



MEGHNAD SAHA INSTITUTE OF TECHNOLOGY

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MINOR PROJECT REPORT

ONLINE FOOD ORDERING

MAKAUT EVEN SEMESTER 2022 - 23



[MASTER OF COMPUTER APPLICATION]

MAULANA ABUL KALAM AZAD
UNIVERSITY OF TECHNOLOGY,
WEST BENGAL



MAULANA ABUL KALAM AZAD UNIVERSITY OF TECHNOLOGY

(Formerly known as WEST BENGAL UNIVERSITY OF TECHNOLOGY)

UNDER THE SUPERVISION OF

MR. SUBHJIT SANTRA

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CERTIFICATE

This is to certify that the project entitled “**ONLINE FOOD ORDERING**” has been prepared according to the regulation of degree of Master of Computer Application (MCA) under the University of “Maulana Abul Kalam Azad University of Technology”. The project being submitted by-

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The whole procedure has been carried out under my supervision and guidance. I have gone through this project and have seen that it is fulfilling the requirement of Major Project under MAKAUT, WB.

Dated: _____

Subhojit Samanta

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(EXTERNAL PROJECT GUIDE)

(HEAD OF THE DEPARTMENT)
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(EXAMINER)

MEGHNAD SAHA INSTITUTE OF TECHNOLOGY

2022 – 2023

(MAULANA ABUL KALAM AZAD UNIVERSITY OF TECHNOLOGY (MAKAUT) also known as WBUT)

FACULTY OF MCA DEPARTMENT

CERTIFICATE OF RECOMMENDATION

This is to certify you that **Ripam kundu** have completed their Minor Project work titled : **ONLINE FOOD ORDERING** under the supervision and guidance **Mr. Subhjit Santra** of We are satisfied with their work, which is being presented for the partial fulfilment of the degree of Master of Computer Application (MCA), MAULANA ABUL KALAM AZAD UNIVERSITY OF TECHNOLOGY (WBUT), Haringhata, Nadia : 741249.

Prof. Mr. Subhjit Santra

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Student Signature

DATE: _____

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HOD of MCA Department

Meghnad Saha Institute of technology

DATE: _____

ACKNOWLEDGEMENT

We would like to acknowledge our sincere gratitude to the mentors of **Ardent Computech Pvt. Ltd** Without their guidance and constant supervision this project would not have been possible. We are very much thankful for providing us necessary information about this project as well as for the support in completion of the project.

Our thanks and appreciations also go to those people who have willingly helped us out with their abilities in developing this project.

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ABSTRACT

The project has been done under the guidance of **Mr. Subhjit Santra**, from **Ardent Computech Pvt. Ltd, Durgapur**. The project is based on **ASP.NET for Online Food Ordering**. The scope of this project is to reduce the manual operation required to maintain all the records of booking information and also generates the various reports for analysis. Main concept of the project is to enter transaction reports and to maintain customer records. Hence this system can be used in any colleges to maintain their records easily.

Signatures of Students

- 1.
- 2.
- 3.
- 5.
- 6.

Date:

Signature of Faculty

Date :

ACKNOWLEDGEMENT

I take this opportunity to express my deep gratitude and sincerest thank to my project mentor **Mr. Subhjit Santra** for giving most valuable suggestion, helpful guidance and encouragement in the execution of this project work. who gave me a golden opportunity to do this report on **“Online Food Ordering App”**, who also helped in completing my report . I came to know about so many new things and I am really thankful to them. Secondly, I would also like to thank my parents and friends who helped me a lot in finalizing this project within the limited time frame.

I would like to give a special mention to my colleagues. Last but not the least, I am grateful to all the faculty members of **Ardent Computech Pvt. Ltd, Durgapur** for their support.

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TABLE OF CONTENTS

SL No.	Name of the topic	Page No.
1	Introduction	9
2	Object & Scope	10
3	Software Requirement Specifications	11
4	Hardware Requirement Specifications	11
5	System Analysis	12
5.1	Features	13
5.2	Brief Overview of the Technology	13
5.3	Work flow	14 – 16
5.4	Software tool used	17 - 18
5.5	Concept & problem analysis	19 -20
6	System design	21
6.1	System Design	22
6.2	Flow Chart	23
6.3	Data Flow Diagram	24
6.4	Use case Diagram	25
6.5	Entity-Relationship Diagram	26
6.6	ER Diagram Features	27 - 30
6.7	Database Design	31
6.8	User Interface	32
6.9	Feasibility study	33
7	Implementation & Testing	34
7.1	Test cases	35
7.2	Testing steps	36
7.3	Performance & usability Test ingredients	37
7.4	Compatibility & Security Testing	38
7.5	Integration Testing	39
7.6	White Box Testing	40
7.7	Black box Testing	40
7.8	System testing	40
7.9	Output Testing	41
7.10	Goal of Testing	41
7.11	Acceptance Testing	42
7.12	validation	43
7.13	Testing Report	44
8	Screenshot	45 – 49
9	Coding	50 - 54
10	System Security Measures	55
10.1	Database security measures	56
10.2	System security measures	56
11	Limitation	57
12	Conclusion	58
13	Future Scope	59 – 60
14	References	61

INTRODUCTION

Online Food ordering and managing system is a process in which one can order various foods and beverages from some local restaurant and hotels through the use of the internet, just by sitting at home or any place. And the order is delivered to the told location.

The project connects different restaurants with customers. The project contains a server side and a user side. All the management like editing site contents, updating food items, adding restaurants, and checking order status can be managed from the server side. There can be many managers on the site.

For the user section, the users can go through several pages. In order to order the food items, the user has to create an account and sign in or log in. The food comes with the cost as well. This project makes a convenient way for customers to buy/purchase food online, without having to go to the restaurant.

This Online Food Order And managing System is in HTML, JavaScript, and CSS. Talking about the features of this system, it contains the server section and the user (customer) section. All the editing, updating, managing order details, food items, and restaurants are from the admin section while customers can only go through the site and give orders if they want. The design of this system is simple so that the user won't get any difficulties while working on it.

OBJECTIVE

Online Food Ordering System And managing is a process in which one can order various foods and beverages from some local restaurant and hotels through the use of the internet, just by sitting at home or any place. And the order is delivered to the old location. Nowadays everyone is having a busy schedule whether it is in urban areas or rural areas. But talking specifically about the urban areas and deeply about the big cities, people out there are so busy in their life that they don't get enough time to have their meals properly. These days women are no less than men, in any field.

So, in big cities even wives are working women, therefore mostly the small families manage to have their food ordered from somewhere, as they lack time. Not only this is the case, if we talk about the children in the modern era, they like only fast food or something from the outside. But they ignore eating homemade meals. So, the food ordering system these days has one of the fastest-growing markets, though being a new idea. In this project, we have developed something like the same to learn from and serve the nation in a much better way possible. Nowadays, people are more likely to dine-in at the restaurant for their meals.

The online food ordering system And managing provides convenience for the customers that are nothing special but the general busy people of the society. It overcomes the demerits of the manual hotel or mess system and the old-fashioned queuing system. This system enhances the ready-made foods of people.

Therefore, this system enhances the speed of getting food on a person's plate and the quality and manner of taking the order from the customer. It provides a better communication platform. The user's details are stored using electronic media. The online food ordering system provides the menu online and the customers can easily place the order by just clicking the mouse or by touching a button on their smartphones.

Also, with the food ordering system online, people can easily track their orders, and the admin can maintain the customer's database and advance the food delivery system. This food ordering system allows the user to select the desired food items from a list of available menu items provided by the local hotel or restaurant.

SCOPE

Without an Online Food Ordering System, managing and maintaining details of the bookings and course is a tedious job for any organization. According to our website, the role of admin is to insert and modify the details of the bookings after the login process and the role of the user is to insert and modify the details of the bookings after the login process.

Software Requirement Specification (SRS)

PROCESSOR	INTEL i3 7 th Gen processor
OPERATING SYSTEM	MacOS, WINDOWS, Linux, Android
MEMORY	4GB RAM OR MORE
HARD DISK SPACE	MINIMUM 1GB FOR DATABASE USAGE FOR FUTURE USE.
DATABASE	MYSQL

SOFTWARE REQUIREMENT

Operating System	:	Windows 10/2019
Front-End Tool	:	HTML, CSS, Angular JS.
Back-End Tool	:	MySQL
Programming Languages	:	PHP

HARDWARE REQUIREMENT

Processor	:	Intel Pentium to any updated
Processor Speed	:	250MHz to 667 MHz
RAM	:	2GB
Hard Disk	:	80 GB

System Analysis

5.1 FEATURES

The features of this system are the following:

- Order product online
- Upload product design online
- Add, edit, delete product
- Send order confirmation via email
- Manage online order

5.2 BRIEF OVERVIEW OF THE TECHNOLOGY

Front End: HTML, CSS, JavaScript

1. **HTML:** HTML is used to create and save web documents.
2. **CSS :** (Cascading Style Sheets) Create attractive Layout
3. **Bootstrap :** responsive design mobile friendly site
4. **JavaScript:** it is a programming language, commonly used with web browsers.

Back end: MongoDB, Node js and Express js

1. **MongoDB:** Creation of tables and collections
2. **Node js :** Node.js is an open source server environment
3. Express js

5.3 WORK FLOW

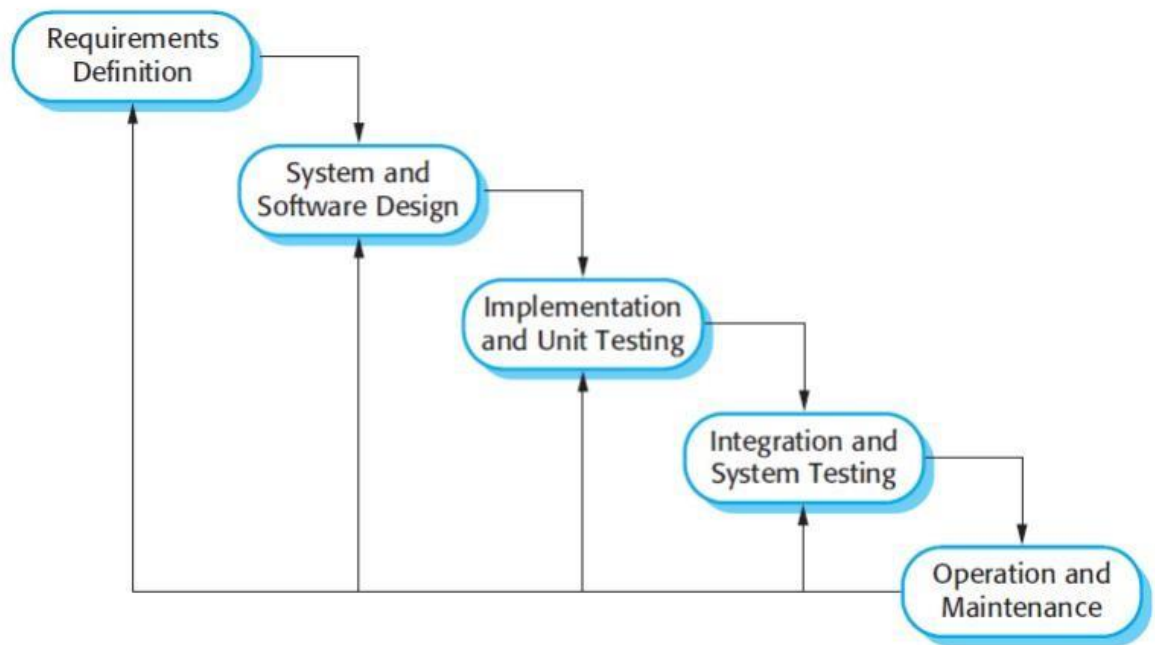
This Document plays a vital role in the development life cycle (SDLC) as it describes the complete requirement of the system. It is meant for use by the developers and will be the basic during testing phase. Any changes made to the requirements in the future will have to go through formal change approval process.

The Waterfall Model was first Process Model to be introduced. It is also referred to as a linear-sequential life cycle model. It is very simple to understand and use. In a waterfall model, each phase must be completed before the next phase can begin and there is no overlapping in the phases. Waterfall model is the earliest SDLC approach that was used for software development.

The waterfall Model illustrates the software development process in a linear sequential flow; hence it is also referred to as a linear sequential life cycle model. This means that any phase in the development process begins only if the previous phase is complete. In waterfall model phases do not overlap.

Waterfall Model design Waterfall approach was first SDLC Model to be used widely in Software Engineering to ensure success of the project. In "The Waterfall" approach, the whole process of software development is divided into separate phases. In Waterfall model, typically, the outcome of one phase acts as the input for the next phase sequentially.

Following is a diagrammatic representation of different phases of waterfall model.



The sequential phases in Waterfall model are:

- **Requirement Gathering and analysis:** All possible requirements of the system to be developed are captured in this phase and documented in a requirement specification doc.
- **System Design :** The requirement specifications from first phase are studied in this phase and system design is prepared. System Design helps in specifying hardware and system requirements and also helps in defining overall system architecture.
- **Implementation :** With inputs from system design, the system is first developed in small programs called units, which are integrated in the next phase. Each unit is developed and tested for its functionality which is referred to as Unit Testing.
- **Integration and Testing:** All the units developed in the implementation phase are integrated into a system after testing of each unit. Post integration the entire system is tested for any faults and failures.
- **Deployment of system :** Once the functional and non-functional testing is done, the product is deployed in the customer environment or released into the market.
- **Maintenance :** There are some issues which come up in the client environment. To fix those issues patches are released. Also to enhance the product some better versions are released. Maintenance is done to deliver these changes in the customer environment.

All these phases are cascaded to each other in which progress is seen as flowing steadily downwards (like a waterfall) through the phases. The next phase is started only after the defined set of goals are achieved for previous phase and it is signed off, so the name "Waterfall Model". In this model phases do not overlap.

Waterfall Model Application

Every software developed is different and requires a suitable SDLC approach to be followed based on the internal and external factors. Some situations where the use of Waterfall model is most appropriate are:

- Requirements are very well documented, clear and fixed.
- Product definition is stable.
- Technology is understood and is not dynamic.
- There are no ambiguous requirements.
- Ample resources with required expertise are available to support the product.
- The project is short.

The advantage of waterfall development is that it allows for departmentalization and control. A schedule can be set with deadlines for each stage of development and a product can proceed through the development process model phases one by one. Development moves from concept, through design, implementation, testing, installation, troubleshooting, and ends up at operation and maintenance. Each phase of development proceeds in strict order.

5.4 SOFTWARE TOOLS USED

- ❖ The whole project is divided in two parts the front end and the back end.

FRONT END

- ❖ **Hypertext Markup Language (HTML)** is the standard markup language for documents designed to be displayed in a web browser. It can be assisted by technologies such as Cascading Style Sheets (CSS) and scripting languages such as JavaScript. Web browsers receive HTML documents from a web server or from local storage and render the documents into multimedia web pages. HTML describes the structure of a web page semantically and originally included cues for the appearance of the document. HTML elements are the building blocks of HTML pages. With HTML constructs, images and other objects such as interactive forms may be embedded into the rendered page. HTML provides a means to create structured documents by denoting structural semantics for text such as headings, paragraphs, lists, links, quotes and other items. HTML elements are delineated by *tags*, written using angle brackets. Tags such as `` and `<input />` directly introduce content into the page. Other tags such as `<p>` surround and provide information about document text and may include other tags as sub-elements. Browsers do not display the HTML tags, but use them to interpret the content of the page. HTML can embed programs written in a scripting language such as JavaScript, which affects the behaviour and content of web pages. Inclusion of CSS defines the look and layout of content. The World Wide Web Consortium (W3C), former maintainer of the HTML and current maintainer of the CSS standards, has encouraged the use of CSS over explicit presentational HTML since 1997.
- ❖ **Bootstrap** is a free and open-source CSS framework directed at responsive, mobile-first front-end web development. It contains CSS- and (optionally) JavaScript-based design templates for typography, forms, buttons, navigation, and other interface components. Bootstrap is the sixth-most-starred project on GitHub, with more than 135,000 stars, behind freeCodeCamp (almost 307,000 stars) and marginally behind Vue.js framework. According to Alexa Rank, Bootstrap is in the top-2000 in US while vuejs.org is in top-7000 in US.
- ❖ **JavaScript** (*/ˈdʒɑːvəˌskript/*), often abbreviated as **JS**, is a programming language that conforms to the ECMAScript specification. JavaScript is high-level, often just-in-time compiled, and multi-paradigm. It has curly-bracket syntax, dynamic typing, prototype-based object-orientation, and functions. Alongside HTML and CSS, JavaScript is one of the core technologies of the World Wide Web. JavaScript enables interactive web pages and is an essential part of web applications. The vast majority of websites use it for client-side page behavior, and all major web browsers have a dedicated JavaScript engine to execute it. As a multi-paradigm language, JavaScript supports event-driven, functional, and imperative programming styles. It has application programming interfaces (APIs) for working with text, dates, regular expressions, standard data structures, and the Document Object Model (DOM). However, the language itself does not include any input/output (I/O), such as networking, storage, or graphics facilities, as the host environment (usually a web browser) provides those APIs. JavaScript engines were originally used only in web browsers, but they are now embedded in some servers, usually via Node.js. They are also embedded in a variety of applications created with frameworks such as Electron and Cordova. Although there are similarities between JavaScript and Java, including language name, syntax, and respective standard libraries, the two languages are distinct and differ greatly in design.
- ❖ **Cascading Style Sheets (CSS)** is a style sheet language describing the presentation of a document written in a markup language like HTML. CSS is a cornerstone technology of the World Wide Web, alongside HTML and JavaScript. CSS is designed to enable the separation of presentation and content, including layout, colors, and fonts. This separation can improve content accessibility, provide more flexibility and control in the specification of presentation characteristics, enable multiple web pages to share formatting by specifying the relevant CSS in a separate .css file, and reduce complexity and repetition in the structural content. Separation of formatting and content also makes it feasible to present the same markup page in different styles for different rendering methods, such as on-screen, in print, by voice (via speech-based browser or screen reader), and on Braille-based tactile devices. CSS also has rules for alternate formatting if the content is accessed on a device. The name *cascading* comes from the specified priority scheme to determine which style rule applies if more than one rule matches a particular element. This cascading priority scheme is predictable. The CSS specifications are maintained by the World Wide Web Consortium (W3C). Internet media type (MIME type) is registered for use with CSS by RFC 2318 (March 1998). The W3C operates a free CSS validation service for CSS documents. In addition to HTML, other markup languages support the use of CSS including XHTML, plain XML, SVG, and XUL.

BACK END

The back end is designed using MySQL which is used to design the database.

- ❖ **MySQL** is an open-source relational database management system (RDBMS). Its name is a combination of "My", the name of co-founder Michael Widenius's daughter, and "SQL", the abbreviation for Language. MySQL is free and open-source software under the terms of the GNU General Public License, and is also available under a variety of proprietary licenses. MySQL was owned and sponsored by the Swedish company MySQL AB, which was bought by Sun Microsystems (now Oracle Corporation). In 2010, when Oracle acquired Sun, Widenius forked the open-source MySQL project to create MariaDB. MySQL is a component of the LAMP web application software stack (and others), which is an acronym for *Linux*, *Apache*, *MySQL*, *Perl/PHP/Python*. MySQL is used by many database-driven web applications, including Drupal, Joomla, phpBB, and WordPress. MySQL is also used by many popular websites, including Facebook, Flickr, MediaWiki, Twitter and YouTube.
- ❖ **MongoDB** is an open-source document database and leading NoSQL database. MongoDB is written in C++. This tutorial will give you great understanding on MongoDB concepts needed to create and deploy a highly scalable and performance-oriented database. MongoDB is a document database used to build highly available and scalable internet applications. With its flexible schema approach, it's popular with development teams using agile methodologies. In comparison to the SQL server, MongoDB is faster and more scalable. While the SQL server supports JOIN and Global transactions, MongoDB does not. The MS SQL server does not accommodate large amounts of data, however MongoDB does. Below are mentioned some of the powerful features of this NoSQL database system that makes it learning worthwhile. Unlike RDBMS where the data is stored in a tabular form, MongoDB stores the data in the form of documents. Inside these documents, the data is stored in fields making it more flexible. The sharding and aggregation framework, coupled with document validations, fine-grained locking, a mature ecosystem of tools and a vibrant community of users are some of the key reasons why MongoDB is the go-to database for many.
- ❖ **NodeJS** It is used for server-side programming, and primarily deployed for non-blocking, event-driven servers, such as traditional web sites and back-end API services, but was originally designed with real-time, push-based architectures in mind. Node.js is sometimes misunderstood by developers as a backend framework that is exclusively used to construct servers. This is not the case; Node.js can be used on the frontend as well as the backend. Node.js is not a programming language. Rather, it's a runtime environment that's used to run JavaScript outside the browser. The Node.js runtime allows developers to build both front and backend applications using only JavaScript. This means no more context switching between different languages like PHP for the backend and JavaScript for the frontend. Once seen as a toy language for amateurs, Node has revolutionized the web. Through its many integrated services, AWS makes a great option for hosting Node.js applications. While there are a lot of different services to choose from, you'll most likely want to start with Elastic Beanstalk, which "makes it easy to deploy, manage, and scale your Node.
- ❖ **AngularJS** is a structural framework for dynamic web apps. It lets you use HTML as your template language and lets you extend HTML's syntax to express your application's components clearly and succinctly. AngularJS's data binding and dependency injection eliminate much of the code you would otherwise have to write. It's used to bind model from your controller to view only. It will not update your controller model if you change this from your view. It means it's used to achieve one time binding. This is the best free (integrated development environment) IDE as it is simple for beginners to learn and gives more power to Angular experts. The benefit of AngularJS IDE is, it is faster and effective and now supports the advanced editing of TypeScript 3.0. Angular is an open-source, JavaScript framework written in TypeScript. Google maintains it, and its primary purpose is to develop single-page applications. As a framework, Angular has clear advantages while also providing a standard structure for developers to work with. Is Angular Used for Backend or Frontend? Angular is an open-source frontend framework. It is a JavaScript-based TypeScript development language that eliminates unneeded features and code to ensure lighter and faster applications.

5.5 CONCEPTS & PROBLEM ANALYSIS

COCOMO model :

COCOMO Model–The Constructive Cost Model is a software cost estimation model based on an algorithm. It was developed by Barry Boehm first published in 1981 Barry W. Boehm’s Book Software engineering economics as a model for estimating effort, cost, and schedule for software projects.

COCOMO applies to three classes of software projects:

- Organic projects- “small” teams with “good” experience working with “less than rigid” requirements.
- Semi-detached projects- “medium” teams with mixed experience working with a mix of rigid and less than rigid requirements.
- Embedded projects- developed with a set of “tight” constraints (hardware, software, operational,..)

BASIC COCOMO equations-

- $EFFORT(E) = a_1(KLOC)^{b_1}$ person month
- Time for Development (Tdev)= $c_1(Effort)^{d_1}$ Month

Here, KLOC-Thousands or kilos of lines of code

Software Project	a₁	b₁	c₁	d₁
Organic	2.4	1.05	2.5	0.38
Semi-Detached	3.0	1.12	2.5	0.35
Embedded	3.6	1.20	2.5	0.32

CALCULATIONS: here the values depend on the types of software products or projects. We have just told that our software project is of organic type. So according to that the values of

$$a_1=2.4$$

$$b_1=1.05$$

$$c_1=2.5$$

$$d_1=0.38$$

In our project the estimated line of code(**LOC**) is **4064**. So the estimated size of the project is **4.64 KLOC**. Hence considering it to be organic software the following is calculated

We know that, **Effort**= $a1(KLOC)^b$ 1person month

$$=2.4*(4.64)^{1.05}PM$$

$$=12.024 PM$$

Finally, **Time for Development** (T_{dev})= $c1(Effort)^d$ 1 Months

$$=2.5*(12.024)^{0.38} Months$$

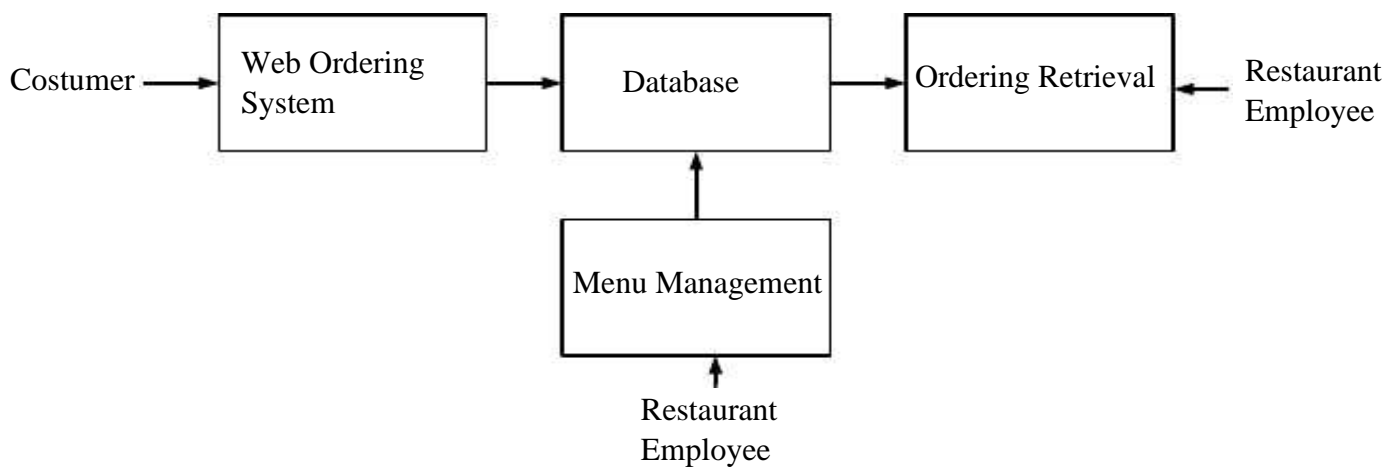
$$=3.644 Months$$

$$\approx 3 Months$$

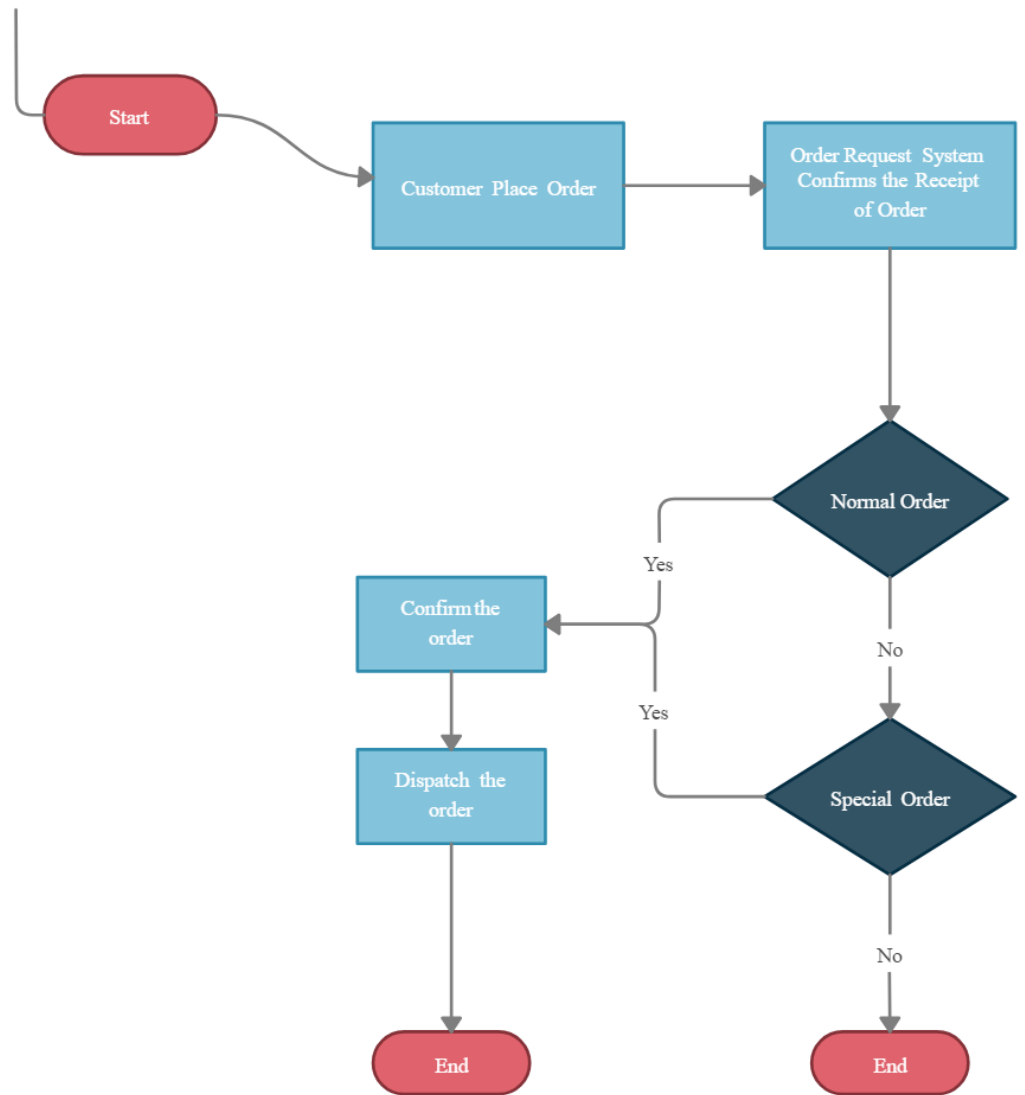
System Design

6.1 System Design:

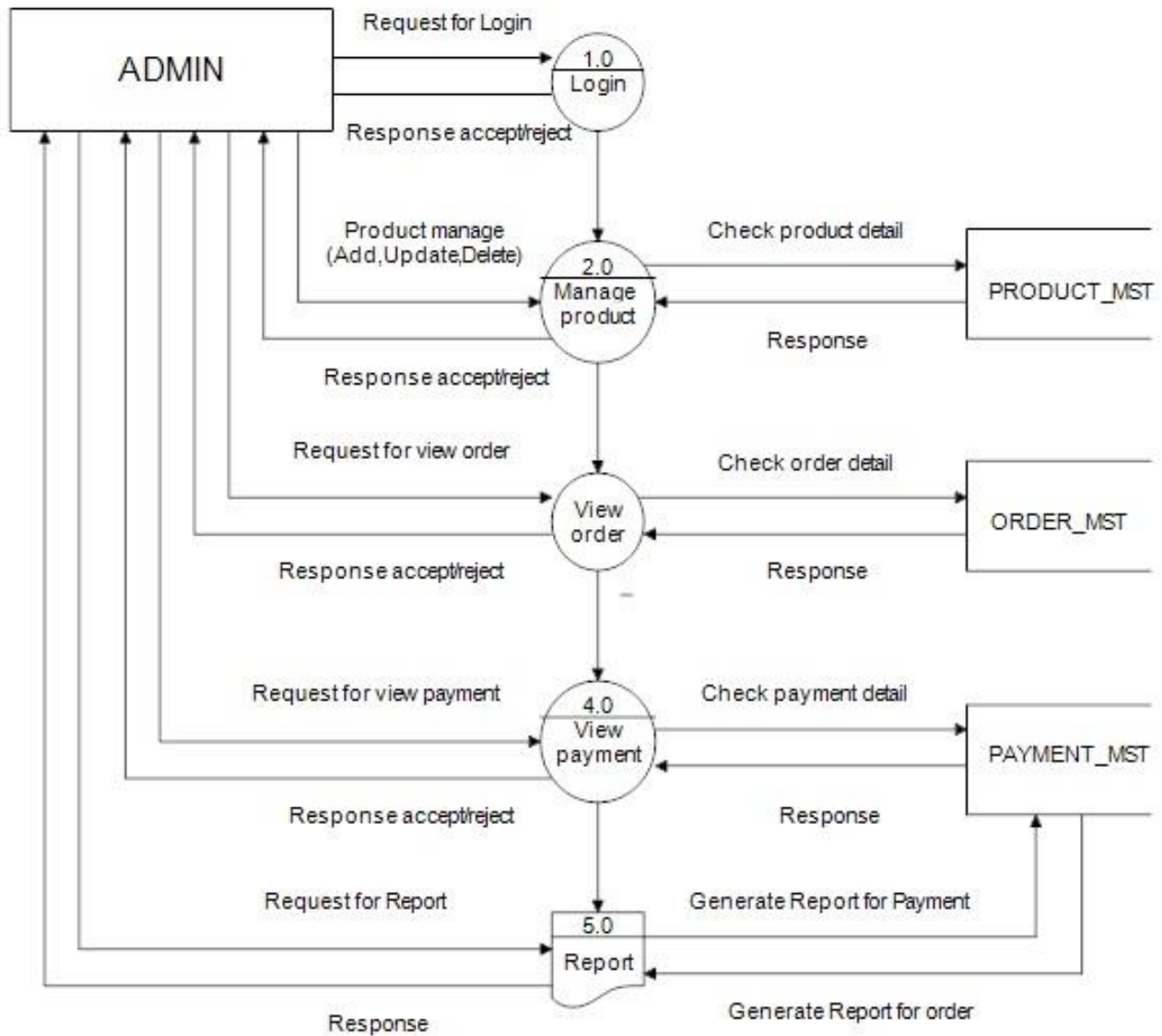
The structure of the system can be divided into three main logical components. The first component must provide some form of menu management, allowing the restaurant to control what can be ordered by customers. The second component is the web ordering system and provides the functionality for customers to place their order and supply all necessary details. The third and final logical component is the order retrieval system. Used by the restaurant to keep track of all orders which have been placed, this component takes care of retrieving and displaying order information, as well as updating orders which have already been processed.



6.2 Flow Chart Diagram :

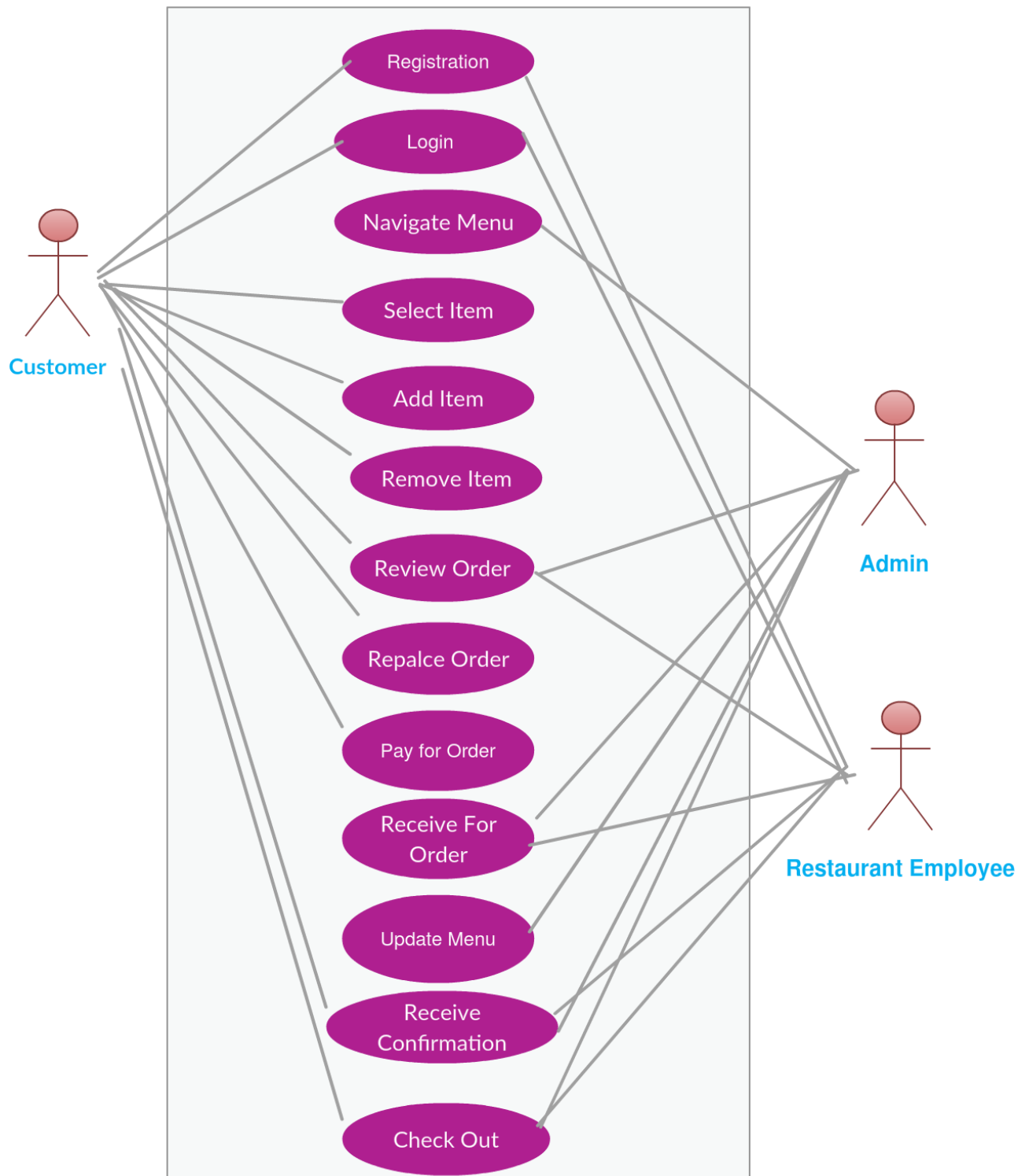


6.3 Data Flow Diagram (DFD) :

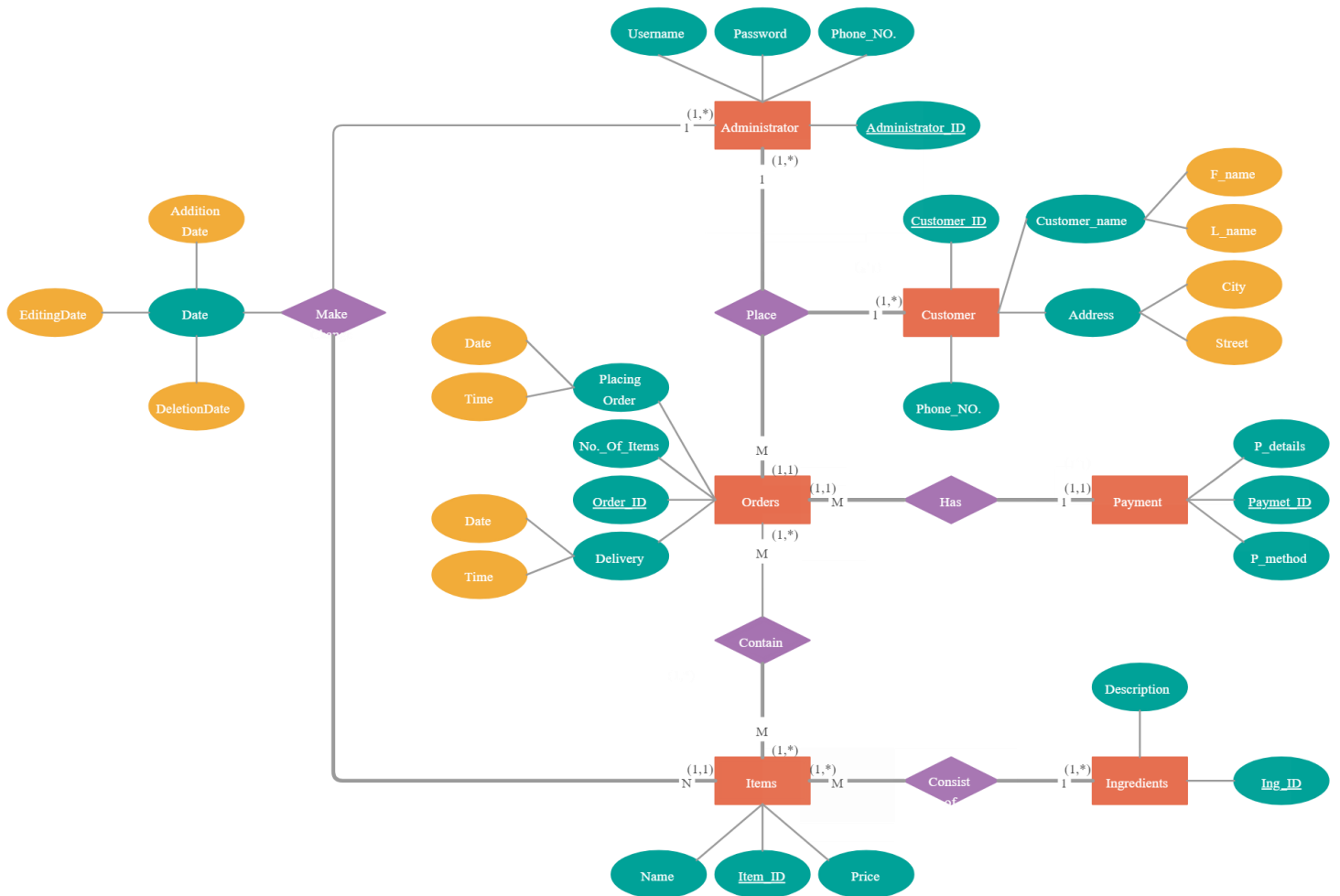


6.4 Use Case Diagram :

Online Food Ordering System



6.5 Entity Relationship Diagram:



6.6 ER Diagram Features

The above shown is an entity-relationship diagram, depicting the working of the food ordering system. ER diagram reflects the relationships that various entities involved in the system share among themselves, along with the entities.

Following are the description of entities involved in food ordering system:

Customer

This represents the set of customers, which are the clients who will be using this application.

The customers are for whom the system is being designed. Its attribute set includes:

Name:

This is the name of the customer, searching or purchasing the products. When signing up to the website the name of the customer is stored, this is done for the future referencing and maintaining the user's data record (history). It is the composite attribute that contains two more attributes that are First-Name and Last-Name. That contains the user's first name and last name.

Cus-id :

This is the identification number assigned by the admin to the users so as to identify them uniquely in the future. This identification number is helpful in fetching data of the individual user from a big set. This is mainly to manage the huge database system where the entire data is being stored. It is a permanent identification number given by the admin to the customer to maintain customer history.

Cus-order-id :

This is the identification number given to determine and manage the sequence of service. Since multiple customers will place orders, so as to schedule whom to give the delivery first is determined by the help of this number, so as to maintain consistency in the system working procedure. It will be unique for each order a day.

But the same id can be repeated on a new day, as it is mainly for the restaurant's reference and to prevent any type of conflict.

Address

This field is for the physical address of the customer where the restaurant authority is required to deliver the parcels. It may or may not be the same as the customer's permanent address or residence, but can be the office place or any place.

Its attribute includes:

Address-id :

An identity through which categorization of places may be done. The address may or may not be unique for each customer registered. But still, this identity helps the delivery person to identify the right place to deliver.

Zip-code :

It is the pin code or the postal code of a region, and which is of utmost importance to any address, since multiple places, streets, bungalows with the same name exist. This is even important in any national-level identification of address. Also, this will help the owner in surveying which region has more demand so as to expand their business in that region.

Phone :

The user's contact number is something that must be correct because if at some point in time the delivery person gets confused with the address, it can be used for confirmation. Also, the restaurant authority can contact their customers for any type of feedback or know if the delivery service is good or not.

Orders

The customer's place order, which is not only still here, there is some work that needs to be done in the database in order to maintain records for keeping track on a monthly basis.

Order-id :

This is the identification number given to determine and manage the sequence of service. Since multiple customers will place orders, so as to schedule whom to give the delivery

first is determined by the help of this number, so as to maintain consistency in the system working procedure. It will be unique for each order a day.

But the same id can be repeated on a new day, as it is mainly for the restaurant's reference and to prevent any type of overlapping of thoughts between customers and owners. It is mainly for the chef's preference.

Cus-id :

This is the identification number assigned by the admin to the users so as to identify them uniquely in the future. This identification number is helpful in fetching data of the individual user from a big set. This is mainly to manage the huge database system where the entire data is being stored. It is a permanent identification number given by the admin to the customer to maintain customer history.

Total-price :

This attribute manages the total price sum of the orders the user has made in one attempt. It is one of the most important attributes since most of the time people change their menu order list contents depending upon their needs, health, and economic situation.

Timing :

Time is something most important to be valued. And one of the major reasons behind the success of this food ordering system. So, managing this cause becomes a goal to be completed. In order to maintain the business work better, the authority must stick to its commitment.

Payment

It defines the payment to be done by the customer for an order placed from the web store at a worth price. Also, various security encryption mechanisms have been used, so the customer details of accounts and other credentials are safe and secure.

Payment-type :

The user is provided with lots of options that he/she can opt for making the payment depending upon their ease. There are many choices available for net banking, use of wallets like pay and I-cash cards, also credit card and debit card options are available too.

Payment-id :

It is for the benefit of the user as well as the website owners since the payment-id is helpful in maintaining the payment record in the database, as well as it is also provided to the customer after the successful completion of payment. As later customers can claim anytime that they have already done the payments and the owners cannot deny. So, it is useful to prevent any kind of fraud from both sides.

Price :

It is the record of the total sum amount the user needs to pay, and after the payment, it is used to update the server-side database to keep the record of the net profit or loss on a daily basis.

Worker

The base of any company, restaurant, or hotel is its employees. It is said that an organization is known by its employees and work. Employees will work honestly and with complete dedication if they are paid sufficient money. On the whole, it's just like a food cycle, everyone depends on somebody.

Worker-name :

The name of the worker is important to maintain their database of work and payment records. Also, if any complaints are filed then it is required.

Timing :

Time is something most important to be valued. And one of the major reasons behind the success of this food ordering system. So, managing this cause becomes a goal to be completed. In order to maintain the business work better, the authority must stick to its commitment. Workers are paid for their good work and more than that for completion of work before time.

Worker-id :

To uniquely identify each worker and prevent any type of redundancy in records.

Salary : The amount of money to be paid to the workers for their effective and on time work was done.

Delivery-mode

The delivery sequence and choice are not the same for everyone but vary from person to person. It may happen that sometimes a person says no to home delivery as he/she is passing by and can pick the parcel themselves. But it is almost an ideal case.

Urgent:

In some cases, like uninvited guest arrival, late-night, people prefer to pay more and get the order delivered urgently. So, restaurants manage such situations by not following the sequence of order placement, as they are getting more than usual. And with another customer whom they have delayed, they manage it with some small gifts or offers.

Normal:

The usual mode of delivery is followed by the sequence of orders placed. It is the normal and majority case. The hotels do not need to put extra effort to manage these.

6.7 Database Design

In this phase, a logical system is built which fulfills the given requirements. Design phase of software development deals with transforming the client's requirements into a logically working system. Normally, design is performed in the following in the following two steps:

1. Primary Design Phase:

In this phase, the system is designed at block level. The blocks are created on the basis of analysis done in the problem identification phase. Different blocks are created for different functions; emphasis is put on minimizing the information flow between blocks. Thus, all activities which require more interaction are kept in one block.

2. Secondary Design Phase:

In the secondary phase the detailed design of every block is performed

The general tasks involved in the design process are the following:

1. Design various blocks for overall system processes.
2. Design smaller, compact and workable modules in each block.
3. Design various database structures.
4. Specify details of programs to achieve desired functionality.
5. Design the form of inputs, and outputs of the system.
6. Perform documentation of the design.

System reviews

6.8 User Interface of Online Food Ordering System

This is one of the main tasks of the developer to design a graphical user interface that the user is attracted to and can use easily, in one word it should be user-friendly. So, for this, you should have a better understanding of customers' likes and dislikes and the features that are in trend and mesmerize the public easily. Initially we need to locate the targeting people and what kind of application they need. An online food ordering system allows your business to accept and manage orders placed online for delivery or takeaway. Customers browse a digital menu, either on an app or website and place and pay for their order online. Sales Module is used to manage the Sales. Delivery Module: It has been developed for managing the Delivery. Payment Module: It manages the Payment. Customer Module: Customer operations will be managed by Customer module. After getting all this information we should start to design the application.

Following Application:

- Grow your visibility.
- Know your customers.
- Grow your order number.
- Increase staff productivity.
- Optimise labour costs.
- Increased order values.

6.9 Feasibility Study

After doing the project Online Food Ordering System, study and analyze all the existing or required functionalities of the system, the next task is to do the feasibility study for the project. All projects are feasible - given unlimited resources and infinite time.

Feasibility study includes consideration of all the possible ways to provide a solution to the given problem. The proposed solution should satisfy all the user requirements and should be flexible enough so that future changes can be easily done based on the future upcoming requirements

A. Economical Feasibility

This is a very important aspect to be considered while developing a project. We decided the technology based on the minimum possible cost factor. All hardware and software cost has to be borne by the organization. Overall we have estimated that the benefits the organization is going to receive from the proposed system will surely overcome the initial costs and the later on running cost for the system.

B. Technical Feasibility

This included the study of function, performance and constraints that may affect the ability to achieve an acceptable system. For this feasibility study, we studied complete functionality to be provided in the system, as described in the System Requirement Specification (SRS), and checked if everything was possible using different types of frontend and backend platforms.

C. Operational Feasibility

No doubt the proposed system is fully GUI based and is very user friendly and all inputs to be taken are all self-explanatory even to a layman. Besides, proper training has been conducted to let the users know the essence of the system so that they feel comfortable with the new system. As far as our study is concerned the clients are comfortable and happy as the system has cut down their loads and doing.

Testing

7.1 TEST CASE

We have implemented various test cases on our software i.e., Food Ordering System. A TEST CASE is a sequence of actions performed to ensure that a certain feature or operation of your software application is working properly. A Test Case contains test steps, test data, precondition, post condition developed for specific test scenarios to verify any requirement. The test case contains specified variables or circumstances that a testing engineer might use to compare expected and actual outcomes in order to assess whether a software product meets the customer's needs.

A test case includes these elements:

- The purpose of the test or description of what requirement is being tested.
- Test data - Test data is a specification of the data elements, values or set that define how to satisfy the test intent.
- The setup to test - Version of application, hardware, software, operating system, access level, logical or physical data and any other setup information being tested.
- Actions and expected results
- To use the data to analyze rework process and to make changes to prevent defects occurring in the system

7.2 TESTING STEPS

Unit Testing

The purpose of Unit Testing is to ensure that each unit in the system functions properly. This testing strategy was applied to each object in the system. A Java test class containing methods to assess objects, calling each method with an assortment of parameters to test whether the values returned were appropriate. These test classes ensured that valid input data was accepted and invalid data was rejected. Each unit within the application was tested to verify that all links and buttons navigated as expected. Usability testing has also been incorporated to examine whether error messages are clear and understood. The database schema was also monitored to ensure insertions, updates and deletes were occurring and with the expected changes. All the tests have proved successful. For those tests which failed initially, the causing factor was identified and remedial action was taken in order to pass the test concerned. The detail of remedial action taken has been documented. Security testing has been incorporated to verify that the expected result is in face, the actual result.

Alpha Testing

Alpha Testing is a type of software testing performed to identify bugs before releasing the software product to the real users or public. It is a type of acceptance testing. The main objective of alpha testing is to refine the software product by finding and fixing the bugs that were not discovered through previous tests.

Beta Testing

It is done to make sure that customers are satisfied with the application experience. The design of the food delivery app should be very easy and user-friendly because the major chunk of the population which uses Zomato or Swiggy isn't highly educated. Simple and effective design is the key to reach to a high number of customers.

Performance Testing of Food Delivery App

Performance testing is a very crucial part of testing food delivery applications. We need to evaluate the behaviour and stability of food delivery applications when high stress, load, concurrency, volume is applied.

Different performance testing use cases are

- validation of application behavior under high load
- validation of application behavior under peak usage
- validation under high constant load and identification of various bottlenecks in the application

Some other use cases are optimization of various APIs, validation of response time of APIs, hardware, and resources utilization under high load. These validations need to be performed so that the food delivery app can become robust enough to handle any amount of load.

Usability Testing of Food Delivery Applications

It is done to make sure that customers are satisfied with the application experience. The design of the food delivery app should be very easy and user-friendly because the major chunk of the population which uses Zomato or Swiggy isn't highly educated. Simple and effective design is the key to reach to a high number of customers. Some usability use cases for food delivery applications are

- making sure that functionalities are easy to find
- navigation should be easy and user-friendly
- buttons of the application should be visible
- verification that font should be of appropriate size so that anyone can read them
- verification that the user can undo the last operation and finally
- the design of the application should be appealing, simple, and user-friendly

Some other use cases are validation that the registration process for food delivery apps should be very simple so that anyone can register and start using it. Addition of address should be very simple, menu navigation should be intuitive and hassle-free, validation that right images should be displayed against food items, images should be clear with proper colors.

Validation that offers and promotions should be easy to find, Bill should be understandable, delivery time and location should be easy to find, making sure that rating process is user-friendly and finally, the checkout process should be damn simple.

Compatibility Testing of Food Delivery Applications

This type of testing verifies that the food delivery application works well in different environments like OS: iOS and Android. Food delivery applications should work fine on all mobile devices with different operating systems and with different sizes. We also verify that it works well with high configuration and low configuration phones.

This is very important testing as a little bug here and there can cost lakhs to business. Hence, Compatibility Testing should be done by a larger set of people who have access to many devices to ensure that the application is compatible with all of them. A testbed of devices and configurations needs to be maintained for proper compatibility testing.

Security Testing for Food Delivery Applications

Security Testing is very important so that the personal data of customers should not be at stake. It is done to ensure that customer data is protected against all kinds of threats and attacks. Leakage of data can cost hefty fees to the business.

Some of the use cases of security testing are validation of application behaviour under cyber-attacks, validation that application should not allow access to the application without proper authentication, and validation of session timeout in times of inactivity.

Food delivery applications have integration of customer credit cards and other card data so security testing becomes very important otherwise customer data can be leaked.

7.5 INTEGRATION TESTING

Data can be lost across an interface. One module can have an adverse effect on another, sub functions, when combined, may not be linked in desired manner in major functions. Integration testing is a systematic approach for constructing the program structure, while at the same time conducting test to uncover errors associated within the interface. The objective is to take unit tested modules and builds program structure. All the modules are combined and tested as a whole. The purpose of performing Integration Testing is to ensure that the different portions that make up the system function correctly, when combined to form a single working application. Integration Testing was performed at the end of each phase to prove that the system still maintained functionality. The benefits become more apparent as the system increases in size and functionality. For example, at the completion of phase two, Companies and Users were two separate system entities (at that point in development). However, the addition of Access Controls in phase three relies on successful integration with the Users entity, for login and customizable access rights to be successful in their operations. For such reasons, testing occurred at each phase completion to verify that new additions have not affected existing functionality.

Testing Levels

Testing can also be grouped by where they are added in the software development process, or by the level of specificity of the test. The main levels of testing during the development process can be mainly identified as unit testing, integration testing, system testing and acceptance testing .

FUNCTIONAL TESTING

These are the points concerned during the stress test:

- Nominal input: character is in putted in the place of digits and the system has to flash the message "Data error.
- Boundary value analysis: exhaustive test cases have designed to create an output report that produces the maximum (and minimum) allowable number of table entries.

7.6 WHITE BOX TESTING

The purpose of White Box testing is to certify that the underlying system architecture functions correctly. This contrasts to Black Box testing which examines system output from knowledge about the systems use of syntax. White Box testing has been undertaken for this system, in order to examine the changes of state for each of the database tables within the system. White Box testing has two immediate benefits. Firstly, by examining the table states during update, create and delete processes for example, the developer is able to verify that the right tables are being queried or affected. Furthermore, the developer can query the record contents, to ensure the correct and relevant fields in one or more tables have been correctly queried or affected, as appropriate. The second benefit is more aimed at the client; as such testing can simulate system stress that it may endure once deployed to see how it reacts.

7.7 BLACK BOX TESTING

The purpose of Black Box or functional testing is to assess the systems internal workings. However, the overall aim of this test strategy is to examine results without knowing how the system arrived at that result. In effect, a tester only requires knowledge of the system specification rather than underlying architecture. This caters for such testing to be performed from an end user's perspective rather than a designer perspective. Furthermore, any ambiguities that may exist between the Black Box test results and the original specification are easily detectable, as an unexpected output would occur. The tests performed here are based around users input and actions. The expected and actual system output for each test case has been documented.

7.8 System Testing

The goals of system testing are to detect faults that can only be exposed by testing the entire integrated system or some major part of it. Generally, system testing is mainly concerned with areas such as performance, security, validation, load/stress, and configuration sensitivity. But in our case we will focus only on function validation and performance. And in both cases we will use the black-box method of testing.

7.9 OUTPUT TESTING

After performing the validation testing, the next step is output testing of the proposed system, since no system could be useful if it does not produce the required output in a specific format. The output format on the screen is found to be correct. The format was designed in the system design time according to the user needs. For the hard copy also; the output comes as per the specified requirements by the user. Hence output testing did not result in any correction for the system.

7.10 GOAL OF TESTING

"Program testing can be used to show the presence of bug, but never to show their absence." If the results delivered by the system are different from the expected ones then the system is incorrect and these bugs should be fixed.

7.11 ACCEPTANCE TESTING

User Acceptance Testing In order to determine that the system had met the requirements defined in Section 3, the user and developer had arranged to meet at the end of July 2022. This involved the developer demonstrating the software and the directors using it briefly. User acceptance testing was done at the end of the implementation the developer provided a form which stated the original requirements.

User Acceptance Testing :

User acceptance of a system is the key factor for the success of any system. The system under consideration is tested for the user acceptance by constantly keeping in touch with the prospective system users at the time of developing and making changes whenever required. This is done in regard to the following point :

- a) Input Screen Design
- b) Output Screen Design
- c) Format of reports and other outputs.
- d)

TESTING METHOD USED

We have adopted a testing method which is a mix of both (structural) and black box (functional) testing. For modules we have adopted white box testing. Then we integrated the module into sub - systems and further into the system. These we adopted black box testing for checking the correctness of the system.

Requirements Validated and Verified:

- The data is getting entered properly into database.
- The Screens are being loaded correctly
- The Various functions specified are being performed completely.

7.12 VALIDATION

At the culmination of the integration testing, Software is completely assembled as a package. Interfacing errors have been uncovered and corrected and a final series of software test begin in validation testing. Validation testing can be defined in many ways, but a simple definition is that the validation succeeds when the software functions in a manner that is expected by the customer. After validation test has been conducted, one of the three possible conditions exists.

- a) The function or performance characteristics confirm to specification and are accepted.
- b) A deviation from specification is uncovered and a deficiency list is created.
- c) Proposed system under consideration has been tested by using validation test and found to be working satisfactory

7.13 TEST REPORTING

Immediate Purpose:

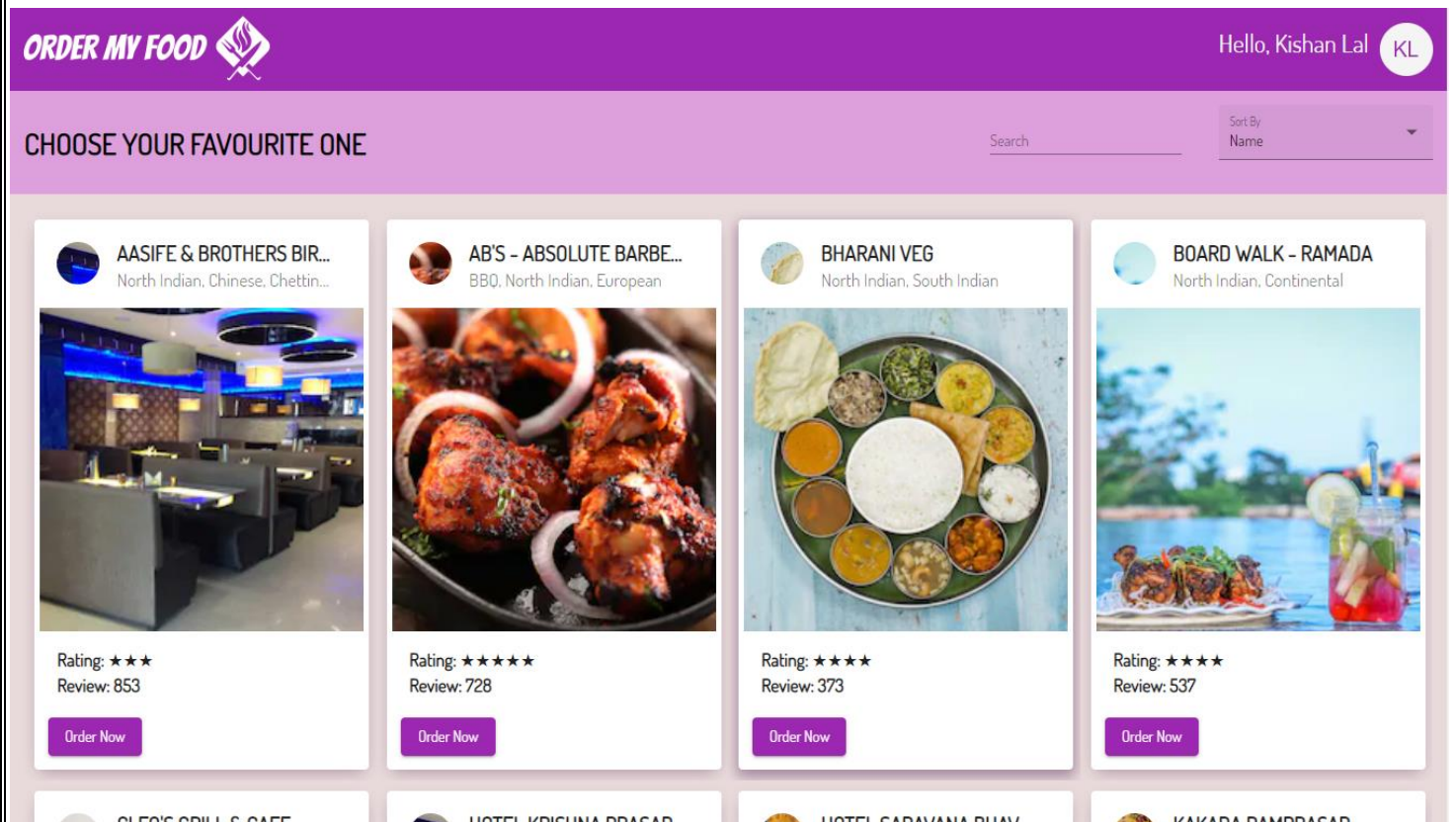
Provide information to the users of the software system, so that they can determine whether the system is ready for production. It will help to show the progress of testing to clients when they have doubts.

Long Term Purpose:

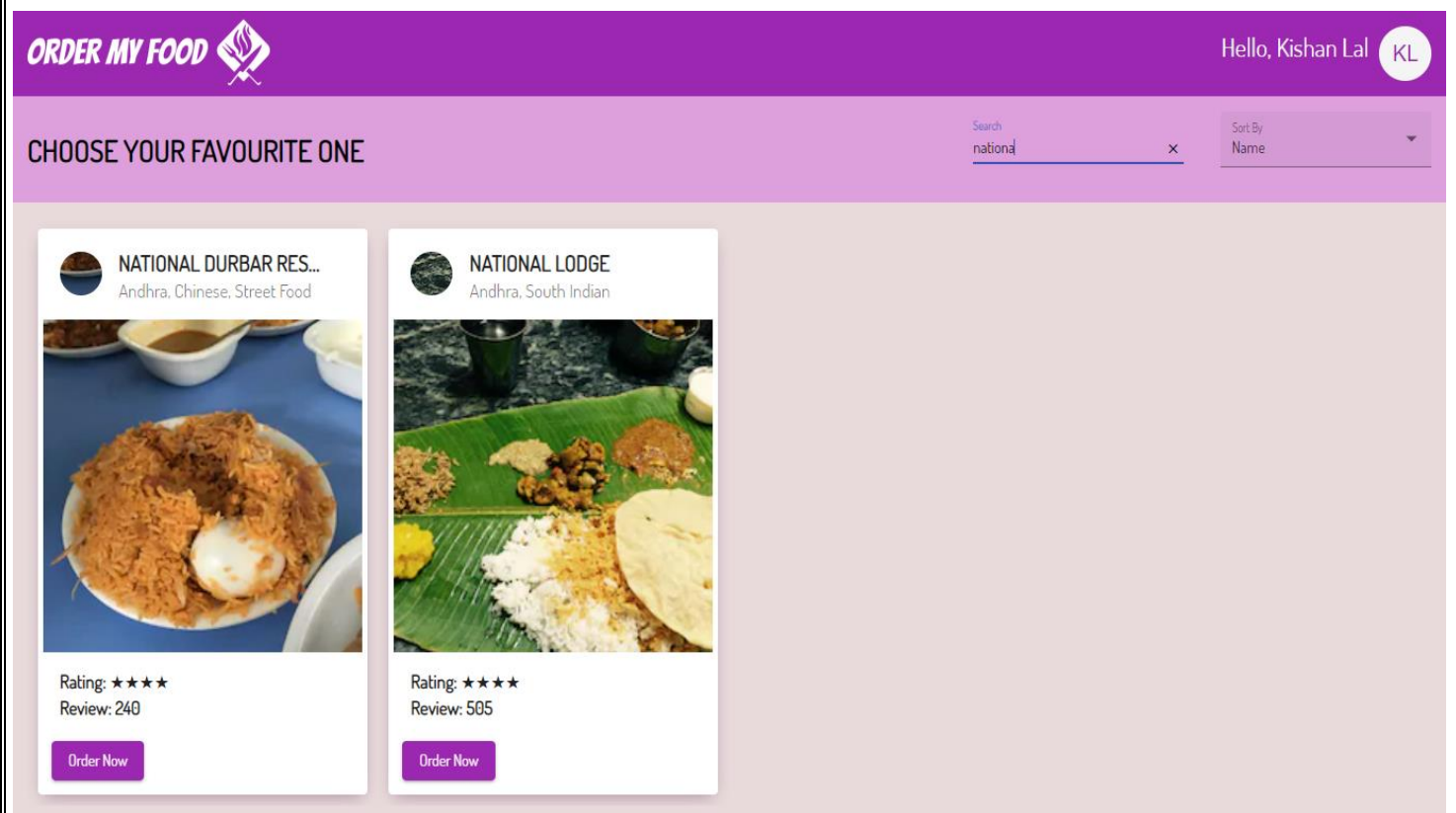
- To trace problems in the event application of the main functions.

Codes & Screenshot

- Home Page having list of hotels



- Searching - We can search for hotel names, cuisines, location, etc.



- **Sorting - We can sort them by Name(default), Reviews and Ratings**

Hello, Kishan Lal KL

CHOOSE YOUR FAVOURITE ONE

Search

Sort By
Review

CLEO'S GRILL & CAFE
Chinese, Continental, Steak, N...

Rating: ★★★★★
Review: 2567

Order Now

PARADISE BIRYANI
Biryani, North Indian

Rating: ★★★★★
Review: 1071

Order Now

KAKADA RAMPRASAD
Mithai, Street Food, North Indi...

Rating: ★★★★★
Review: 865

Order Now

AASIFE & BROTHERS BIR...
North Indian, Chinese, Chettin...

Rating: ★★★
Review: 853

Order Now

AD'S **ABSOLUTE RADDE**

MIDNIGHT MADNESS

ROADWALK **PANADA**

NATIONAL LODGE

- **Individual Hotel Page having list of menus - we can add the menus to the cart**

Hello, Kishan Lal KL

PARADISE BIRYANI
72, Block 14, Dr. Muthulakshmi Salai, LB Road, Thiruvannamipur, Chennai

ORDER NOW

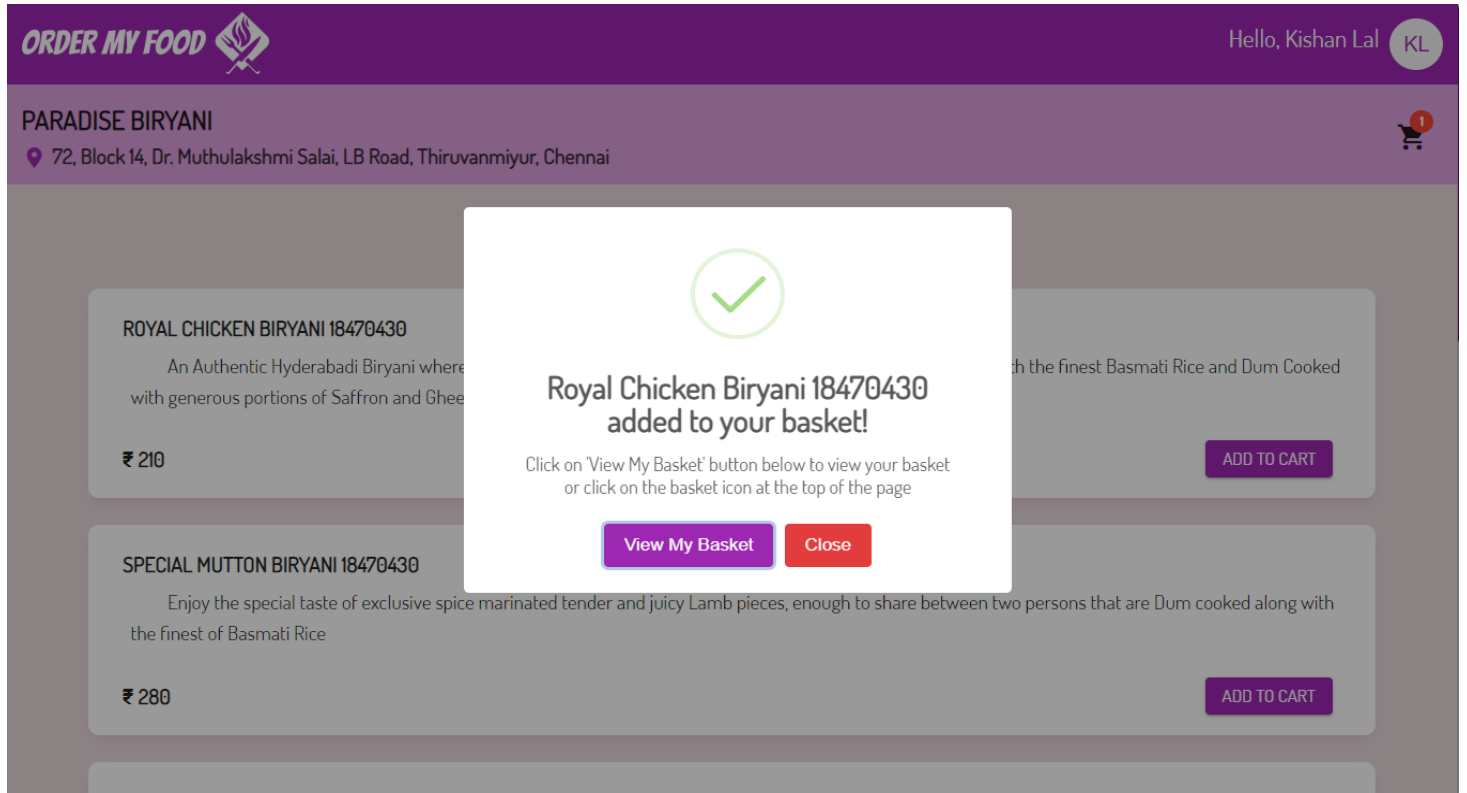
ROYAL CHICKEN BIRYANI 18470430
An Authentic Hyderabad Biryani where succulent Chicken piece is marinated with a blend of spices, layered with the finest Basmati Rice and Dum Cooked with generous portions of Saffron and Ghee.
₹ 210

ADD TO CART

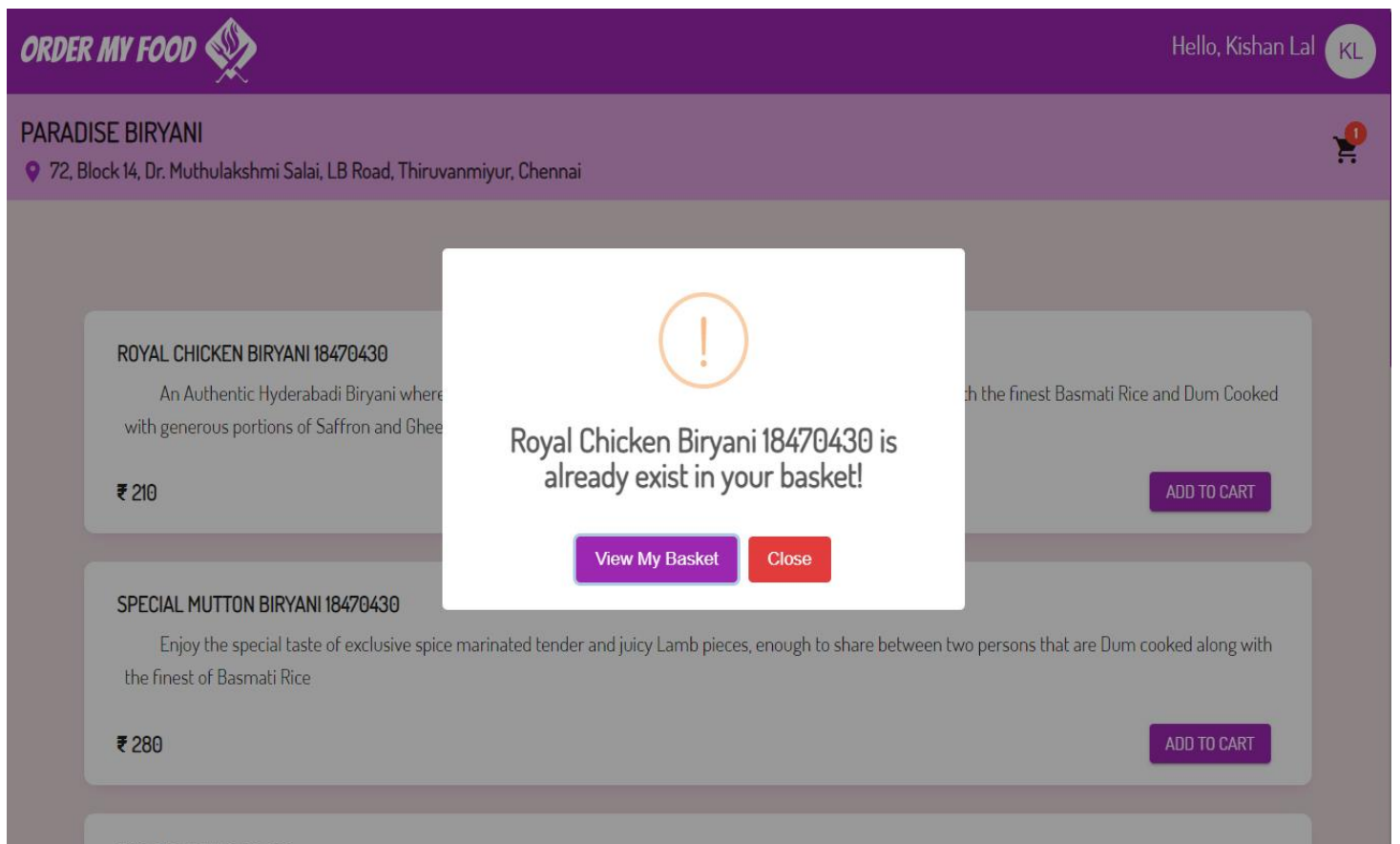
SPECIAL MUTTON BIRYANI 18470430
Enjoy the special taste of exclusive spice marinated tender and juicy Lamb pieces, enough to share between two persons that are Dum cooked along with the finest of Basmati Rice
₹ 280

ADD TO CART


- Adding menus to the basket/cart



- Adding duplicate menu to the basket/cart



• Basket of menus



PARADISE BIRYANI

72, Block 14, Dr. Muthulakshmi Salai, LB Road, Thiruvannamipur, Chennai

ORDER NOW

ROYAL CHICKEN BIRYANI 18470430

An Authentic Hyderabadi Biryani where succulent Chicken piece is marinated with a blend of spices, layered with generous portions of Saffron and Ghee.

₹ 210

SPECIAL MUTTON BIRYANI 18470430

Enjoy the special taste of exclusive spice marinated tender and juicy Lamb pieces, enough to share between two people, served with the finest of Basmati Rice

₹ 280

MY BASKET

ROYAL CHICKEN BIRYANI 18470430

-

Quantity

+

4

Remove Item

SPECIAL MUTTON BIRYANI 18470430

-

Quantity

+


2

Remove Item

Bill Amount: ₹ 1400

PAY BILL

• Payment acknowledgement



PARADISE BIRYANI

72, Block 14, Dr. Muthulakshmi Salai, LB Road, Thiruvannamipur, Chennai

ROYAL CHICKEN BIRYANI 18470430

An Authentic Hyderabadi Biryani where succulent Chicken piece is marinated with a blend of spices, layered with generous portions of Saffron and Ghee.

₹ 210

SPECIAL MUTTON BIRYANI 18470430

Enjoy the special taste of exclusive spice marinated tender and juicy Lamb pieces, enough to share between two people, served with the finest of Basmati Rice

₹ 280

MY BASKET

ROYAL CHICKEN BIRYANI 18470430

-

Quantity

+

4

Remove Item

SPECIAL MUTTON BIRYANI 18470430

-

Quantity


+

2

Remove Item

Bill Amount: ₹ 1400

PAY BILL



Payment Successfull!

It's just a sample success message. We can integrate real time UPI service!

OK

• Hotel Home Page

```

<!-- <app-nav-bar [userName]="userName"></app-nav-bar> -->
<div [class]="{'loader-center':!hotel}">
  <mat-spinner *ngIf="!hotel"></mat-spinner>
</div>
<div class="hotel-container">
  <mat-sidenav-container>
    <mat-sidenav-content>
      <app-nav-bar [userName]="userName"></app-nav-bar>
      <div class="menu-container" *ngIf="hotel">
        <div class="hotel-meta">
          <div class="hotel-meta-data">
            <h3 class="mat-display-1">{{ hotel.name }}</h3>
            <div class="address">
              <mat-icon>location_on</mat-icon>
              <p>{{ hotel.address }}</p>
            </div>
          </div>
          <mat-icon matBadge="{{ cartItems.length }}" matBadgeColor="warn" class="shopping-cart"
(click)="sidenav.toggle(); scrollTop()" *ngIf="cartItems.length">shopping_cart</mat-icon>
          <mat-icon class="shopping-cart" (click)="toggleSideNav()"
*ngIf="!cartItems.length">shopping_cart</mat-icon>
        </div>
        <div class="hotel-menus">
          <app-menu-item [hotel]="hotel" (addToMyCartEvent)="addToMyCart($event)"
[class]="{'apply-felix-basis': cartItems.length}"></app-menu-item>
          <mat-divider [vertical]="true"></mat-divider>
        </div>
      </div>
    </mat-sidenav-content>
    <mat-sidenav #sidenav [mode]="toggleMode" position="end" [opened]="false">
      <div class="price-container" *ngIf="!cartItems.length">
        <h3>My Basket</h3>
        <p class="empty-basket">
          Your basket is empty. Please add items to your basket.
        </p>
      </div>
      <div class="price-container" *ngIf="cartItems.length">
        <h3>My Basket</h3>
        <div class="cart-items">
          <app-cart-item [cartItems]="cartItems" (removeQuantityEvent)="removeQuantity($event)"
(addQuantityEvent)="addQuantity($event)" (removeItemEvent)="removeItem($event)"></app-cart-
item>
        </div>
        <div class="amount" *ngIf="cartItems.length"> Bill Amount: {{ "\u20B9" }} {{ totalAmount }}</div>
        <button mat-raised-button color="warn" class="calculate-menu" *ngIf="cartItems.length &&
totalAmount" (click)="openPaymentMethod()">
          Pay Bill
        </button>
      </div>
    </mat-sidenav>
  </mat-sidenav-container>
</div>

```

• Hotel Page

```
<app-nav-bar [userName]="userName"></app-nav-bar>

<div class="hotel-container">

  <div class="menu-bar">

    <h3 class="tagline">Choose your favourite one</h3>

    <div class="filters">

      <app-search-bar (searchQueryEvent)="searchQuery($event)"></app-search-bar>

      <app-dropdown [selectedValue]="selectedValue" [sortOptions]="sortOptions"
(sortEvent)="sortHotels($event)"></app-dropdown>

    </div>

  </div>

  <div class="hotel-cards" [class]="{'empty-search': !hotels.length}" *ngIf="!hotels.length">

    <div class="empty-hotel">

      <mat-spinner *ngIf="!hotelsConstant.length"></mat-spinner>

      <h3 *ngIf="hotelsConstant.length">

        No Hotels found!

      </h3>

    </div>

  </div>

  <div class="hotel-cards">

    <div *ngFor="let hotel of hotels" class="hotel">

      <app-hotel-card [hotelName]="hotel.name" [hotelThumbnail]="hotel.thumbnail_image"
[hotelImage]="hotel.feature_image"

        [cuisines]="hotel.cuisines" [rating]="hotel.rating" [review]="hotel.reviews"
(click)="goToHotel(hotel)" ></app-hotel-card>

    </div>

  </div>

</div>
```

• Hotel card page

```
<mat-card>

  <mat-card-header>

    <div mat-card-avatar [ngStyle]="{'background-image': 'url(' + hotelThumbnail + ')'}"></div>

    <mat-card-title title="{{hotelName}}">{{hotelName}}</mat-card-title>

    <mat-card-subtitle title="{{cuisines}}">{{cuisines}}</mat-card-subtitle>

  </mat-card-header>

  <mat-card-content>

    <p>Rating: <span class="rating-star">{{'★'.repeat(math.round(rating))}}</span></p>

    <p>Review: {{review}}</p>

  </mat-card-content>

  <mat-card-actions>

    <button mat-raised-button color="warn">Order Now</button>

  </mat-card-actions>

</mat-card>
```

• Menu-Item

```
<div class="menus-container">
  <h3 class="menu-header">Order Now</h3>
  <mat-card class="menu" *ngFor="let menu of hotel.menu">
    <mat-card-header>
      <mat-card-title>{{menu.name}}</mat-card-title>
    </mat-card-header>
    <mat-card-content>
      <p>
        {{menu.desc}}
      </p>
    </mat-card-content>
    <mat-card-actions>
      <span>{{'\u20B9'}} {{menu.price}}</span>
      <button mat-raised-button class="order" (click)="addToMyCart(menu)">
        Add to Cart
      </button>
    </mat-card-actions>
  </mat-card>
</div>
```

• Cart - Item

```
<div class="cart-item" *ngFor="let cartItem of cartItems">
  <h4>{{ cartItem.name }}</h4>
  <div class="price-input">
    <button mat-mini-fab color="accent" (click)="removeQuantity(cartItem)">
      <mat-icon>remove</mat-icon>
    </button>
    <mat-form-field class="quantity-form-field">
      <mat-label>Quantity</mat-label>
      <input matInput type="text" [(ngModel)]="cartItem.quantity">
    </mat-form-field>
    <button mat-mini-fab color="accent" (click)="addQuantity(cartItem)">
      <mat-icon>add</mat-icon>
    </button>
  </div>
  <button mat-raised-button color="warn" class="remove-menu" (click)="removeItem(cartItem)">
    Remove Item
  </button>
</div>
```

• Drop down Menu

```
<mat-form-field appearance="fill">
  <mat-label>Sort By</mat-label>
  <mat-select [(value)]="selectedValue">
    <mat-option [value]="sort.value"*ngFor="let sort of sortOptions"
(click)="sortHotels(selectedValue)">
      {{ sort.viewValue }}
    </mat-option>
  </mat-select>
</mat-form-field>
```

• Search bar

```
<mat-form-field>
  <mat-label>Search</mat-label>
  <input matInput type="text" [(ngModel)]="hotelSearch" (ngModelChange)="searchQuery($event)"
autocomplete="off">
  <button mat-button *ngIf="hotelSearch" matSuffix mat-icon-button aria-label="Clear"
(click)="clearSearch()">
    <mat-icon>close</mat-icon>
  </button>
</mat-form-field>
```

• Navigation Bar

```
<div class="navbar-container">
  
  <div class="user-profile" *ngIf="userName">
    <p class="greetings">Hello, {{ userName }}</p>
    <ngx-avatar name="{{ userName }}" textSizeRatio="2.5" bgColor="#f5f5f5"
fgColor="#9c27b0"></ngx-avatar>
  </div>
</div>
```



System

Security

8.1 DATABASE SECURITY

System security measure is meant to be provided to make your system reliable and secured from unauthorized user may create threats to the system. So you should follow some security measures. We have used security levels in database level at system level.

8.2 SYSTEM SECURITY

If we talk about the system security in our propose system we have implemented with the help of maintain the session throughout the system's use. Once has logged out than he/she will not be able to perform any task before signing back again.

A high level of authentic login is given to the system so this is a very tedious task to enter without authorization and authentication.

LIMITATION

- Excel export has not been developed for Food Item Category due to some criticality
- The transactions are executed in off-line mode, hence on-line data for Customer Order capture and modification is not possible.
- Off-line reports of Food Item. Confirm Order. Customer cannot be generated due to batch mode execution.
- Since it is an online project, Customers need internet connections to use it.
- People who are not familiar with computers can't use this software.
- Customer must have debit card or credit card to book tickets.
- A description of the background and context of the project and its relation to work already done in the area.
- Made statement of the aims and objectives of the project.
- The description of Purpose. Scope, and applicability
- We define the problem on which we are working in the project.
- We describe the requirement Specifications of the system and the actions that can be done on these things.
- We understand the problem domain and produce a model of the system, which describes operations that can be performed on the system.
- We included features and operations in detail, including screen layouts
- We designed user interface and security issues related to system . Finally the system is implemented and tested according to test cases

CONCLUSION

This project has been appreciated by all the user in the organization. It is easy to use, since it uses the GUI provided in the user dialog. User friendly screens are provided. The usage of software increases the efficiency, decrease the effort. It has been efficiently employed as a Site management mechanism. It has been thoroughly tested and implemented. Although I have put my best efforts to make the software flexible, easy to operate but limitations cannot be ruled out even by me. Though the software presents a broad range of options to its users some intricate options could not be covered into it; partly because of logistic and partly due to lack of sophistication. Paucity of time was also major constraint; thus, it was not possible to make the software foolproof and dynamic Lack of time also compelled me to ignore some part such as storing old result of the candidate etc. Considerable efforts have made the software easy to operate even for the people not related to the field of computers but it is acknowledged that a layman may find it a bit problematic at the first instance. The user is provided help at each step for his convenience in working with the software.

FUTURE SCOPE AND FURTHER ENHANCEMENT

The main purpose of an online ordering system is to provide customers for a way to place an order at a restaurant over the internet. This order food online system project aimed at developing an online food ordering system that can be used in small places, and medium cities firstly and then on a large scale. It is developed to help restaurants to simplify their daily operational and managerial tasks as well as improve the dining experience of customers. And also helps restaurants develop healthy customer relationships by providing good services. The system enables staff to update and make changes to their food and beverage list information based on the orders placed and the orders completed.

The online food ordering system is one of the most profitable marketing strategies for restaurant businesses. Online food ordering platforms also prevents missed orders due to busy phone lines or a lack of resources to monitor the phone. The face of the restaurant industry has shifted from the traditional dine-in culture to takeaways, online ordering, and home deliveries. Restaurants are quickly incorporating mobile food ordering apps in their restaurant management systems to streamline the entire order taking process.

As we all know that food is the basic need in every human life, for which everyone is struggling. Yet even after their efforts, if people are still not happy with their sustenance, then the effort given behind it is completely useless. The reasons might be the people are occupied with their busy schedules, they either can't able to cook or not having time to make food and order their food from outside.

There is a feature called 'Advance Order' or 'Food Pre-Ordering' which allows users to schedule their order's delivery time. With the help of the food pre-ordering feature, customers get the freedom of choosing delivery or pickup time, at the time of placing their orders. Customers can select their usual order to be delivered immediately or set a particular time for future delivery. The restaurant is immediately notified about your customers' preferred schedule. It enables customers to browse the app and place orders for the food they select from the specific restaurants. Later they can also see the estimated time for the delivery of the food that they have placed.

The food delivery market growth in India by the online segment will be significant for revenue generation. With a large number of young people living across various cities, food delivery apps in India have become instantly popular among these users. Brands will gravitate to a digital menu for products that 'travel well' during delivery and a separate in-store menu for food that is best served hot at the store itself. With the virtual presence of quick-serves amplified beyond physical locations, off-premise dining will grow.

In future we would like to keep working on this project and make a new addition to provide users with more advanced features and more detailed information. We have set our sights on the following additions in future: -

1. Forget password for admin and councilor.
2. Online payment process through debit and credit card.
3. Auto mail will be sent to the user's email-id when new user creates their ID.

References

- www.zomato.com
- www.wikipedia.com
- www.tutorialpoint.com
- www.geeksforgeeks.org
- www.nevonprojects.com

Thank You