuisine category and a table of existing categories.

**Form Fields:**

- Name: Category Name
- Slug: Category slug
- Parent Category: None
- Image: Placeholder image

**Table Data:**

<input type="checkbox"/>	Title	Created By	count
<input type="checkbox"/>	Bangladeshi Food Edit	Admin	0
<input type="checkbox"/>	Indian Edit	Admin	1
<input type="checkbox"/>	Chinese food Edit	Admin	1
<input type="checkbox"/>	Japanese Edit	Admin	1
<input type="checkbox"/>	Italian Edit	Admin	0
<input type="checkbox"/>	mexican Edit	Admin	0
<input type="checkbox"/>	Title	Created By	Count

Figure 18 Cuisine Category Page Prototype

## Restaurant Request Prototype

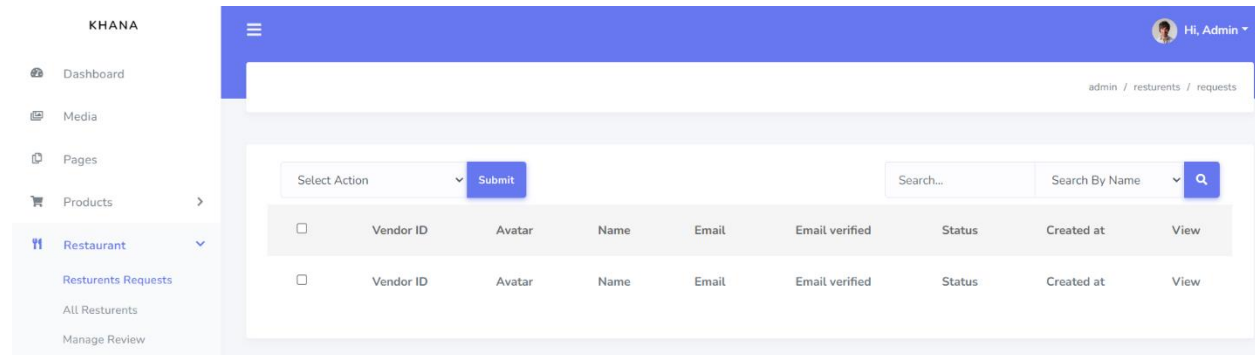


Figure 19 Restaurant Request Prototype

## All Restaurant Prototype

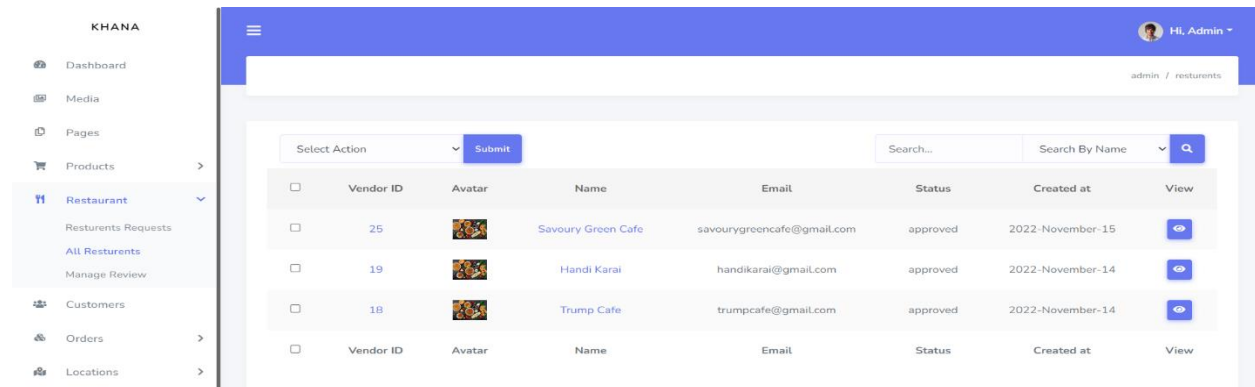


Figure 20 All Restaurant Prototype

## Customers Prototype

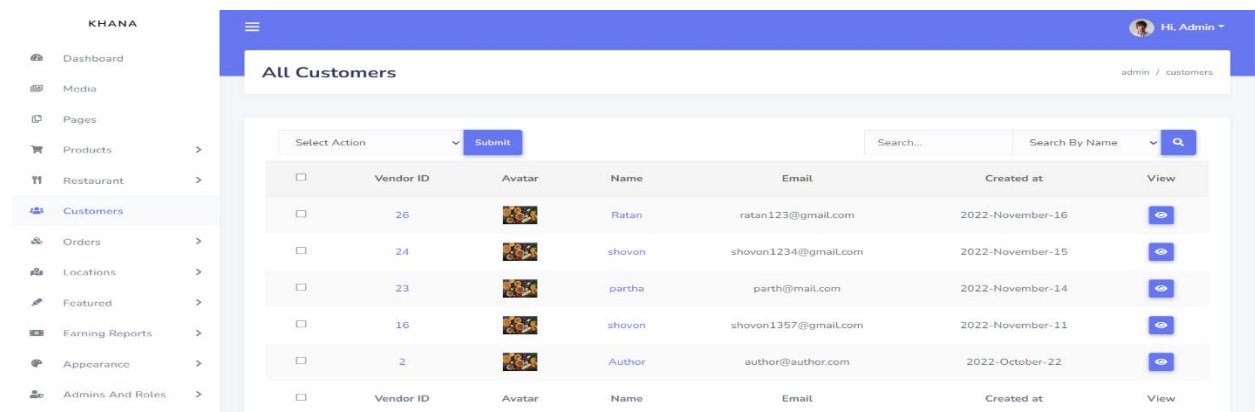


Figure 21 Customer Prototype

## All Order Prototype

The screenshot displays the 'All Orders' page in the KHANA system. The page features a blue header with the user name 'Hi, Admin' and a breadcrumb trail 'admin / order'. The main content area is titled 'Orders List' and includes a date range filter for '11/17/2022 - 11/17/2022' and a search bar. The table below shows the following data:

Order Id	Restaurant Name	Order Type	Payment Method	Total Amount	Status	Payment Status	Action
#20	Admin	Booking	NOGOD	530.00	Pending	Pending	Options
#19	Admin	Booking	BKASH	180.00	Pending	Pending	Options
#18	Admin	Booking	BKASH	620.00	Pending	Pending	Options
#17	Admin	Booking	BKASH	350.00	Pending	Pending	Options
#16	Admin	Booking	NOGOD	350.00	Pending	Pending	Options
#15	Admin	Booking	NOGOD	0.00	Pending	Pending	Options

Figure 22 All Order Prototype

## Pending Order Prototype

The screenshot displays the 'Pending Orders' page in the KHANA system. The page features a blue header with the user name 'Hi, Admin' and a breadcrumb trail 'admin / order / type / pending'. The main content area is titled 'Pending Orders' and includes a date range filter for '11/17/2022 - 11/17/2022' and a search bar. The table below shows the following data:

Order Id	Restaurant Name	Order Type	Payment Method	Total Amount	Status	Payment Status	Action
#9	Admin	Booking	COD	280.00	Pending	Pending	Options
#10	Admin	Booking	NOGOD	700.00	Pending	Pending	Options
#11	Admin	Booking	BKASH	30.00	Pending	Pending	Options
#12	Admin	Booking	BKASH	510.00	Pending	Pending	Options
#13	Admin	Booking	COD	140.00	Pending	Pending	Options
#15	Admin	Booking	NOGOD	0.00	Pending	Pending	Options

Figure 23 Pending Order Prototype

## Complete Orders Prototype

The screenshot shows the 'Complete Orders' section of the KHANA dashboard. The sidebar on the left lists various navigation options, with 'Orders' expanded to show 'All Orders', 'Pending Orders', 'Accept Orders', and 'Complete Orders'. The main content area features a date range filter for '11/17/2022 - 11/17/2022', a search bar, and a table with columns: Order Id, Restaurant Name, Order Type, Payment Method, Total Amount, Status, Payment Status, and Action. The table currently displays 'No Data Found'.

Figure 24 Complete Order Prototype

## Location Prototype

The screenshot shows the 'Location List' section of the KHANA dashboard. The sidebar on the left lists various navigation options, with 'Locations' expanded. The main content area features an 'Add New' button, a filter dropdown set to 'Publish', and a table with columns: Title, Total Users, Status, and Date. The table lists several locations with their respective details.

	Title	Total Users	Status	Date
<input type="checkbox"/>	Rangpur <a href="#">Edit</a>	0	Published	Last Modified 3 weeks ago
<input type="checkbox"/>	Feni <a href="#">Edit</a>	0	Published	Last Modified 2 days ago
<input type="checkbox"/>	Bogra <a href="#">Edit</a>	0	Published	Last Modified 3 weeks ago
<input type="checkbox"/>	Barisal <a href="#">Edit</a>	1	Published	Last Modified 3 weeks ago
<input type="checkbox"/>	Dhaka <a href="#">Edit</a>	2	Published	Last Modified 2 days ago
<input type="checkbox"/>	Chittagong <a href="#">Edit</a>	1	Published	Last Modified 2 days ago
<input type="checkbox"/>	Rajshahi <a href="#">Edit</a>	0	Published	Last Modified 2 days ago

Figure 25 Location List Prototype

## New Create Location Prototype

**KHANA**

Hi, Admin

### Add new location

Location Name

Latitude

Longitude

Map Zoom Level

**Publish**

**Status**

**Image**

Figure 26 New Create Location List Prototype

## Featured Prototype

**KHANA**

Hi, Admin

### Featured Seller

Featured Seller  
**Membership**  
 All | Free Membership | Silver Membership | Gold Membership | Platinum Membership | Free Membership | Silver Membership | Gold Membership | Platinum Membership |

Featured Seller

<input type="checkbox"/>		Store Name	Email	Membership Status	Registered At
<input type="checkbox"/>		Savoury Green Cafe <a href="#">View</a>	savourygreencafe@gmail.com	Free Membership	Last Modified 1 day ago
<input type="checkbox"/>		Handi Karai <a href="#">View</a>	handikarai@gmail.com	Free Membership	Last Modified 3 days ago
<input type="checkbox"/>		Trump Cafe <a href="#">View</a>	trumpcafe@gmail.com	Free Membership	Last Modified 3 days ago
<input type="checkbox"/>		Store Name	Email	Membership Status	Registered At

Figure 27 Featured Seller Prototype

## Manage Featured

The screenshot displays the 'Current Featured Seller' management page. On the left is a sidebar with navigation options: Dashboard, Media, Pages, Products, Restaurant, Customers, Orders, Locations, Featured, Earning Reports, and Appearance. The main content area has a blue header with a user profile 'Hi, Admin'. Below the header, there's a 'Current Featured Seller' section with a 'Select Action' dropdown and an 'Apply' button. A search box labeled 'Enter Value' is also present. The main part of the page is a table with the following data:

<input type="checkbox"/>		Store Name	Email	Featured At
<input type="checkbox"/>		Trump Cafe <a href="#">View</a>	trumpcafe@gmail.com	Last Modified 3 days ago
<input type="checkbox"/>		Handi Karai <a href="#">View</a>	handikarai@gmail.com	Last Modified 3 days ago
<input type="checkbox"/>		Savoury Green Cafe <a href="#">View</a>	savourygreencafe@gmail.com	Last Modified 1 day ago
<input type="checkbox"/>		Store Name	Email	Featured At

Figure 28 Current Featured Prototype.

## Chapter 9 – Engineering

### 9.1 New system modules

The newly developed **Seat& Eat** has various modules now I am describing below some key modules along with their system working process.

#### Login Module:

SL	User Action	SL	System action
01	User click on the Seat& Eat website link	01	Users will first get a login form.
02	User will have to provide a login credentials	02	Verify with username, email and password.
03	User will click on login button	03	If the user's authentication is valid, he will be redirected to a homepage. It will display an error message if any data is invalid.

Table 16 Login Module

**Enroll Owner module:**

SL	User Action	SL	System action
01	Admin clicks owner panel.	01	This will direct the owner to add their information form.
02	Admin should inform owner details.	02	The system will acquire all the information.
03	Admin will click on add owner button	03	If all information is filled and username is other unique then it will accept otherwise it will show error message.

Table 17 Enroll Owner module

**Enroll Manager module:**

SL	User Action	SL	System action
01	Admin clicks manager panel.	01	This will direct the owner to add their information form.
02	Admin should inform manager details.	02	The system will acquire all the information.
03	Admin will click on add manager button	03	If all information is filled and username is other unique then it will accept otherwise it will show error message.

Table 18 Enroll Manager module



**Add Food menu:**

SL	User Action	SL	System action
01	Admin click on add food menu section.	01	It will direct to add food menu form .
02	Admin will have to provide menu section file.	02	It will accept all files.
03	Admin will click on add food menu button.	03	The food menu file will be uploaded & will be visible for the other users.

Table 19 Add Food menu

**Accounts Module:**

SL	Customer action	SL	System action
01	In this case, the admin will click on the Accounts section.	01	This system will pay and add to the free category.
02	If admin decides to add a fee, redirect to add a fee form.	02	The system will check the form where the customer's name, phone number and email address are entered correctly and the payment is made correctly.
03	If admin wants to add salary then redirect to add a salary form	03	The system will check the form where the customer's name, phone number and email address are entered correctly and the payment is made correctly

Table 20 Accounts Module

**Send Customer Notification Module:**

SL	Customer action	SL	System action
01	Admin will be click module of send customer notification section.	01	The system will be show the customer notification.
02	Admin will be click send notification button to he wants to send.	02	The system show a form to write the notification.
03	Admin will be click this system module and send notification.	03	The system will send the notification to the customer after booking .

Table 21 Send Customer Notification Module

**Customer Feedback Module:**

SL	Customer action	SL	System action
01	The admin will click of customer feedback section.	01	This system will show the customer list.
02	Admin will be click reply button to the reply of feedback.	02	This system will showing a form to write the feedback
03	Admin will be click to send reply.	03	This system will send the reply the proper customer.

Table 22 Customer Feedback Modul

## 9.2 Use case diagram for Seat& Eat

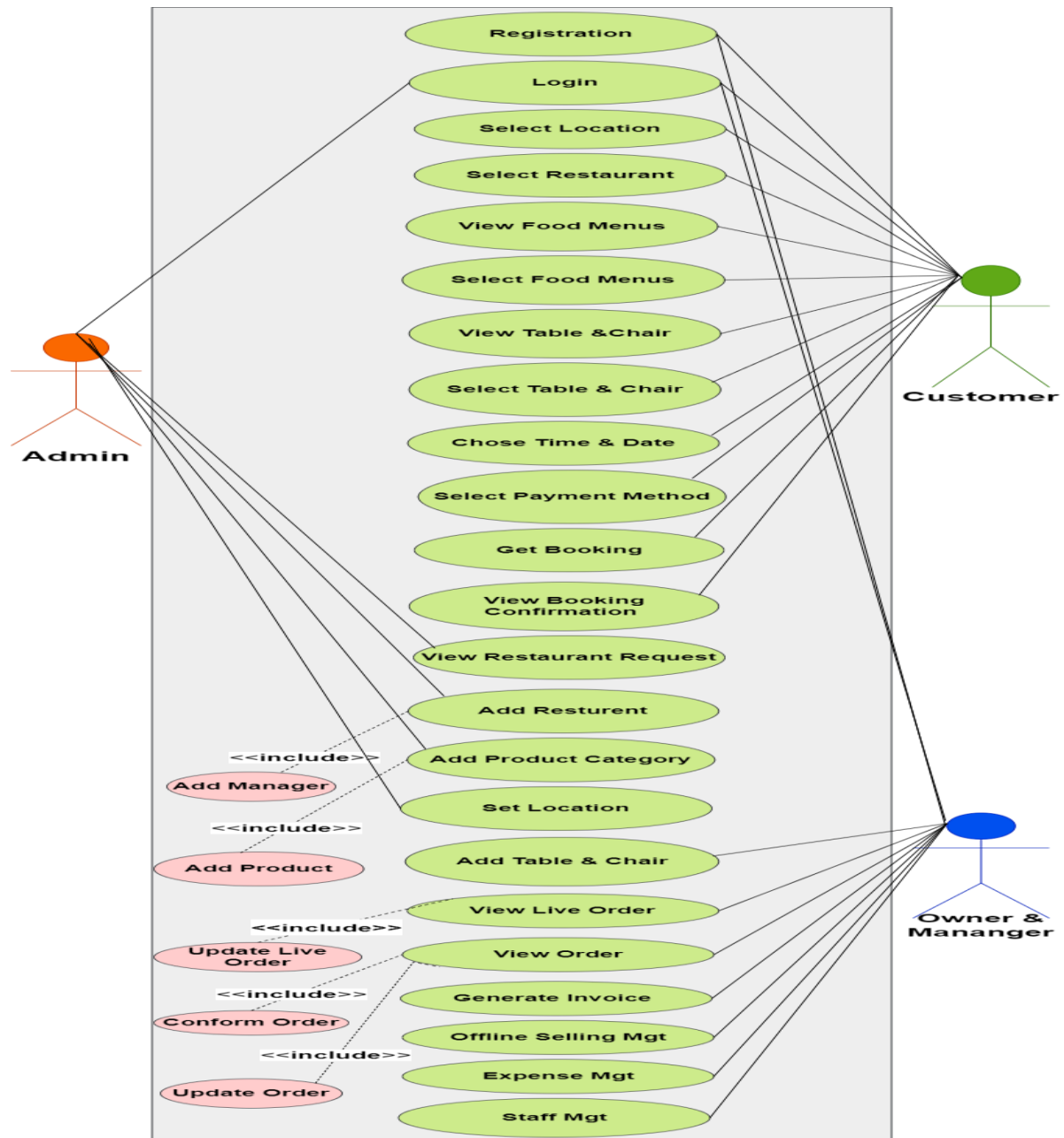


Figure 29 Use Case diagram for Seat& Eat

### 9.3 Class diagram for Seat& Eat

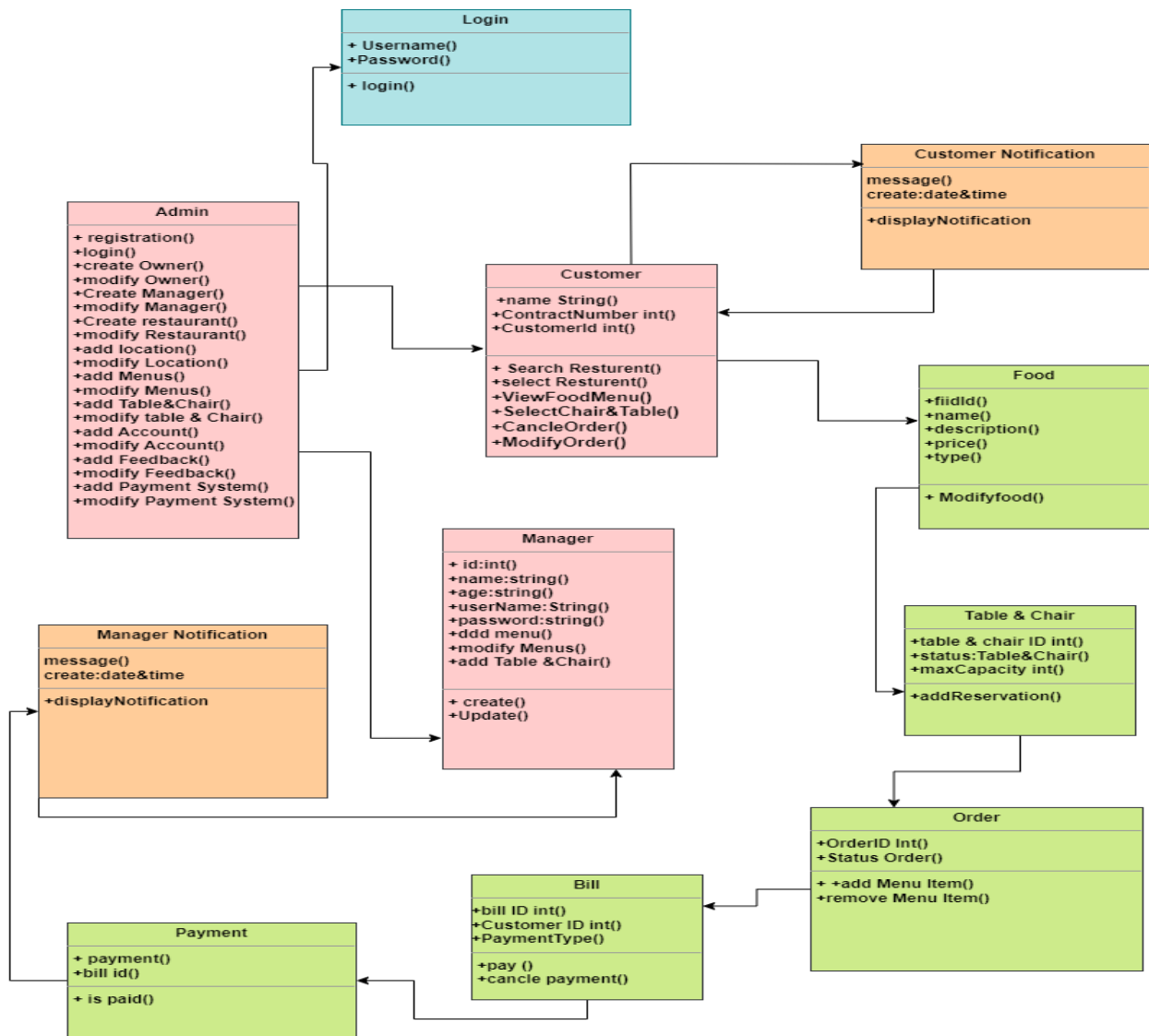


Figure 30 Class diagram Seat& Eat

## 9.4 Entity Relationship diagram of Seat& Eat

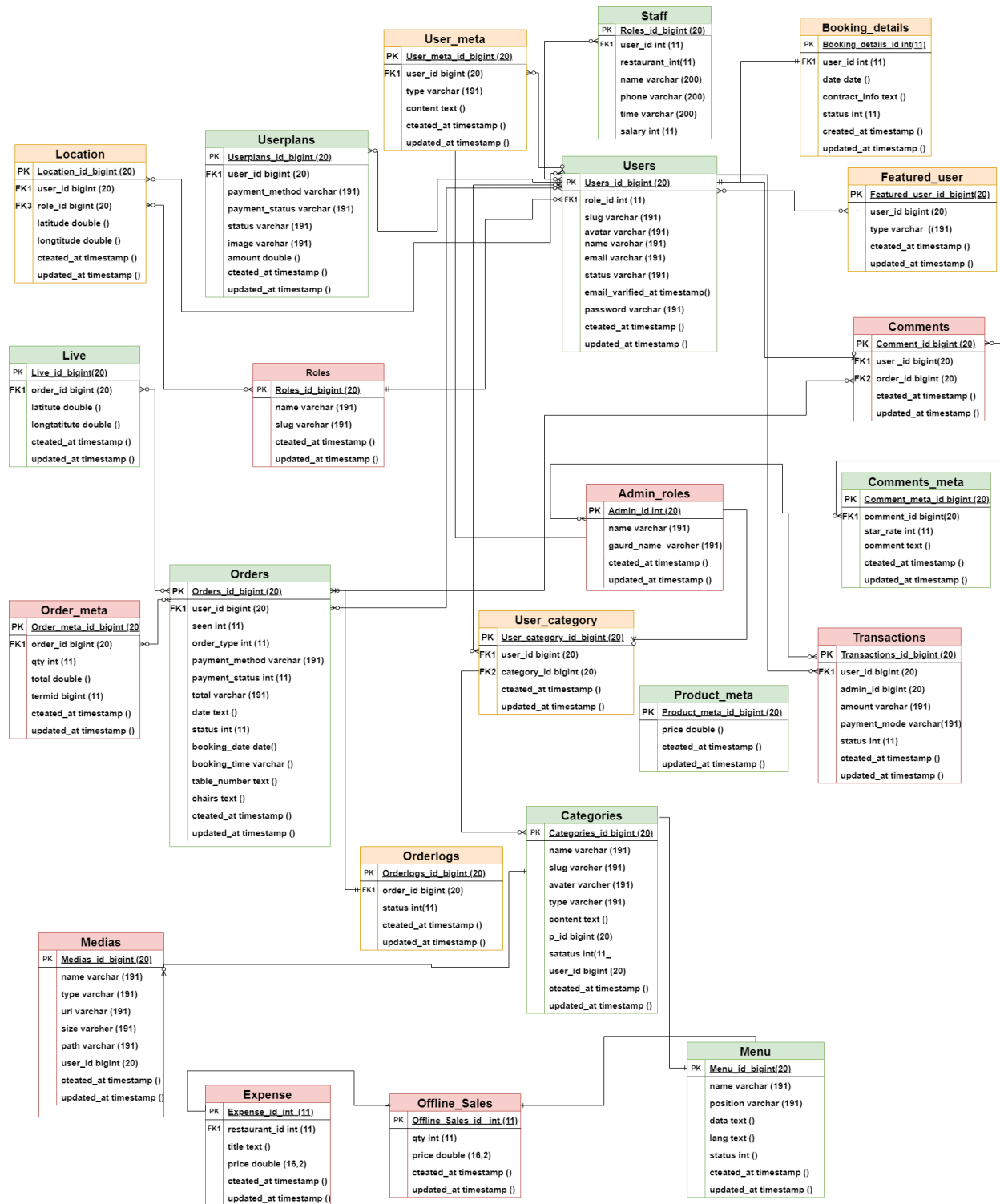


Figure 31 ERD diagram Seat& Eat

## 9.5 Sequence Diagram of Seat& Eat

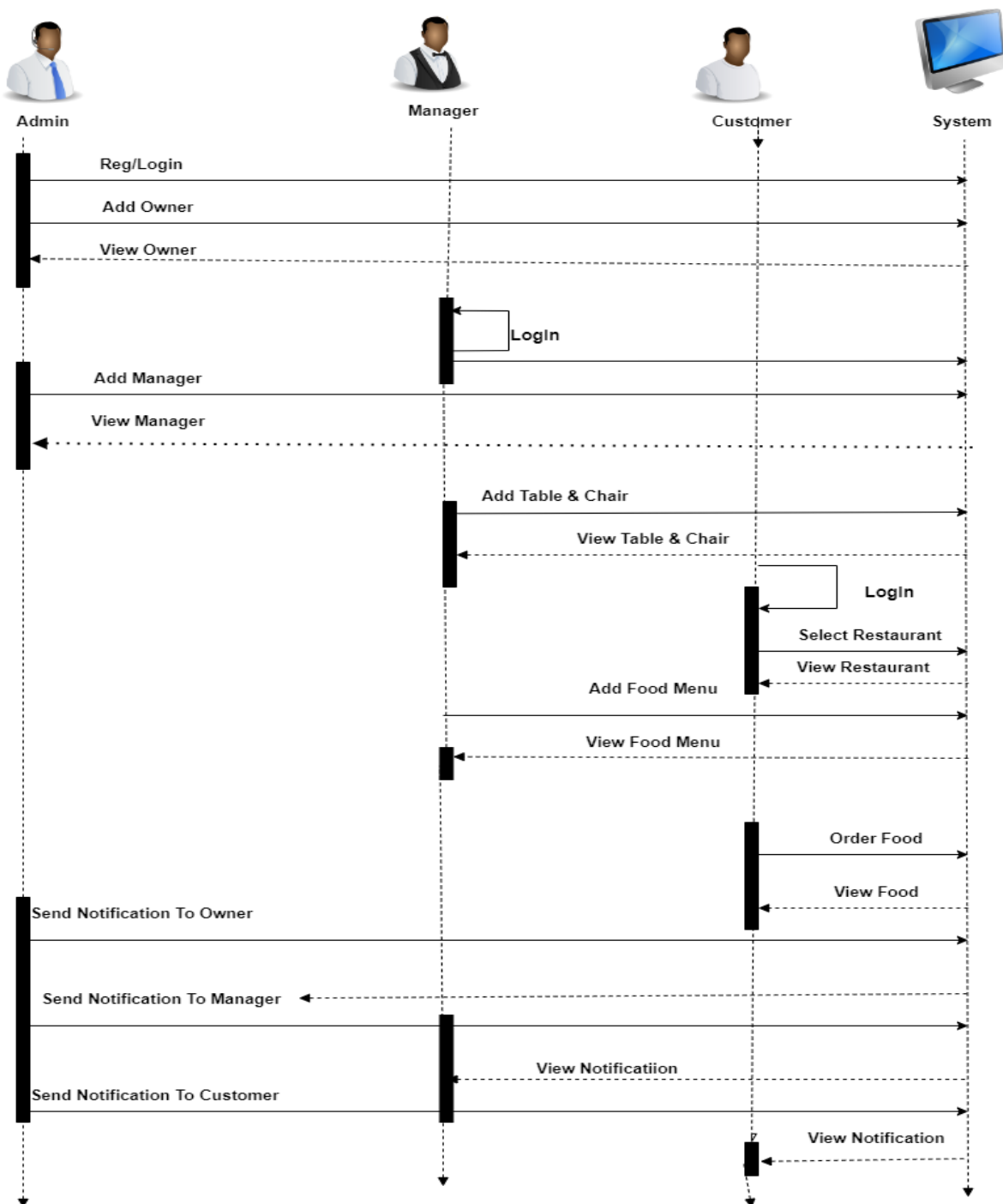


Figure 32 Sequence Diagram Seat& Eat

## 9.6 Component diagram of Seat& Eat

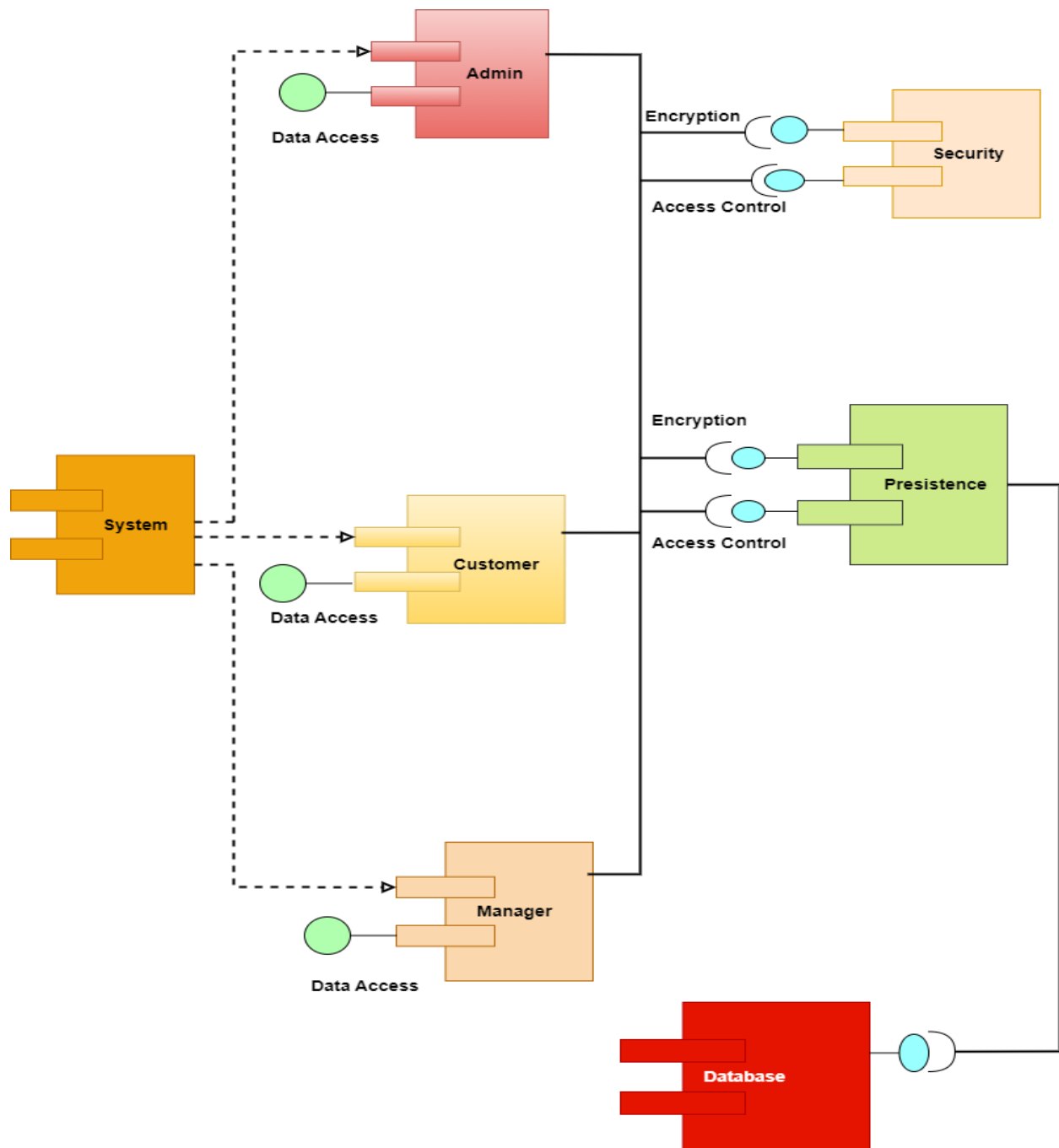


Figure 33 Component diagram

## 9.7 Deployment diagram of Seat& Eat

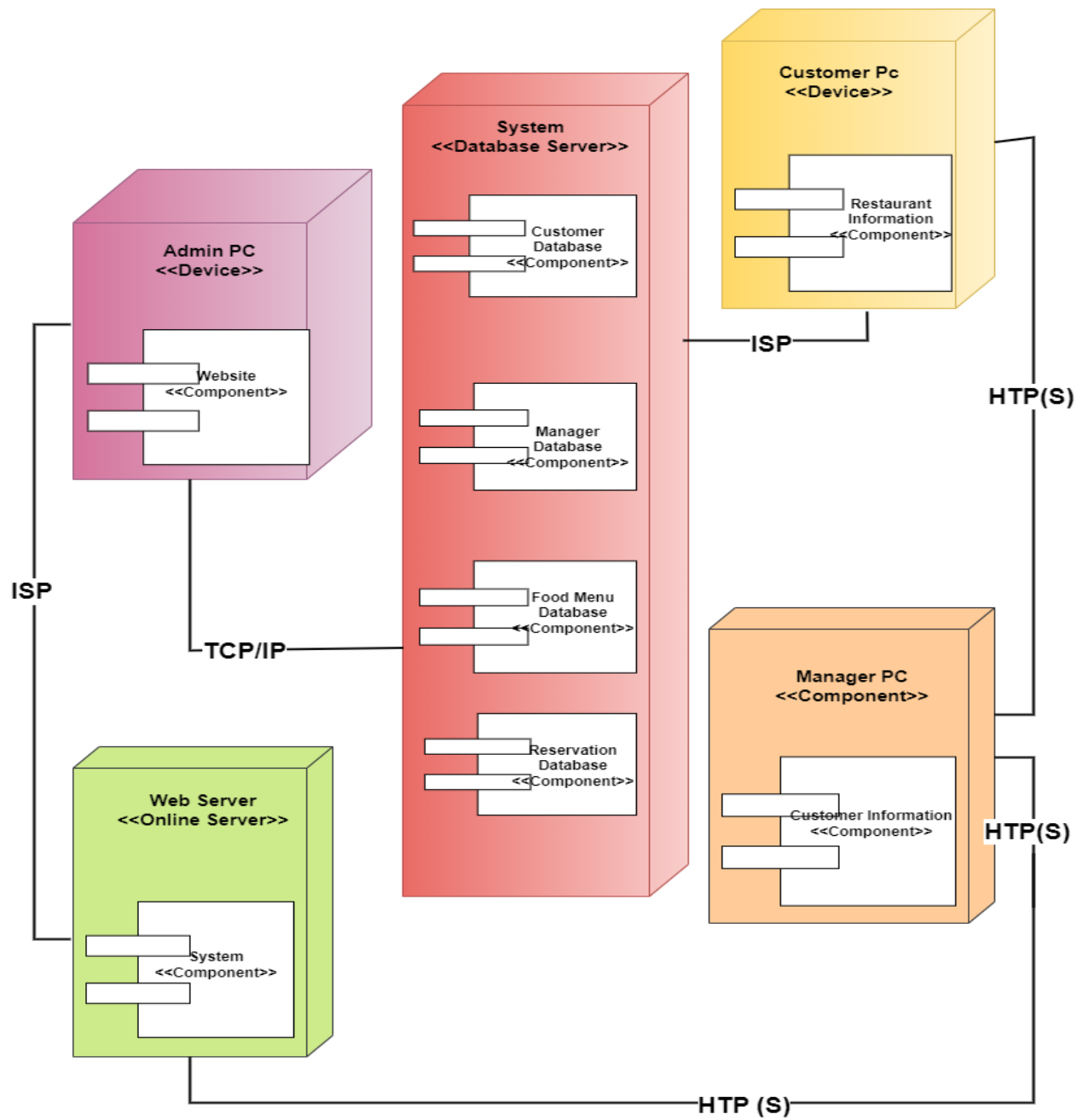
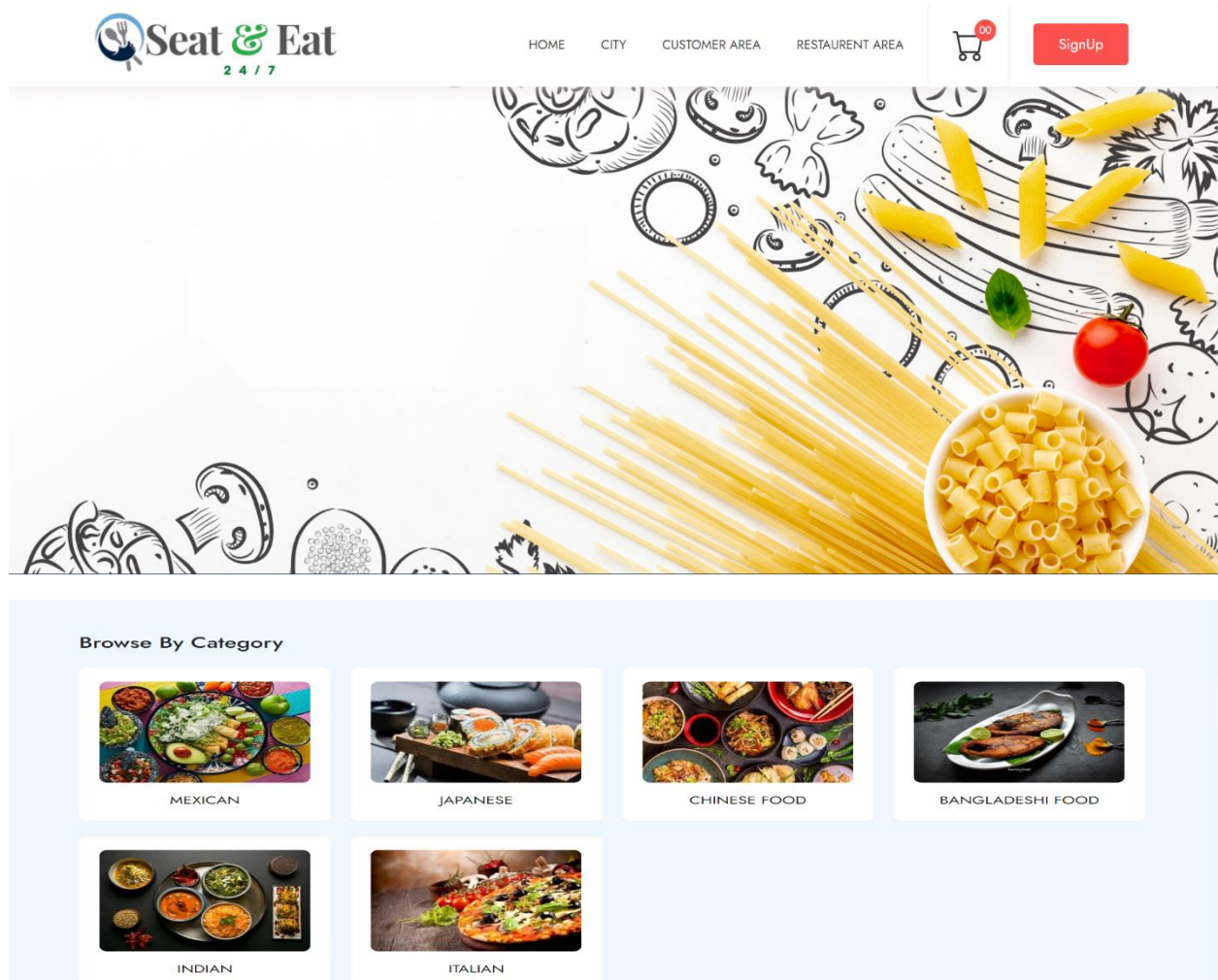


Figure 34 Deployment diagram



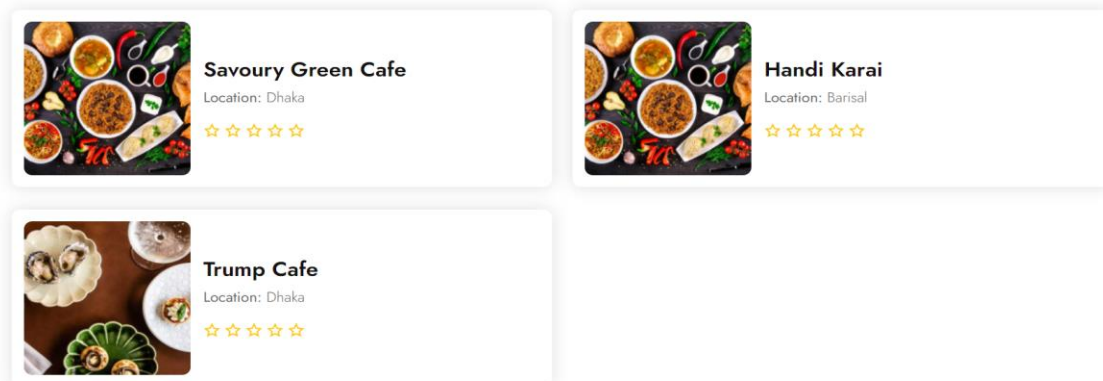
## 9.8 System interface design

### Home Page Interface

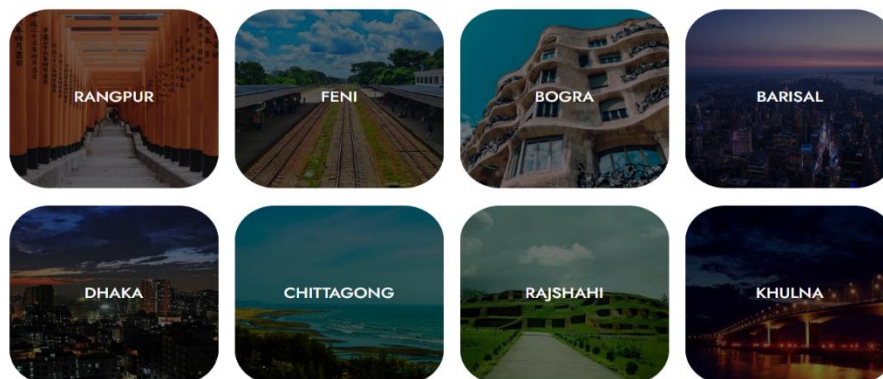


### Featured Restaurant

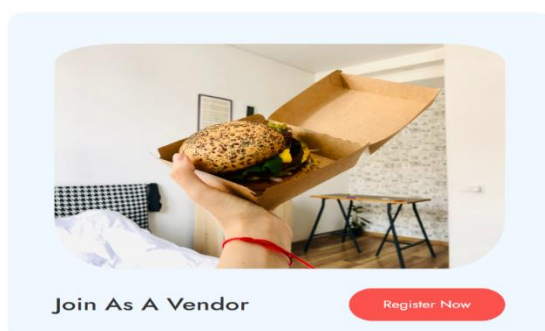
All The Popular restaurant are Here!!



Find us these cities any many more.



Want to Join Partnrship?



#### Quick Links

About Us  
Add Your Restatements  
Help  
My Account

#### Categories

Top Categories  
Best Rated  
Best Price  
Latest Submissions

#### Contacts

📍 66/1  
Razabazar, Farmgate, Dhaka.  
☎ 01714437118  
✉ shovonhowlader1357@gmail.com@gmail.com

#### FOLLOW US



Figure 35 Home page Interface

## Admin Dashboard Page Interface

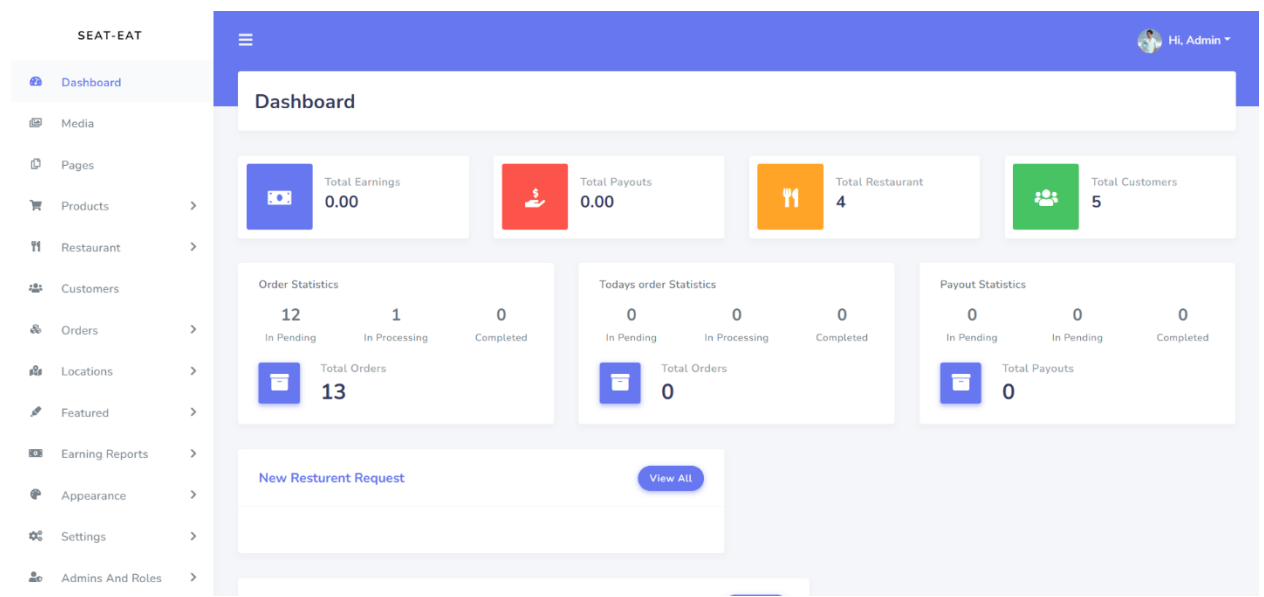


Figure 36 Admin page Interface

## All Product Interface

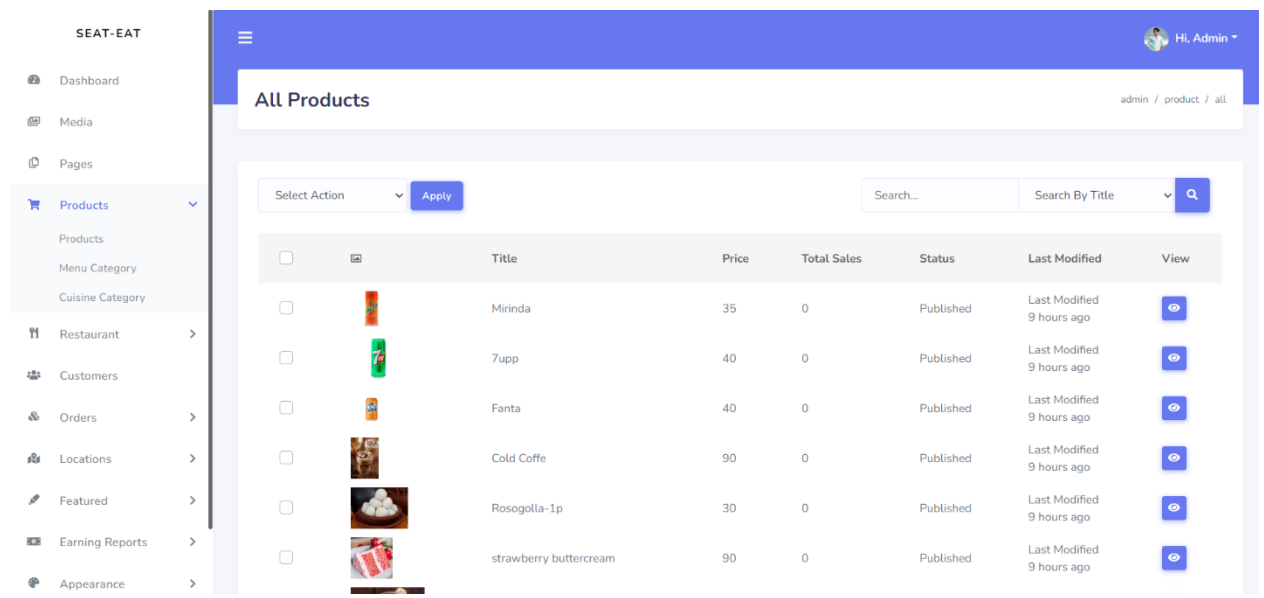


Figure 37 All Product Interface

## Menu Category Interface:

The screenshot displays the 'Menu Category' page in the SEAT-EAT system. The sidebar on the left includes options like Dashboard, Media, Pages, Products, Restaurant, Customers, Orders, Locations, Featured, and Earning Reports. The main content area features a table with columns for Title, Created By, and count. Each row includes a checkbox and an 'Edit' link.

	Title	Created By	count
<input type="checkbox"/>	Drinks <a href="#">Edit</a>	Royal Cuisine Restaurant	4
<input type="checkbox"/>	Dessert <a href="#">Edit</a>	Royal Cuisine Restaurant	4
<input type="checkbox"/>	Main Menus <a href="#">Edit</a>	Royal Cuisine Restaurant	8
<input type="checkbox"/>	Drinks <a href="#">Edit</a>	Savoury Green Cafe	1
<input type="checkbox"/>	Dessert <a href="#">Edit</a>	Savoury Green Cafe	1
<input type="checkbox"/>	Main Menus <a href="#">Edit</a>	Savoury Green Cafe	3
<input type="checkbox"/>	Drinks <a href="#">Edit</a>	Handi Karai	4
<input type="checkbox"/>	Dessert <a href="#">Edit</a>	Handi Karai	6

Figure 38 Menu Category page Interface

## Cuisine Category Interface

The screenshot displays the 'Cuisine Category' page in the SEAT-EAT system. The form on the left includes fields for Name (Category Name), Slug (Category slug), Parent Category (None), and an Image upload area. The main content area features a table with columns for Title, Created By, and count. Each row includes a checkbox and an 'Edit' link.

	Title	Created By	count
<input type="checkbox"/>	Bangladeshi Food <a href="#">Edit</a>	Admin	1
<input type="checkbox"/>	Indian <a href="#">Edit</a>	Admin	3
<input type="checkbox"/>	Chinese food <a href="#">Edit</a>	Admin	3
<input type="checkbox"/>	Japanese <a href="#">Edit</a>	Admin	3
<input type="checkbox"/>	Italian <a href="#">Edit</a>	Admin	2
<input type="checkbox"/>	mexican <a href="#">Edit</a>	Admin	2
<input type="checkbox"/>	Title	Created By	Count

Figure 39 Cuisine Category page Interface

## Restaurant Request Page Interface

The screenshot displays the 'Restaurant Request' page in the SEAT-EAT system. The left sidebar shows the navigation menu with 'Restaurant' selected. The main content area features a table of requests. At the top of the table, there is a 'Select Action' dropdown and a 'Submit' button. A search bar and a 'Search By Name' dropdown are also present. The table contains one visible entry for 'Cinnamon Restaurant' with a 'Verified' status and a 'pending' status.

<input type="checkbox"/>	Vendor ID	Avatar	Name	Email	Email verified	Status	Created at	View
<input type="checkbox"/>	28		Cinnamon Restaurant	cinnamonrestaurant@gmail.com	Verified	pending	2022-November-19	

Figure 40 Restaurant request page Interface

## All Restaurant Interface

The screenshot displays the 'All Restaurants' page in the SEAT-EAT system. The left sidebar shows the navigation menu with 'Restaurant' selected. The main content area features a table of all restaurants. At the top of the table, there is a 'Select Action' dropdown and a 'Submit' button. A search bar and a 'Search By Name' dropdown are also present. The table contains five entries, all with an 'approved' status.

<input type="checkbox"/>	Vendor ID	Avatar	Name	Email	Status	Created at	View
<input type="checkbox"/>	27		Royal Cuisine Restaurant	royalcuisinerestaurant@gmail.com	approved	2022-November-19	
<input type="checkbox"/>	25		Savoury Green Cafe	savourygreencafe@gmail.com	approved	2022-November-15	
<input type="checkbox"/>	19		Handi Karai	handikarai@gmail.com	approved	2022-November-14	
<input type="checkbox"/>	18		Trump Cafe	trumpcafe@gmail.com	approved	2022-November-14	

Figure 41 All restaurant page Interface

## Customer Page Interface

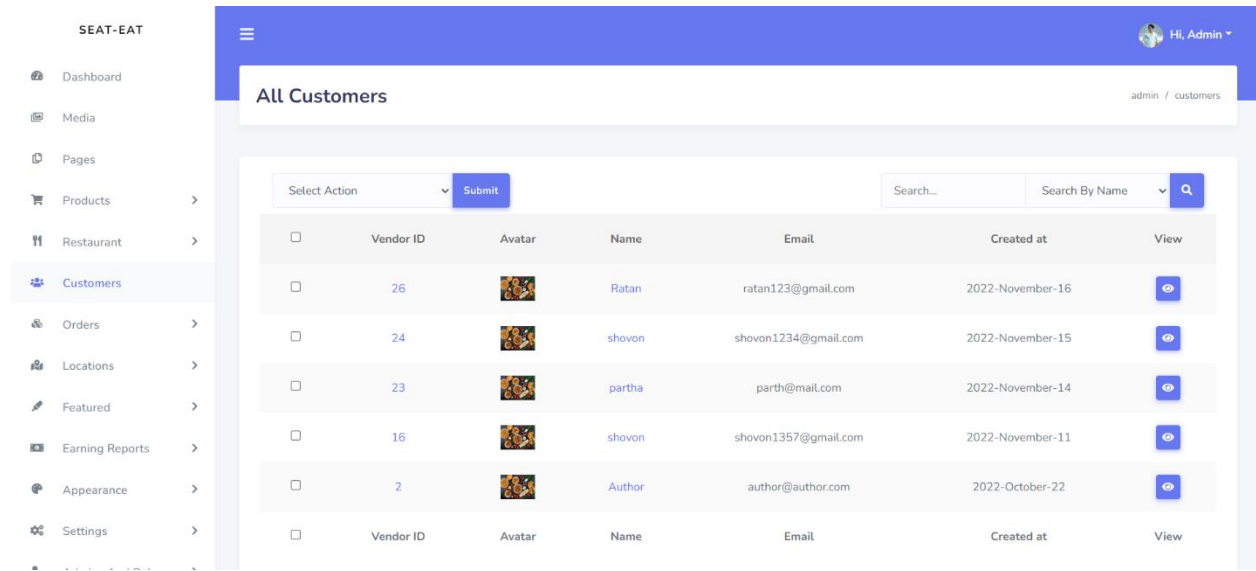


Figure 42 Customer page Interface

## Owner/Manager Page Interface

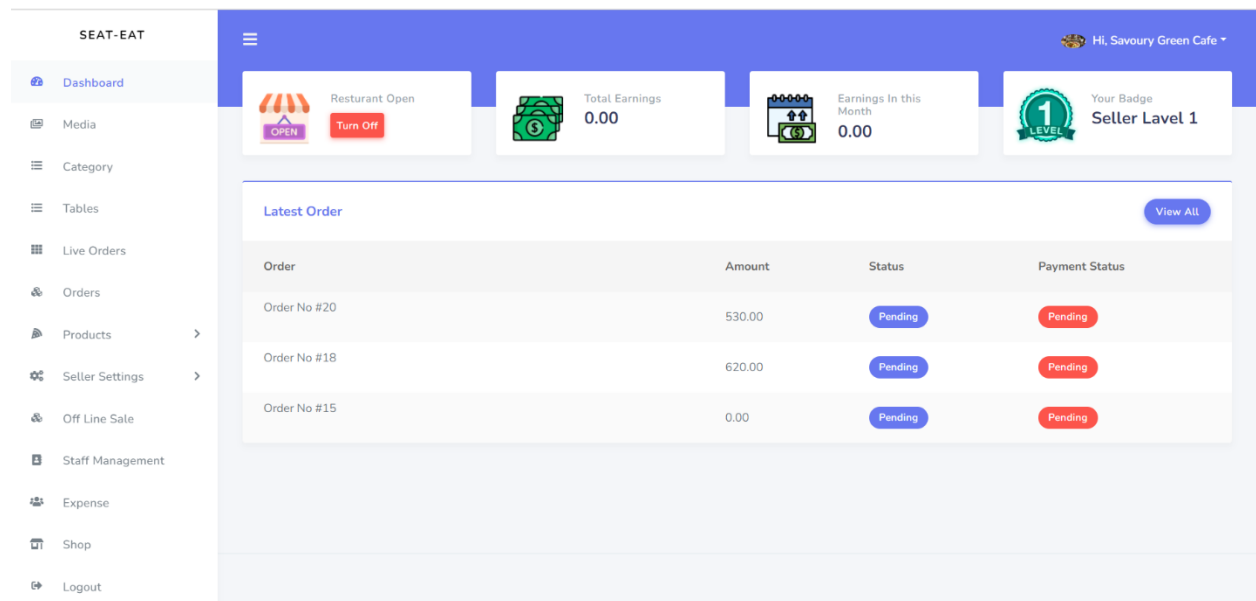


Figure 43 Owner/Manager page Interface

## Media Page Interface

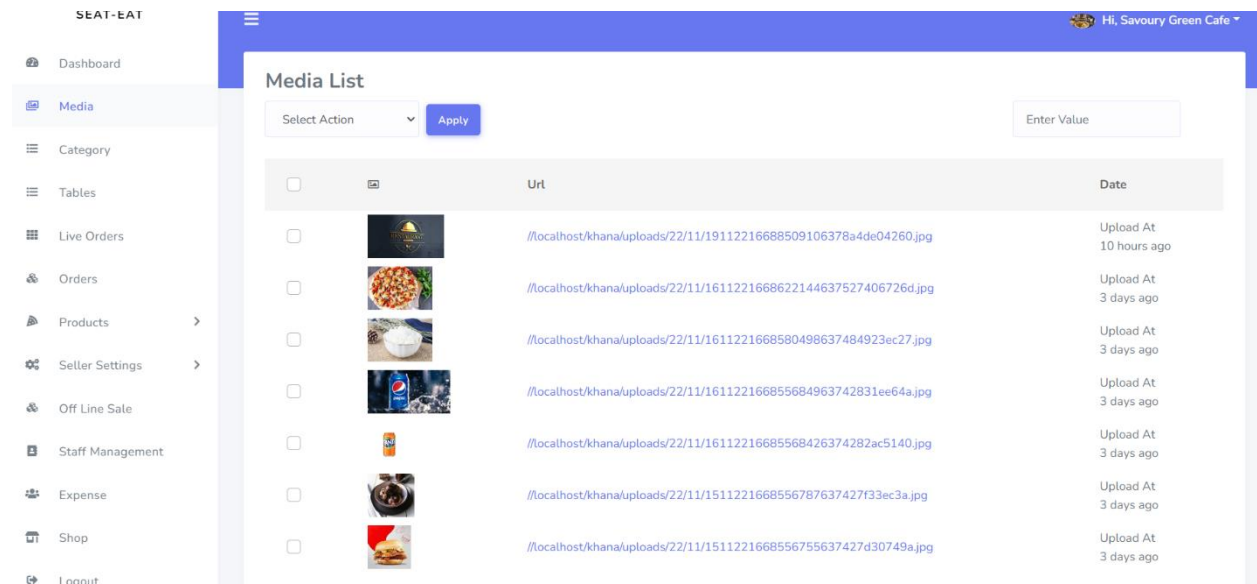


Figure 44 Media page Interface

## Category Page Interface

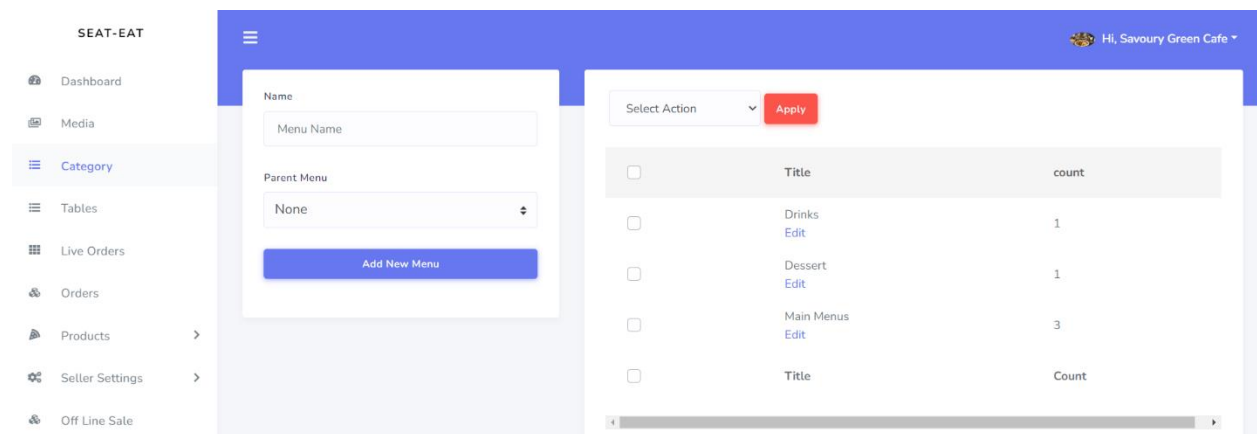


Figure 45 Category page Interface

## Add Table Chair Interface



Figure 46 Add Table Chair page Interface

## Live Order Interface

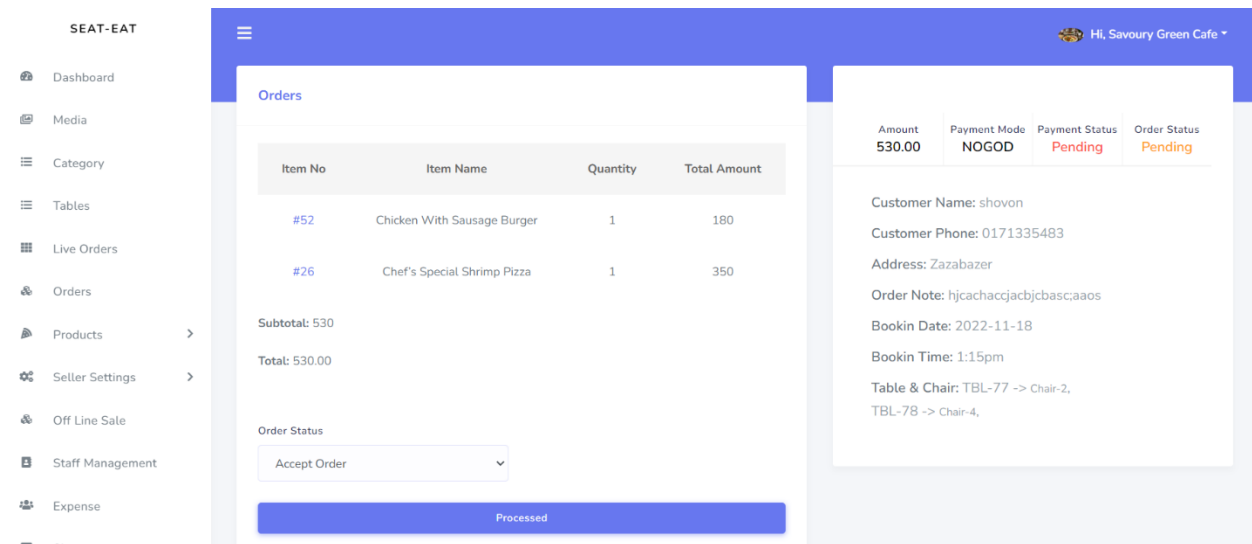
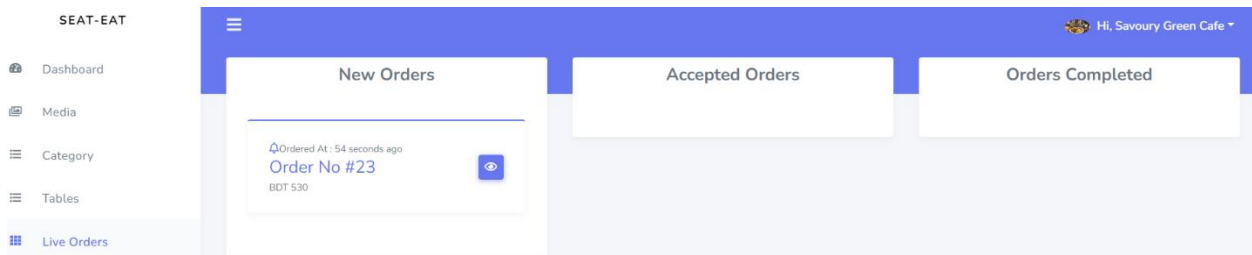


Figure 47 Live Order page Interface



## Order Interface

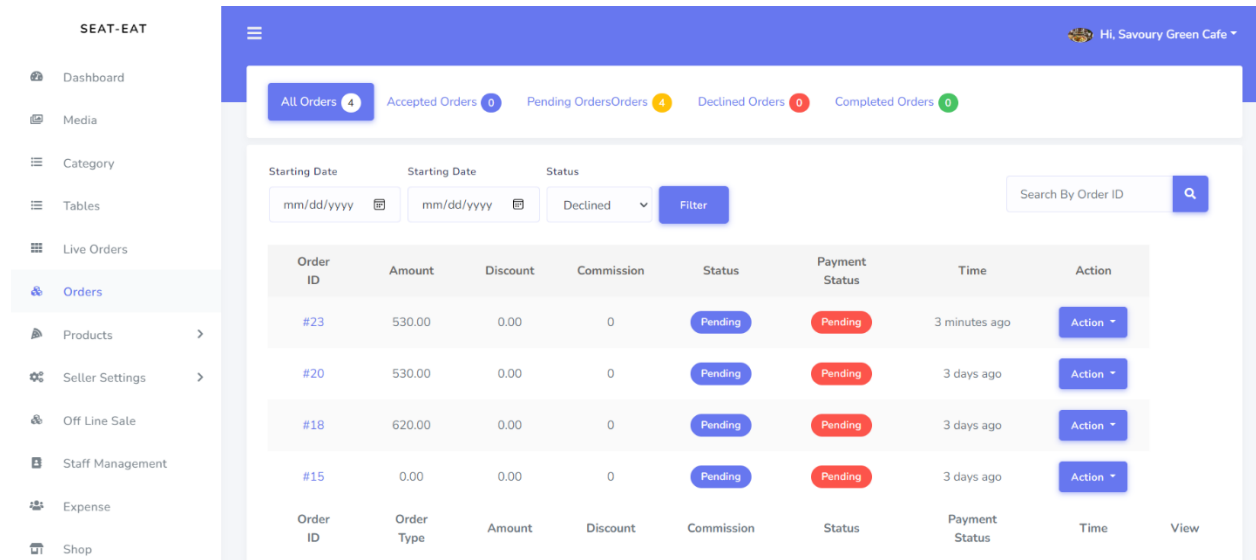
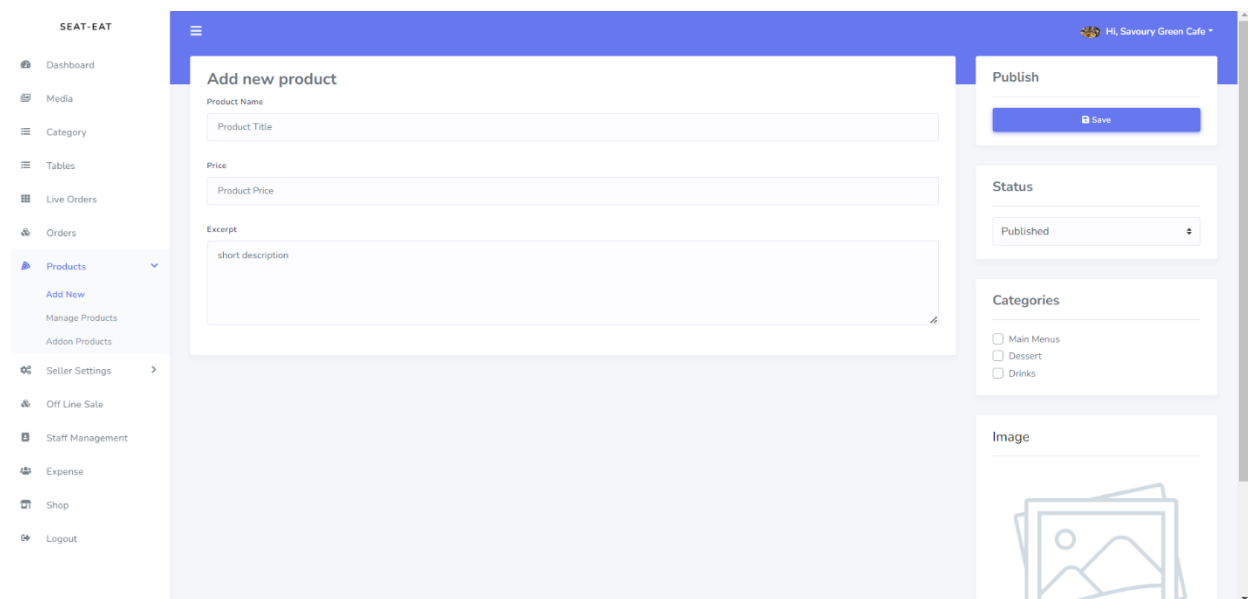


Figure 48 Order page Interface

## Product Interface



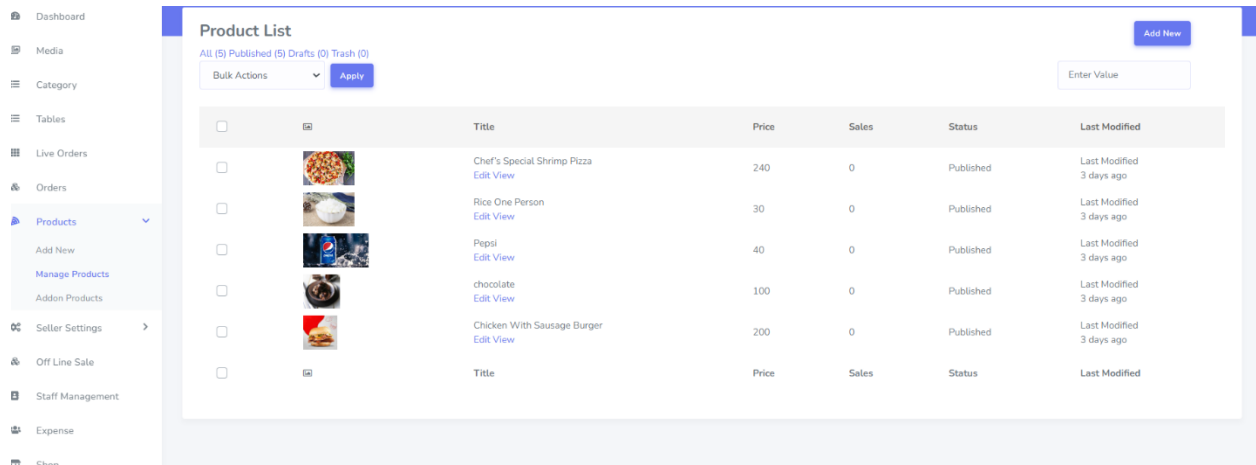


Figure 49 Product page Interface

## Offline Sale Interface

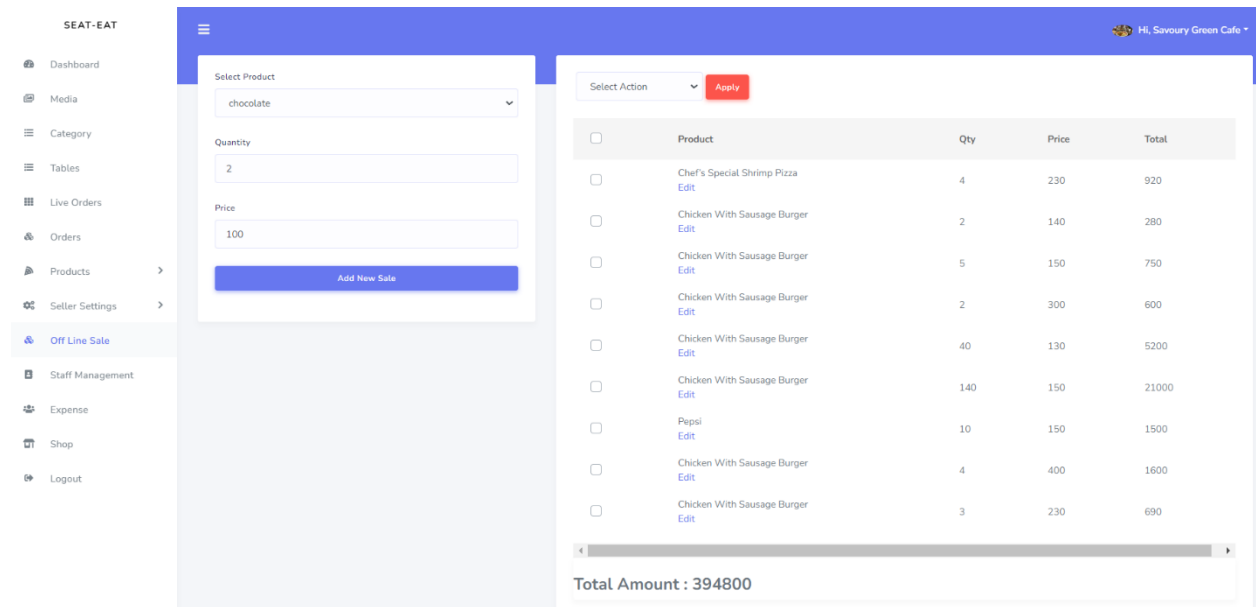


Figure 50 Offline Sale page Interface

## Staff Management Interface

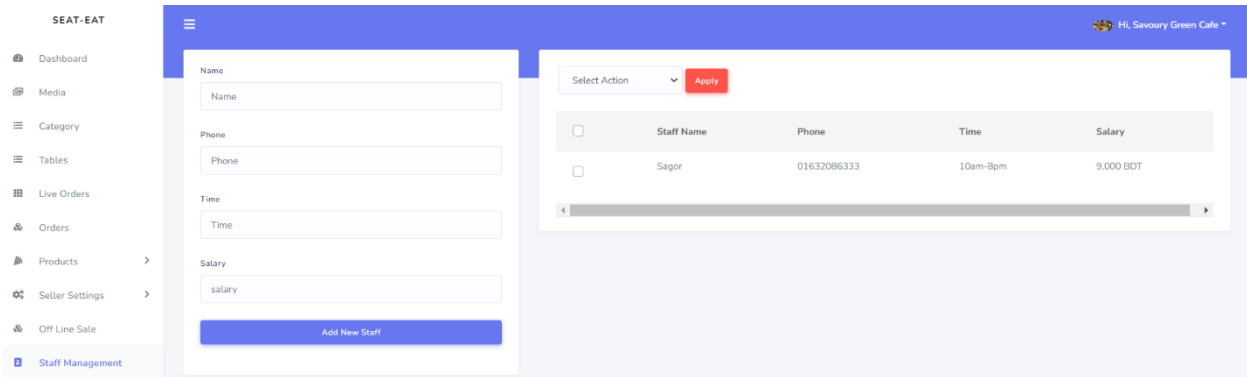


Figure 51 Staff Management page Interface

## Expense Interface

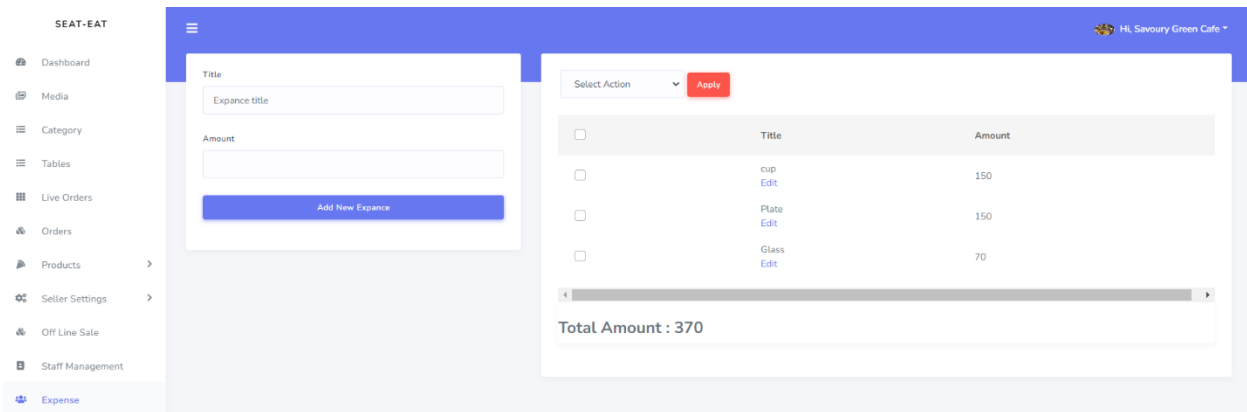


Figure 52 Expense page Interface

## Chapter 10 – Deployment

### 10.1 Core module coding sample

For this project I have used HTML5, CSS3, PHP, JavaScript for front-end development.

and back-end development I have used Laravel Framework. And mysql server for database management.

Now I'm display some parts of my coding below:

#### 10.1.1 Logging System

```

37
38     </nav>
39 </div>
40 <form action="{{ route('restaurant.register') }}" method="POST">
41     @csrf
42     <div class="register-card-body">
43         <div class="row mt-30">
44             @if(Session::has('errors'))
45                 <div class="col-lg-12">
46                     <p class="alert alert-danger">{{ Session::get('errors') }}</p>
47                 </div>
48             @endif
49             <div class="col-lg-6">
50                 <div class="form-group">
51                     <label>{{ __('Restaurant Name') }}</label>
52                     <input type="text" required="" name="name" class="form-control">
53                 </div>
54             </div>
55             <div class="col-lg-6">
56                 <div class="form-group">
57                     <label>{{ __('Email') }}</label>
58                     <input type="email" required="" name="email" class="form-control" >
59                 </div>
60             </div>
61             <div class="col-lg-6">
62                 <div class="form-group">
63                     <label>{{ __('Password') }}</label>
64                     <input type="password" class="form-control" required="" name="password">
65                 </div>
66             </div>
67             <div class="col-lg-6">
68                 <div class="form-group">
69                     <label>{{ __('Confirm Password') }}</label>
70                     <input type="password" class="form-control" required="" name="password_confirmation">
71                 </div>
72             </div>
73         </div>

```

Figure 53 All Login & Registration System

```

register_step_1.blade.php  register_step_2.blade.php X  register_step_3.blade.php  register_step_4.blade.php  OrderController.php ...\Author  OrderController.php ...\Rider
script > am-content > Themes > khana > views > store > register_step_2.blade.php > script
1 @extends('theme::layouts.app')
2 @push('css')
3 <script async defer src="https://maps.googleapis.com/maps/api/js?key={{ env('PLACE_KEY') }}&libraries=places&callback=initialize"></script>
4 @endpush
5 @section('content')
6 <div class="main-content mt-50">
7   <div class="container">
8     <div class="row">
9       <div class="col-lg-10 offset-lg-1">
10        <div class="register-card">
11          <div class="register-progress text-center">
12            <nav>
13              <ul>
14                <li class="active">
15                  <div class="register-progress-number">
16                    <span>1</span>
17                  </div>
18                  <div class="register-progress-body">
19                    {{ __('Step 1') }}
20                  </div>
21                </li>
22                <li class="active">
23                  <div class="register-progress-number">
24                    <span>2</span>
25                  </div>
26                  <div class="register-progress-body">
27                    {{ __('Step 2') }}
28                  </div>
29                </li>
30                <li>
31                  <div class="register-progress-number">
32                    <span>3</span>
33                  </div>
34                  <div class="register-progress-body">
35                    {{ __('Step 3') }}
36                  </div>
37                </li>

```

Figure 54 All Login &amp; Registration System

```

register_step_1.blade.php  register_step_2.blade.php X  register_step_3.blade.php  register_step_4.blade.php  OrderController.php ...\Author  OrderController.php ...\Rider
script > am-content > Themes > khana > views > store > register_step_2.blade.php > script
38
39
40 </ul>
41 </nav>
42 </div>
43 <form action="{{ route('restaurant.register_step_2') }}" method="POST">
44   @csrf
45   <div class="register-card-body">
46     <div class="row mt-30">
47       @if(Session::has('errors'))
48         <div class="col-lg-12">
49           <p class="alert alert-danger">{{ Session::get('errors') }}</p>
50         </div>
51       @endif
52       <div class="col-lg-12">
53         <div class="form-group">
54           <label>{{ __('Select City') }}</label>
55           <select name="city" id="city" class="form-control selectric">
56             @foreach($cities as $city)
57               <option value="{{ $city->id }}">{{ $city->title }}</option>
58             @endforeach
59           </select>
60         </div>
61       </div>
62       <div class="col-lg-12">
63         <div class="form-group">
64           <label>{{ __('Address Line') }}</label>
65           <input type="text" class="form-control" required="" name="address_line">
66         </div>
67       </div>
68       <div class="col-lg-12">
69         <div class="form-group">
70           <label>{{ __('Select Your Location') }}</label>
71           <input type="text" class="form-control" required="" name="full_address" id="location_input" required>
72         </div>
73       </div>

```

Figure 55 All Login &amp; Registration System

```

script > am-content > Themes > khana > views > store > register_step_3.blade.php > ...
44 </ul>
45 </nav>
46 </div>
47
48 <form action="{{ route('restaurant.register_step_3') }}" method="POST" enctype="multipart/form-data">
49 @csrf
50 <div class="register-card-body">
51 <div class="row mt-30">
52 @if(Session::has('errors'))
53 <div class="col-lg-12">
54 <p class="alert alert-danger">{{ Session::get('errors') }}</p>
55 </div>
56 @endif
57 <div class="col-lg-12">
58 <div class="restaurant-profile-cover-img">
59 <div class="register-cover-img imgUp">
60 <label for="restaurant_cover" class="imagePreview">
61 <i class="fas fa-image"></i>
62 </label>
63 <input type="file" name="cover_img" id="restaurant_cover" class="media-img d-none">
64 </div>
65 <div class="logo-img imgUp">
66 <label for="logo_img" class="imagePreview">
67 <i class="fas fa-camera"></i>
68 </label>
69 <input type="file" name="logo_img" id="logo_img" class="media-img d-none">
70 </div>
71 </div>
72 </div>
73 <div class="col-lg-12">
74 <div class="f-right">
75 <button>{{ __('Next & Save') }}</button>
76 </div>

```

Figure 56 All Login &amp; Registration System

```

script > am-content > Themes > khana > views > login > index.blade.php > ...
1 @extends('theme:layouts.app')
2
3 @section('content')
4 <div class="main-content mt-50">
5 <div class="container">
6 <div class="row">
7 <div class="col-lg-6 offset-lg-3">
8 <div class="login-card">
9 <div class="login-header">
10 <h5>{{ __('Login your account') }}</h5>
11 </div>
12 <div class="login-body">
13 <div class="social-login">
14 <h6>{{ __('Login with social account') }}</h6>
15 <div class="social-links">
16 @if(env('FACEBOOK_CLIENT_ID') != null)
17 <a class="facebook" href="{{ url('login/facebook') }}"><i class="fab fa-facebook"></i> {{ __('Facebook') }}</a>
18 @endif
19 @if(env('GOOGLE_CLIENT_ID') != null)
20 <a class="google" href="{{ url('login/google') }}"><i class="fab fa-google"></i> {{ __('Google') }}</a>
21 @endif
22 </div>
23 </div>
24 <div class="login-form">
25 <form action="{{ route('login') }}" method="POST">
26 @csrf
27 <div class="form-group">
28 <label>{{ __('Email') }}</label>
29 <input type="email" name="email" class="form-control @error('email') is-invalid @enderror" name="email" value="{{ old('email') }}">
30 @error('email')
31 <span class="invalid-feedback" role="alert">
32 <strong>{{ $message }}</strong>
33 </span>
34 @enderror
35 </div>
36 </div>

```

Figure 57 All Login &amp; Registration System

```

11     </div>
12     <div class="login-body">
13         <div class="login-form">
14             @if (session::has('errors'))
15                 <div class="row">
16                     <div class="col-12">
17                         <p class="alert alert-danger">{{ Session::get('errors') }}</p>
18                     </div>
19                 </div>
20             @endif
21             <form method="POST" action="{{ route('user.register') }}">
22                 @csrf
23                 <div class="form-group">
24                     <label>{{ __('Your Full Name') }}</label>
25                     <input type="text" name="name" class="form-control">
26                 </div>
27                 <div class="form-group">
28                     <label>{{ __('Your Email') }}</label>
29                     <input type="email" name="email" class="form-control">
30                 </div>
31                 <div class="form-group">
32                     <label>{{ __('Password') }}</label>
33                     <input type="password" class="form-control" name="password">
34                 </div>
35                 <div class="form-group">
36                     <label>{{ __('Password') }}</label>
37                     <input type="password" class="form-control" name="password_confirmation">
38                 </div>
39                 <div class="remember-section">
40                     <div class="remember">
41                         <div class="custom-control custom-checkbox">
42                             <input type="checkbox" class="custom-control-input" id="agree" name="agree">
43                             <label class="custom-control-label" for="agree">{{ __('I agree to') }} <a href="{{ url('/page/terms-and-conditions') }}">{{ __
44                         </div>
45                     </div>
46                 </div>

```

Figure 58 All Login &amp; Registration System

## 10.1.2 Admin, Owner/Manager Panel

```

343
344     if (Amcoders\Plugin\Plugin::is_active('shop')) {
345         $data['dashboard']=array(
346             'name' => __('Dashboard'),
347             'icon' => 'fas fa-tachometer-alt',
348             'active' => Request::is('store/dashboard'),
349             'url' => route('store.dashboard')
350         );
351
352         $data['media']=array(
353             'name' => __('Media'),
354             'icon' => 'far fa-images',
355             'active' => Request::is('/store/media'),
356             'url' => route('store.media')
357         );
358         $data['menu']=array(
359             'name' => __('Category'),
360             'icon' => 'fas fa-list-ul',
361             'active' => Request::is('store/order'),
362             'url' => route('store.menu.index')
363         );
364
365         $data['table']=array(
366             'name' => __('Tables'),
367             'icon' => 'fas fa-list-ul',
368             'active' => Request::is('store/table'),
369             'url' => route('store.table.index')
370         );
371
372         $data['order']=array(
373             'name' => __('Live Orders'),
374             'icon' => 'fas fa-th',
375             'active' => Request::is('store/order'),
376             'url' => route('store.order.index','type=live')
377         );
378         $data['orders']=array(
379             'name' => __('Orders'),

```

Figure 59 Admin, owner /Manager System

```

439
440 $data['settings']=array(
441     'name' => __('Seller Settings'),
442     'icon' => 'fas fa-cogs',
443     'active' => Request::is('store/settings*'),
444     'child'=> array(
445         __('Shop Day') => route('store.day.show'),
446         __('Earnings') => route('store.earnings'),
447         __('Payouts') => route('store.payouts'),
448         __('information') => route('store.my.information')
449     )
450 );
451
452 $data['offlinesale']=array(
453     'name' => __('Off Line Sale'),
454     'icon' => 'fas fa-cubes',
455     'active' => Request::is('store/offlinesale'),
456     'url' => route('store.offlinesale.index')
457 );
458
459 $data['Manage Staff']=array(
460     'name' => __('Staff Management'),
461     'icon' => 'fas fa-address-book',
462     'active' => Request::is('store/staff'),
463     'url' => route('store.staff.index')
464 );
465
466 $data['expnaces']=array(
467     'name' => __('Expense'),
468     'icon' => 'fas fa-users',
469     'active' => Request::is('store/expnaces'),
470     'url' => route('store.expnaces.index')
471 );
472
473 $data['store']=array(
474     'name' => __('Shop'),
475     'icon' => 'fas fa-store-alt',

```

Figure 60 Admin, owner /Manager System

## 10.2 Possible Problem Breakdown

At some point it will be found that developing the entire system will be too difficult, so the task should be divided into smaller parts to be completed in an easier way. This will make the job easier. Possible breakdown mechanisms of the system are:

- ❖ Analysis & database design part.
- ❖ Dashboard management process.
- ❖ User panel development.

### Analysis & database design :

- Requirements must be identified.
- Needs must be prioritized.
- Gathering the necessary information.
- Normalize the data collected.
- Creates model categories for the database.



**Dashboard management:**

- Registration and login system for different user .
- Design and development different pages.
- Develop Admin manipulation system.
- Develop Customer manipulation system.
- Develop Owner manipulation system.
- Develop Manager manipulation system.

**User panel development :**

- Front-end development.
- Registration and login system.
- Customer, Owner and Manager enrollment system.
- Add food menu system.
- Add table and chair system.
- Add choosing date and time system.
- Send notification system.
- Send feedback system.
- Add rating and review system.

## Chapter 11 – Testing

### 11.1 Test plan acceptance

Software testing is a process of checking whether the expected requirements are met and ensuring that the software product is free of defects. Testing is a very important part of software development. In this case the user and the developer should adopt the test plan.

The main purpose of software testing is to detect errors or any missing requirements against the actual requirements.

There are two types of testing:

❖ **Functional Testing:** Functional testing are mainly three types. They are:

✚ **Unit Testing:**

- Improves code quality.
- Find software bugs early.
- Debugging process is used.
- This reduces the cost of the system.

✚ **Module Testing:**

- It consumes less time while testing.
- It supports parallel testing.
- Reduces any kind of complications.

### **Integration Testing:**

- This usually helps to identify problems between integrations and modules.
- It helps to identify problems between integration and modules.
- The application system checks whether the modules work properly before proceeding to testing.
- Data uploads successfully.

❖ **Non-Functional Testing** : I am going to implement four types of non-functional testing in my build project they are:

#### **Acceptance Testing:**

- Personal information is updated from the user's point of view.

#### **Security Testing:**

- Gives access to different pages for different user roles.
- Potential cost savings.
- Saves overall time

#### **Accessibility Testing:**

- It is a user friendly test.
- The system also checks whether the color combination is correct.

#### **Usability Testing:**

- Here is the admin panel test.
- The system is tested with different users.

## 11.2 Test case

These are the test cases of Seat& Eat :

### Unit test –test case:

Test case name      Unit test			
Test class			
Test description			
Data source	Test setup	expected result	Actual result

### Module test –test case:

Test case name      Unit test			
Test class			
Test description			
Data source	Test setup	expected result	Actual result

**Integration test –test case:**

<b>Test case name</b>	<b>Unit test</b>		
<b>Test class</b>			
<b>Test description</b>			
<b>Data source</b>	<b>Test setup</b>	<b>expected result</b>	<b>Actual result</b>

**11.3 Unit testing:****Unit test-1****Test case**

<b>Test case name</b>	<b>Unit test</b>		
<b>Test class</b>	<b>User registration,</b>		
<b>Test description</b>	<b>User Email and username verification .</b>		
<b>Data source</b>	<b>Test setup</b>	<b>expected result</b>	<b>Actual result</b>
<b>User entry</b>	<b>Submit the form</b>	<b>an error message</b>	<b>need validation</b>

Table 23 Unit test case-1

**Settings**

Name: Shovon Howlader

Email: shovon1999@gmail.com

**Password Change**

Current Password: Current Password

New Password: New Password

Confirm Password: Confirm Password

**Update**

Figure 61 Unit testing case 1 result

## Unit test-2

### Customer enrollment:

Test case name	Unit test		
Test class	Customer enrollment.		
Test description	User Email & Username		
Data source	Test setup	expected result	Actual result
User entry	Input all types of data and submit the form	Got an error message	Email address and username are required

Table 24 Unit test case-2

## Login your account

Email

shovon123.com

! Please include an '@' in the email address. 'shovon123.com' is missing an '@'.

...

Remember Me [Forgot password?](#)

Login Now

Don't Have An Account? [Register Now](#)

OR

Figure 62 Unit testing case 2 result

### Use case-3

#### User login

Test case name	Unit test		
Test class	User login		
Test description	Registered email and password		
Data source	Test setup	expected result	Actual result
User entry	Input wrong registered data in the form	Invalid message	Need valid registered input.

Table 25 User login

## User login

Welcome to **seat-eat**

E-Mail Address

Password

Remember Me

[Forgot Your Password?](#)

Login



Figure 63 Unit testing case 3 result

## 11.4 Module test:

### Module test-1

Test case name	Unit test		
Test class	Enroll Owner		
Test description	Admin can need to fill up all field.		
Data source	Test setup	Expected result	Actual result
User entry	Blank spaces are not acceptable	Got alert message	Need proper information

Table 26 Module test-1



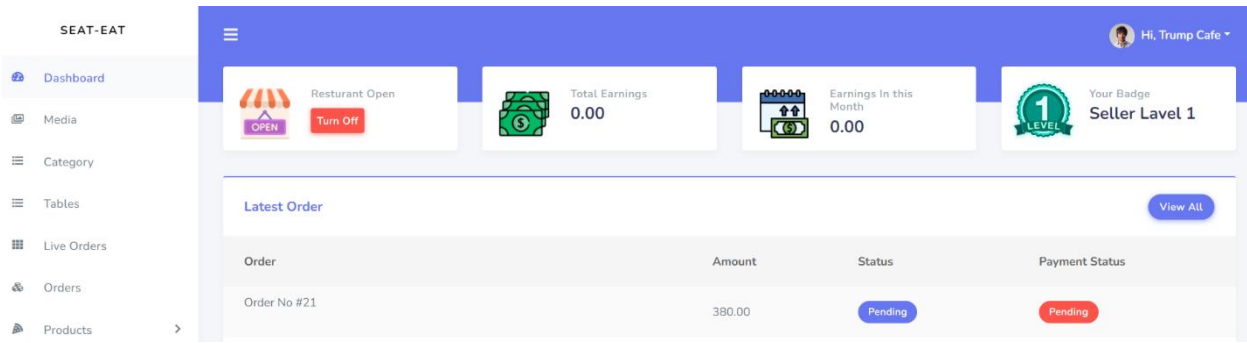


Figure 64 Module testing 1 result

**Module test-2**

Test case name	Unit test		
Test class	Enroll Manager		
Test description	Admin can need to fill up all field.		
Data source	Test setup	Expected result	Actual result
User entry	Blank spaces are not acceptable	Got alert message	Need information proper

Table 27 Module test-2

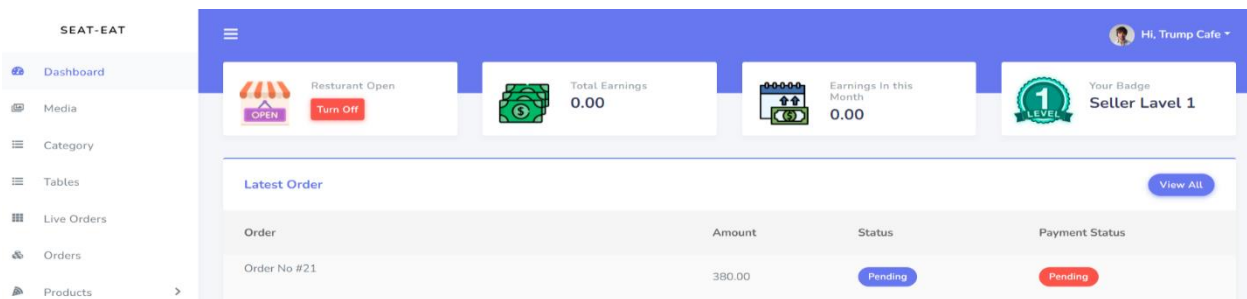


Figure 65 Module testing 2 result

## 11.5 Integration testing:

Test case name	Unit test		
Test class	Customer		
Test description	1. Login Controller  2. Divert the system to the event that the verified middleware test replica is productive, which redirects login attempts and dashboards.		
Data source	Test Setup	Expected Result	Actual Result
User entry	1. Go to login section 2. Provide valid email address & password. 3. Click on login System	Need User authentication	It also show invalid email & password.

Table 28 Integration testing

**Login your account**

Email  
shovon1999@gmail.com

Password  
...

Remember Me [Forgot password?](#)

[Login Now](#)

[Don't Have An Account? Register Now](#)

OR

Figure 66 User login integration test

The screenshot shows a user profile page for 'Shovon Howlader' with the email 'shovon1999@gmail.com'. The page has a sidebar menu with options: Dashboard, Orders, Settings (highlighted in red), Ratings & Reviews, and Logout. The main content area is titled 'Settings' and contains the following fields:

- Name:** Shovon Howlader
- Email:** shovon1999@gmail.com
- Password Change:**
  - Current Password:** Current Password
  - New Password:** New Password
  - Confirm Password:** Confirm Password

An 'Update' button is located at the bottom right of the settings form.

Figure 67 User login integration test result

## 11.6 Security testing:

Test case name	Unit test		
Test class	Admin		
Test description	Login Controller		
Data source	Test setup	Expected Result	Actual Result
User entry	Security testing Invalid login attempt	Shouldn't be logged in showing invalid information	The result is Expected.

Table 29 Security testing

## Login your account

Email

shovon123.com

 Please include an '@' in the email address. 'shovon123.com' is missing an '@'.

...

Remember Me

[Forgot password?](#)

Login Now

Don't Have An Account? [Register Now](#)

OR

Figure 68 User security test results

### 11.7 Usability testing:

Test case name	Unit test		
Test class	Customer		
Test description	Customer Controller		
Data source	Test setup	Expected Result	Actual Result
User entry	Customer can use this system.	This system is user friendly.	The customer face any problem.

Table 30 Usability testing

## Chapter 12 – Implementation

### 12.1 Training:

Training is a very important factor. When the software is launched, it becomes necessary to train the users, teaching them how to use the program. The training requirement after the software is developed is important to ensure optimum productivity. All that needs to be done to generalize unused frameworks with clients is taken this way.

The table which describes the training method of Seat& Eat is given below:

SL NO	User	Training Scope	Time Period	Comment
01	User	Registered as user	1 Hours	Procedures are properly viewed by users
02	Admin	Adds external users to the database	2 Hour	Admin can be easily use this system.

Table 31 User Training

### 12.2 Parallel implementation scheme

#### Big Bang

The Big Bang usually shuts down the existing system of schemes and immediately makes the new system useful and capable. It is much faster than any other type of scheme and uses the new system when the test is finished. It creates an instability for the old system. Big Bang usually quickly shuts down the previous system and activates itself. Currently, this method works much faster than other methods. Because it remains until the end of the test using the new system properly. It is used

because many times data can be lost or even crash the new system. This is included in the HR considerations of a single site.

## **Scaling**

My project is Instant Food. I plan to use the project for restaurant owners to manage their restaurant projects on the go.

### **12.3 Load Balancing**

Load balancing means optimizing the system so that a certain number of users can accept the system and use the system gracefully. Load balancing generally refers to how many users a system can accept at the same time and how long the system can last, known as load balancing.

It splits the load across different servers so that users don't have any difficulty running it and the system runs faster.

My proposed system has four types of users accessing daily and perfect load balancing strategy is developed to handle them.

## Chapter 13 – Critical Appraisal & evaluation

### 13.1 Objective could be met

Below is a list of the targets that were initially announced:

- ✓ There is a registration and login system for the users of the project.
- ✓ There are admin management and user management.
- ✓ There is a user enrollment system.
- ✓ Contains sales and marketing record management.
- ✓ Customers can give ratings and reviews as desired.

### Objective -1

How good can the features be?

How good can the features be?

Why can't it be done?

How could it not be done?

Which goals remain unfulfilled?

What purpose remains unfulfilled?

What are the solutions to meet the goals?

What are the solutions to meet the objectives?

Which feature is not complete yet?

## **Achievement rate and others**

My developed project is **Seat& Eat** the registration process and login system of the project is perfectly implemented for all types of users. Here the admin can manage all the users if they want, customers, owners and managers can all register the same.

Add food menu, add restaurant, delete restaurant, add chair-table and delete chair-table, time schedule system, payment system and even manage all types of tasks in the project. I use Laravel framework for user authentication. have used

Here every objective success rate is 100%, the system is now able to meet the needs of the users. Now any type of restaurant management system can be used.

## **13.2 Objectives that totally don't meet of touched**

I hope to create this project process with the customer in mind. So that they can save their precious time and choose the restaurant of their choice and eat the food of their choice.

I have made a special arrangement so that the customer can select the date and time of his choice and book the table-chair as he likes.

### **The reasons why it couldn't be touch**

I have faced many problems in integrating bulk SMS system in my **Seat& Eat** project. I will implement this system in future to update the attendance report process easy and beautiful.

## **What could have been done**

If I can implement bulk SMS system in my system then automatically a notification of ordering will go to the customer and from there he can take next step of his order.



## Chapter 14 – Lessons Learned

### **14.1 Pre-project-Review-closing**

The project **Seat& Eat** developed by me is basically a web based system.

Following the pre-defined framework of Student System Management and keeping in mind the requirements of the customers and thinking about their time management, food order in process and seat reserve, the plan has been prepared. Select an architecture to build the system on and select a name for the project

It basically deals with all online based tasks of a restaurant and customer and their seat management for customer satisfaction.

Then I understood all the requirements, built the said system with PHP Laravel and JavaScript and wrote the documentation as per the project.

### **14.2 What I have learned**

The wonderful experience in creating the project is that, I have never before installed a full-face working software like I did now. It was a new experience for me. I've learned how to adopt a structure as well. Observed how to work with structure, format and database. I improve my skills with various tests like black box and white box testing, unit testing, acceptance testing and even usability testing. Learned how to break down a large project into smaller tasks. I was able to do the project easily by using my acquired knowledge.

While working on the project, I improved my programming skills and gained a detailed understanding of how to secure a system and everything from designing the project well to organizing the process and making it a reality. Hopefully this knowledge and education will help me a lot in my future projects.

### **14.3 The problem I face**

I faced various difficulties and challenges in completing this project. The first challenging problem was how to start working on the plan. Keeping in mind the requirements of the customer, the requirements of the restaurant owner and the requirements of the full restaurant system, we faced many problems while starting the work.

It was much more challenging that I had planned to finish the project in a short period of time. First I planned to complete the said work within three / four months and created a time box to complete the entire project. But day by day I realize that it is not possible to complete the work within that time limit, so I have to rearrange the time limit. Many kinds of trouble have to be faced while working on database. At times the system had to be updated at different places as per requirement. Which took a bit of trouble to find and do. As my system has seat booking system I ran into a bit of trouble and the notification that comes after the payment system was also a bit of a hassle.

### **14.4 What solution Occurred**

I faced various problems while developing my project. I have always tried to find different ways to solve problems. Where there are problems must be solved. Generally I enjoy a challenge and I was up for the challenge to solve any problem in my project. A great experience for me was when I was faced with the problem of choosing the right time framing, I separated the entire task into different small parts and created approximate time frames for specific tasks which made it easier to create my time box. Implementation of the project sometimes had to add some new information and systems which became a challenge for me and I was able to successfully implement my project. I had to face many challenges in selecting the table chair and managed to solve it later.

Finally I strictly followed time boxing to complete the work within the stipulated time frame and successfully completed my work on time.

## Chapter 15 – Conclusion

### 15.1 Summary of the project:

Thanks to the great creator who blessed me to perform and understand the said work.

**Seat& Eat** is an online based solution for restaurants .This system is designed to provide convenience to restaurants and customers. The main objective of this system is to provide online ordering and reservation services to the customer. Each menu item has a name, price and associated recipe. After successful login customer can access menu page with listed items as per desired time. The main point of developing this system is to help the restaurant administrator to manage the restaurant business, help the customer to order online and reserve table and all the methods to manage the restaurant well can be used and benefited by the restaurant authorities. In the proposed system the user can search a menu according to his choice. According to the price range and category of food and later he can order the food. They then have to pay for the meal using a payment method that the system accepts. After making the payment the customer will receive a confirmation e-mail in his/her email. The entire system is developed with the help of HTML, CSS, JavaScript, PHP, Laravel framework. Various types of diagrams, charts and tables are provided in the documentation. Security is ensured to prevent unauthorized access to the system.

I think all classes of people of our country will get many benefits through this project.

### 15.2 Goal of the project

The main goal of my project is to save time for restaurant customers Many times in busy restaurants people have to stand for a long time while eating which is a cause of great suffering for the common people, so it was my aim to solve it. The system can be accessed by registered owners and restaurant managers. Now that I am listing the main objectives of the project:

The project is an online based solution

- Many restaurants can be added to the same system
- Food can be ordered at home.
- You can select the restaurant of your choice.
- Restaurant table and chair reservation system is managed automatically.

- Restaurant authorities can keep track of all their income and expenses through the system.

### **15.3 Success of the project**

The project is successful only when the user requirements are met by the project. Success always depends on how satisfied the user is with using the system and whether the system has all the benefits they expect and whether they get them. So, I can say my project is completed successfully.

### **15.4 What I have done in the documentation**

I have followed the academic documentation framework in creating the documentation. I have discussed the documentation on how to complete the entire project. I have included time-boxing of the project, different types of charts, different types of graphs and screenshots in the documentation for easy understanding of the project. Various test results are attached.

So finally it can be said that all the necessary information is attached in this documentation.

### **15.5 Value of the project**

There is no place for menus to automate my project .Our country has a large number of restaurants out of which 95% are completely manually operated. So this system will be a very important project for them. The system is primarily designed to save customer time but such a system has not been observed in any system previously developed. The system is basically a restaurant management based system with various features added keeping in mind the satisfaction that they can do their work completely online.

This project will play an important role in my professional life.

### **15.6 My Experience**

It was a great experience for me since I started this project from the beginning and completed it successfully. Taking on new challenges in each case and overcoming them successfully was also a great learning experience. Got ideas about design work and development work. Now, I know how to start and execute a software project.

I think the concept of time management system that I got from this project is a very important chapter in my life. It will help me in future.

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