A PROJECT REPORT

Submitted by

Dipak Prajapati

200220131051

In fulfillment for the award of the degree

Of

BACHELOR OF ENGINEEERING

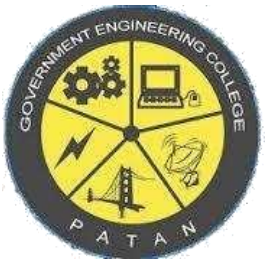
In

Computer Science & Engineering

Government Engineering College, Patan

Gujarat Technological University, Ahmedabad

August, 2023



Government Engineering College, Paten

At & Post: Katpur, Patan

CERTIFICATE

This is to certify that the project report submitted along with the project entitled **Food Ordering System** has been carried out by **Dipak Prajapati** under my guidance in partial fulfillment for the degree of Bachelor of Engineering in Computer science & Engineering, 7th Semester of Gujarat Technological University, Ahmedabad during the academic year 2022-2023

Prof. Divyesh Bavisa	**Dr.H.B.JETHVA**
Internal Guide	**Head Of The Departmen**

techmicra

Date: 19th July 2023

To,
Head of Computer Engineering Department.
Government Engineering College, Patan
R453+P9J, Katpur, Gujarat 384265

Subject: Confirmation Letter of Internship at Techmicra IT Solutions.

Respected Sir,

We are glad to offer an internship to your student **Dipak Prajapati (Semester 7th) Enrollment No. 200220131051 of Computer Engineering.** He will be working as an intern at our organization for Summer Internship from **27th July 2023 till 10th August 2023 in Java Web Development ;** along with that we will be helping him to clear his basics.

We wish best of luck for career and congratulation for becoming a member of our company.

Sincerely,

For, TECHMICRA IT SOLUTIONS
PROPRIETOR

techmicra IT Solutions

Pallav Mamtora
CEO Techmicra IT Solutions
pallav@techmicra.co.in

techmicra

CERTIFICATE

This is to certify that **Mr. Dipak Prajapati (Enrollment No. 200220131051) 7th** Semester **Govt. Engineering College Patan**, Department of Computer Engineering has successfully completed his internship and task work at "Techmicra IT Solutions", Ahmedabad, during **27th July 2023 till 10th August 2023.**

As a part of the internship till now he has completed the **Web Development with Java** tasks under our companies' guidance

Getting started with different types of file and project structure anatomy in Java & J2EE, Environment setup & Core Programming Concepts in Java Mutability Execution framework, Thread pool, Callable, Future, Reentrant lock ,Collections(Arrays, List, Que) Collections(HASH MAP, HASH TABLE, HASH SET) hashing features,JAVA 8 New features : Interfaces Optional class JAVA 8 New features , Servlet, JSP, Session Management with Authentication, Working with J2EE & JDBC Crud operations (insert, retrieve, update, delete, sorting, searching, pagination, chart generation),Overview of Hibernate basics configuration and ORM implementation, Usage in Spring or Spring Boot, Spring environment setup and configurations. Bean its usage and scope ,Spring IOC, DI, Setter injections, Autowirig ,Maven(POM), DI and Autowiring, AOP, Event Handling ,Spring Boot configuration and required annotation ,Controller and RESTful controller, CRUD operation with hibernate in spring boot - 1 and CRUD operation with hibernate in spring boot - 2.

His understanding of problem context and technical knowledge for the tools used was up to the mark. During the project work, we found him sincere and the work done by him was commendable.

We wish him all the best in his future endeavors and hope that he will have a successful career.

Sincerely,

For, TECHMICRA IT SOLUTIONS

Techmicra IT Solutions **CEO.**

CERTIFIED ISO 9001:2015 COMPANY

www.techmicra.co.in

info@techmicra.co.in | pallav@techmicra.co.in

+91-9727835207 | +91-9427617574

Office No. 12, Sanidhya Building, oppo. UCO Bank, Ashram Road, Ahmedabad - 380009

ACKNOWLEDGEMENT

I would also like to thank my Internal guide Prof. Mr. Divyesh Bavisa for helping us through our internship by giving us the necessary suggestions and advice along with their valuable co-coordination in completing this project.

I would also like to thank my parents, friends, and all the members of the family for their precious support and encouragement which they provided in the completion of my work. In addition to that, I would also like to mention personals who gave me permission to use and experience the valuable resources required for the project.

Thank you,

Dipak Prajapati (200220131051)

ABSTRACT

Online food ordering is a feature of our suggested system, which makes it convenient for customers. It eliminates the drawbacks of the conventional queuing mechanism. Our system is an easy way to order food from restaurants and get a mess service online. This system enhances the process of taking consumer orders. Customers can easily place orders as they like using the online meal ordering system, which sets up a food menu online. Additionally, clients can simply follow orders if there is a food menu.

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CHAPTER1: OVERVIEW OF ORGANIZATION

1.1 VISION:

To spread data literacy among business owners about what could be best achieved in their existing implementations by tuning them and what further can be achieved to their benefit.

1.2 DIFFERENT PROJECTS:

Retail Chain Analytics: The client is a retail sales giant having numerous stores across the USA, with each sending sales, invoice, inventory and other details in different formats.

GST Suvidha System: The client was developing a GST (Goods & Services Tax) Filing system which would help accountants to file the GST for their clients/companies.

1.3 SERVICES:

- **Data Ecosystem Designs**
  Expert Data Architects here design ecosystems where the different data platforms come together to work wonders.
- **Database Administration**
  Administering Database servers to make sure the database is always delivering the best performance 24*7.
- **Data Migrations**
  Migrating data across databases, servers, platforms and technologies to keep you up to date with latest in the market.
- **Data Warehouse & ETL**
  Large Scale Data Warehouse designs coupled with high performance ETL pipelines that aid your dashboards.
- **Advanced Analytics**
  Advanced Analytical Services designed using complex algorithms for forecasts and predictions.

1.4 EACH STAGE OF PRODUCTION:

- **Assemble the right team:**
  We handle all aspects of vetting and choosing the right team that you don't have the time, expertise, or desire to do.
- **Sprint planning:**
  Sprint roadmap is a collective planning effort. Team members collaborate to clarify items and ensure shared understanding.

- **Tech architecture:**
  We break monolithic apps into microservices. Decoupling the code allows teams to move faster and more independently.
- **Iterative delivery:**
  We divide the implementation process into several checkpoints rather than a single deadline.
- **Code reviews:**
  Code reviews before release help detect issues like memory leaks, file leaks, performance signs, and general bad smells**.**
- **Stand-ups & weekly demos:**
  Stand-ups, weekly demos, and weekly reviews make sure everyone is on the same page and can raise their concerns.

CHAPTER2: INTRODUCTION OF INTERNSHIP & PROJECT

2.1 PROJECT SUMMARY:

An online ordering system is software that lets your restaurant accept and manage orders placed online. An online food ordering system generally has two components – a website or app that allows customers to view the menu and place an order, and an admin interface that enables the restaurant to receive and fulfill customer orders.

Online food ordering systems are a great option for restaurants looking to respond to a rapidly changing operating environment – and most are relatively easy to set up. If you've been considering adding an online sales channel to your restaurant but you're not sure where to start, read on for insights and tips on choosing the right online ordering system for your business.

2.2 PURPOSE:

The main reason is that it benefits both the customer and the business. With a website or mobile app, customers can easily browse all the dishes the restaurant has available, customize dishes to their requirements, and place an order. It can also save their favourite orders allowing them to easily re-order that in the future. From the restaurant's perspective, they no longer spend time taking the customer's orders, stop worrying about communication errors, and streamline their order management workflow.

2.3 OBJECTIVE OF INTERNSHIP:

A great internship offers the knowledge and skills required to become successful in a specific career field. Employers spend a great deal of time and money on training their new employees, and they know that they can eliminate a lot of time by hiring someone with previous knowledge and experience.

The internship offers many advantages:

- Job experiences
- Research
- Experience
- Helps to guide career goals
- Create a professional network

I have experienced many of the good things during my internship period and still learning more. I have learned NodeJS, which was completely new, so it seemed too difficult. But now I am enjoying the NodeJS and ReactJS technology. I Have learned Full Stack Web development during my internship period.

2.4 BRIEF LITERATURE REVIEW:

Existing systems require more security and usability in order to attract more users. It involves a lot of manual paperwork and customers need to stay in the queue for a long time. The present systems are inadequate in providing information and advice to the agencies and customers about their orders.

2.5 TECHNOLOGIES USED:

- **IDE: VSCode Editor**
  Visual Studio Code is a code editor redefined and optimized for building and debugging modern web and cloud applications.

- **Programming Language:**
  HTML/CSS/Javascript
  HTML is a language by which you can make website, by the use of CSS you style your web content and javascript is interpreted language.

  Java
  Java is widely used programming language for coding web applications.

CHAPTER 3: PROJECT & INTERNSHIP PLANNING

3.1 PLANNING:

Project Planning is concerned with identifying and measuring the activities, milestones, and even before any development activity starts. Project planning consists of the following essential activities: deliverables produced by the project. Project planning is undertaken and completed sometimes

- Scheduling time.
- Risk identification, analysis, and accurate planning.
- Estimating some of the basic attributes of the project like cost, duration and efforts.

The effectiveness of the subsequent planning activities is based on the accuracy of these estimations. Project management involves planning, monitoring and control of the process and the events that occurs as the software evolves from a preliminary concept to an operational implementation. Cost estimation is a relative activity that is concerned with the resources required to accomplish the project plan.

3.2 WORK PLAN DURING INTERNSHIP:

Learn HTML basic concepts and web design	Performed practical on HTML concepts like Table, forms CSS and Bootstrap
Learned basics of OOPs	Performed practical on oops concept in java. Encapsulation Inheritance Polymorphism Data abstraction
javascript	Implemented basic functions like pop up box and blinking images
Project Work	Make a good, user-accessible, and easy-to-understand design.

3.3 PROJECT DEVELOPMENT APPROACH AND JUSTIFICATION:

A Software process model is a simplified abstract representation of a software process, which is presented from a particular perspective. A process model for software engineering is chosen based on the nature of the project and application, the methods and tools to be used, and the controls and deliverables that are required. All software development can be characterized as a problem-solving loop which in four distinct stages is encountered:

3.3.1 Requirement analysis

3.3.2 Design

3.3.3 Coding

3.3.4 Testing

3.3.5 Deployment

3.4 ROLES AND RESPONSIBILITY:

3.4.1 Continue to learn your skills as a software engineer.

3.4.2 Focus on depth of knowledge and expertise in a certain language, toolset, and area ofthe stack.

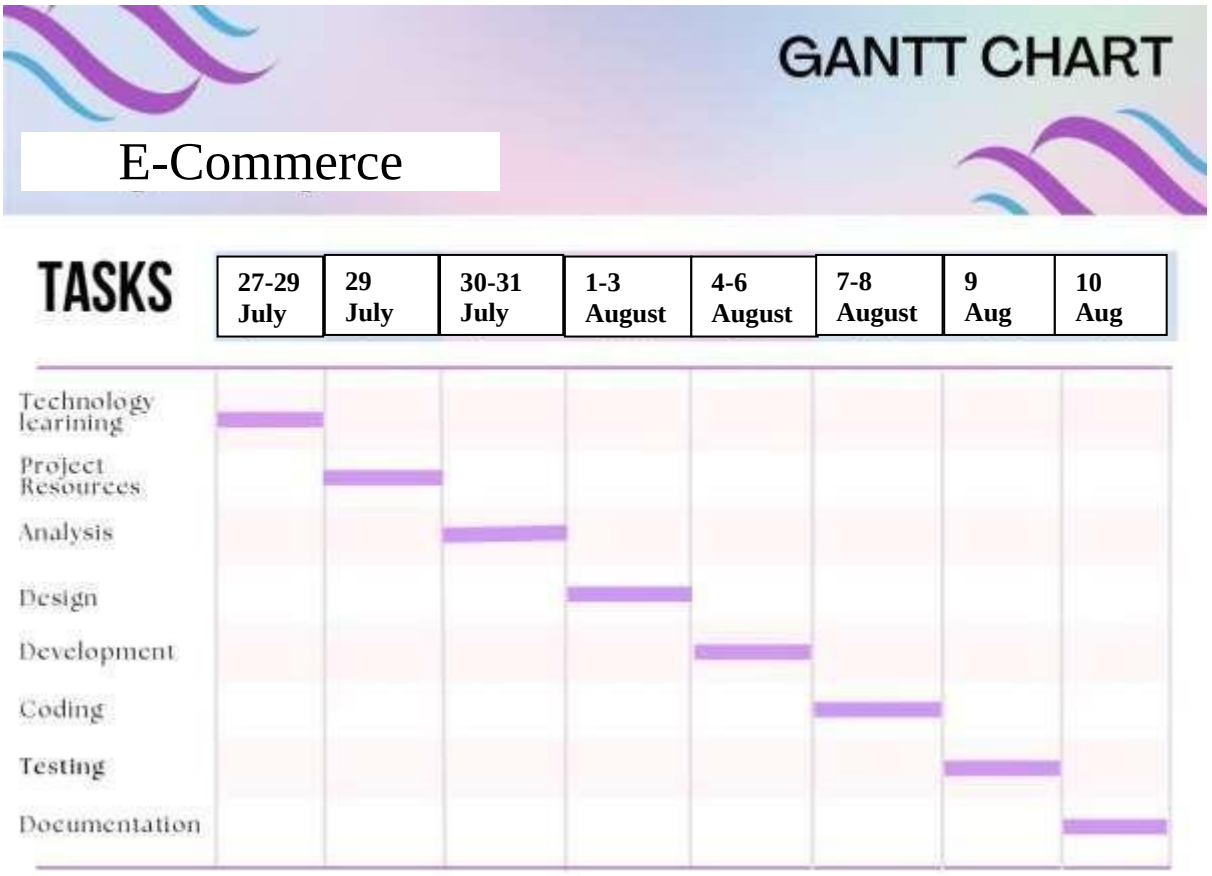
3.4.3 Learn soft skills to be better eligible for real world interaction with client andcolleagues.

3.4.4 Develop habits of following industry standards and good practices for softwaredevelopment under the guidance of a mentor.

3.4.5 Chose the right way to learn new things.

3.4.6 It is important to choose the right channel and ways to gain knowledge to becomesuccessful

3.5 GANTT CHART:



CHAPTER 4: SYSTEM ANALYSIS

4.1 CURRENT SYSTEM:

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. Venues will then receive the order details via their chosen online food ordering system and produce the order ready for delivery or customer pickup.

Despite the easing of restrictions, demand for takeaway and delivery food has remained high in Australia, with the number of people ordering food online for delivery increasing by 27% from 2020 to 2022.

4.2 WORKING AND SHORTCOMINGS OF CURRENT SYSTEM:

There can be a lack of system security, reliability, or standards owing to poor implementation of the ordering system. The software development industry is still evolving and keeps changing rapidly. In many countries, network bandwidth might cause an issue. The user interface can always be improved for the better.

4.3REQUIREMENTS OF NEW SYSTEM:

There are some problems that exist in traditional systems, and those are given as follows:

- There will be many users visiting the portal, and hence we require a reliable and robust frontend that can withhold the users on our site.
- Better user interface for easy ordering.

4.4 SYSTEM FEASIBILITY:

4.4.1 Does the system contribute to the overall objectives of the organization?

Yes, the system contributes to the overall objectives of the organization.

4.4.2 Can the system be implemented using the current technology and within the given cost and schedule constraints?

Yes, the system be implemented using the current technology and within the given cost and schedule constraints.

3.4.3 Can the system be integrated with other systems that are already in place*?*

Yes, this can directly communicate through API to the other system. But this phase is in the Future work currently we are focused on better compression methods.

4.5PROPOSED SYSTEM & FEATURES:

- **Easy to use**
- **Economically good**
- **Security**
- **Flexibility:**

4.6 LIST OF MODULES:

4.6.1 Web User Pages:

- **Main Landing Page:**
  The landing page includes some of the most featured items and exclusive items.
- **Products Page:**

  It shows all the items that are listed.
- **Contact Page:**

  It shows contact information and takes suggestions.
- **Profile Page:**

  It shows your login form and registration form.
- **Cart Page:**

  It shows the items you want to order.
- **Order Detail Page:**

  It is for every order and shows its details.

CHAPTER 5: SYSTEM DESIGN

5.1 Data Dictionary:

Login table:

Field	Data type
Username	Varchar
Password	Varchar

Registration table:

Field	Data type
Username	Varchar
E-mail	Varchar
Password	Varchar
Mobileno	int

Cart:

Field	Data type
Username	Varchar
id	int
Product_id	int
quantity	int

5.2 USE CASE DIAGRAM:

Purpose:

The purpose of use case diagram is to capture the dynamic aspect of a system. But this definition is too generic to describe the purpose. Because other four diagrams (activity, sequence, collaboration and State chart) are also having the same purpose. So, we will look into some specific purpose which will distinguish it from other four diagrams. Use case diagrams are used to gather the requirements of a system including internal and external influences. These requirements are mostly design requirements. So, when a system is analyzed to gather its functionalities use cases are prepared and actors are identified. Now when the initial task is complete use case diagrams are modelled to present the outside view.

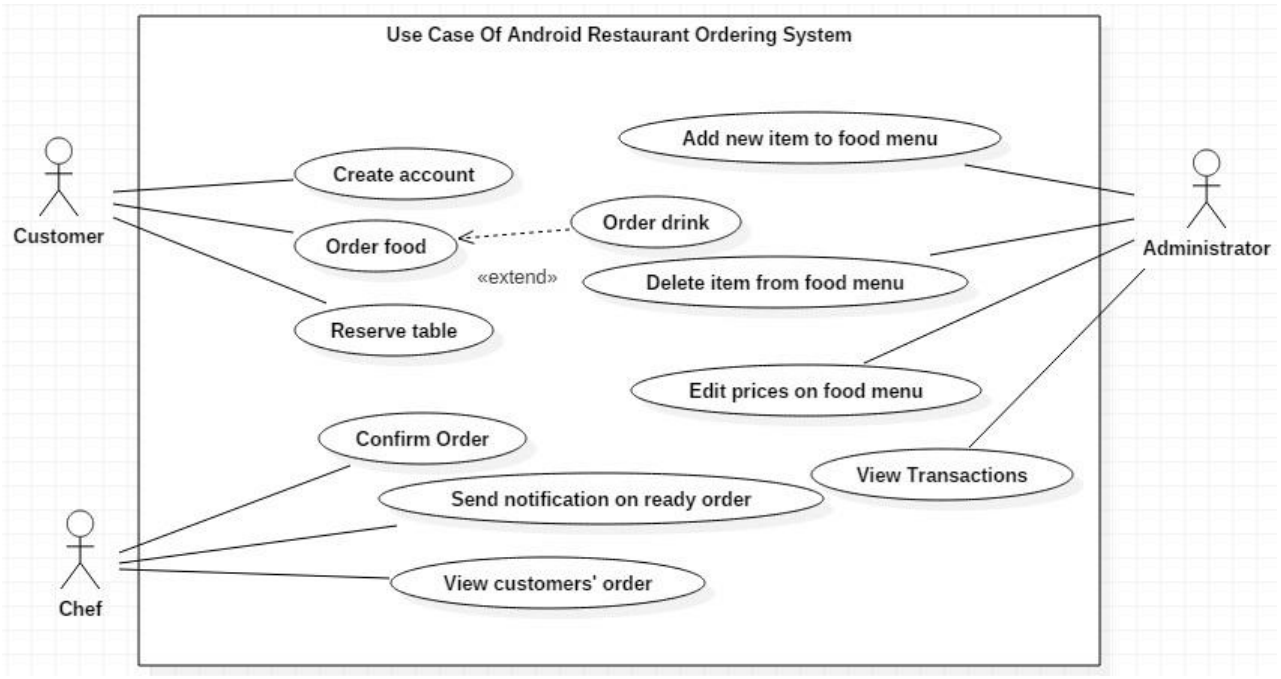
So, in brief, the purposes of use case diagrams can be as follows:

- Used to gather requirements of a system.
- Used to get an outside view of a system.
- Identify external and internal factors influencing the system.
- Show the interacting among the requirements are actors.

Use Case Model

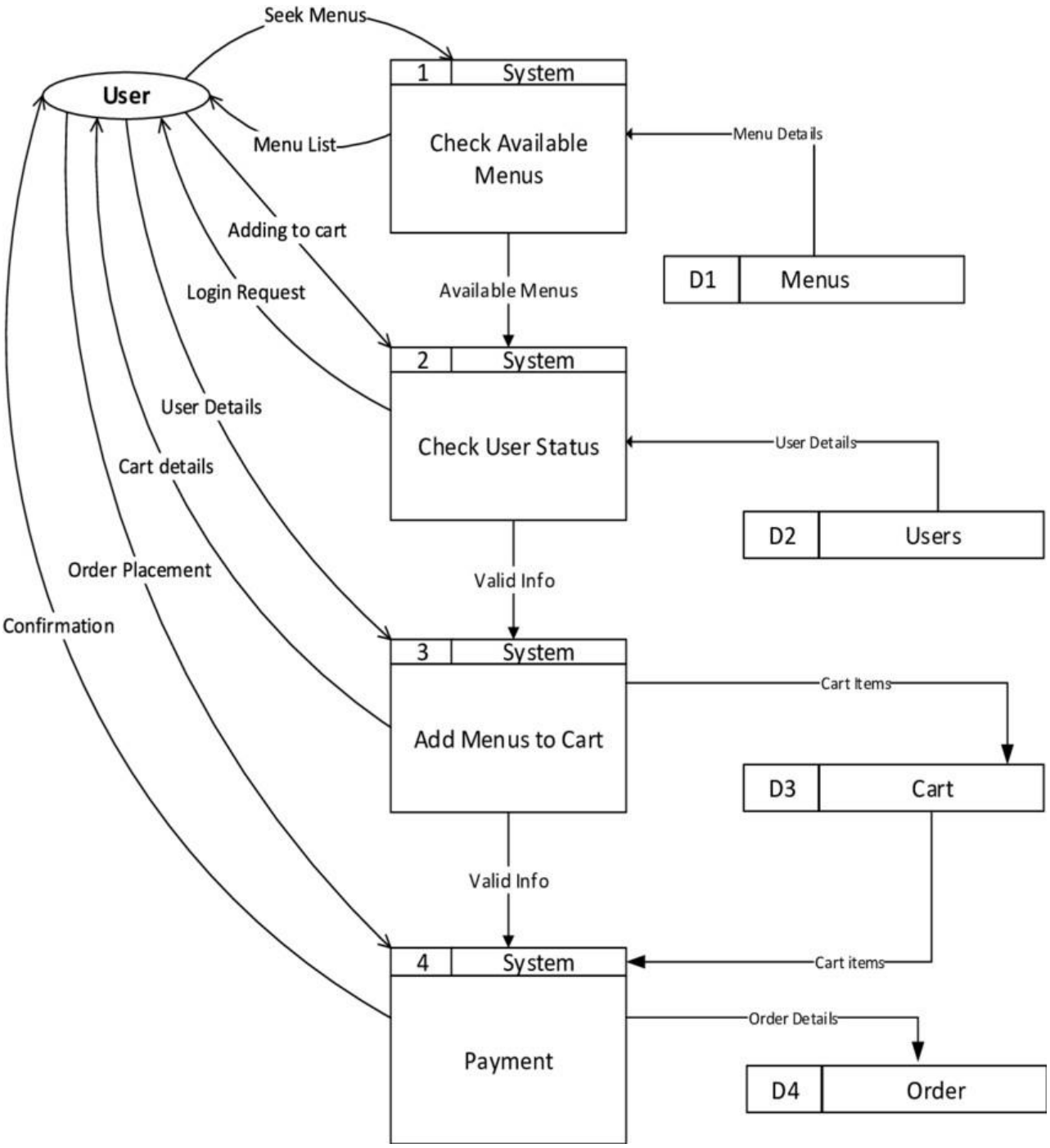
The use case model captures the requirements of a system. Use cases are a means of communicating with users and other stakeholders what the system is intended to do.

A use case diagram shows the interaction between the system and entities external to the system. These external entities are referred to as actors. Actors represent roles that may include human users, external hardware, or other systems. An actor is usually drawn as a namedstick figure, or alternatively as a class rectangle with the «actor» keyword.



5.3 DATA FLOW DIAGRAM:

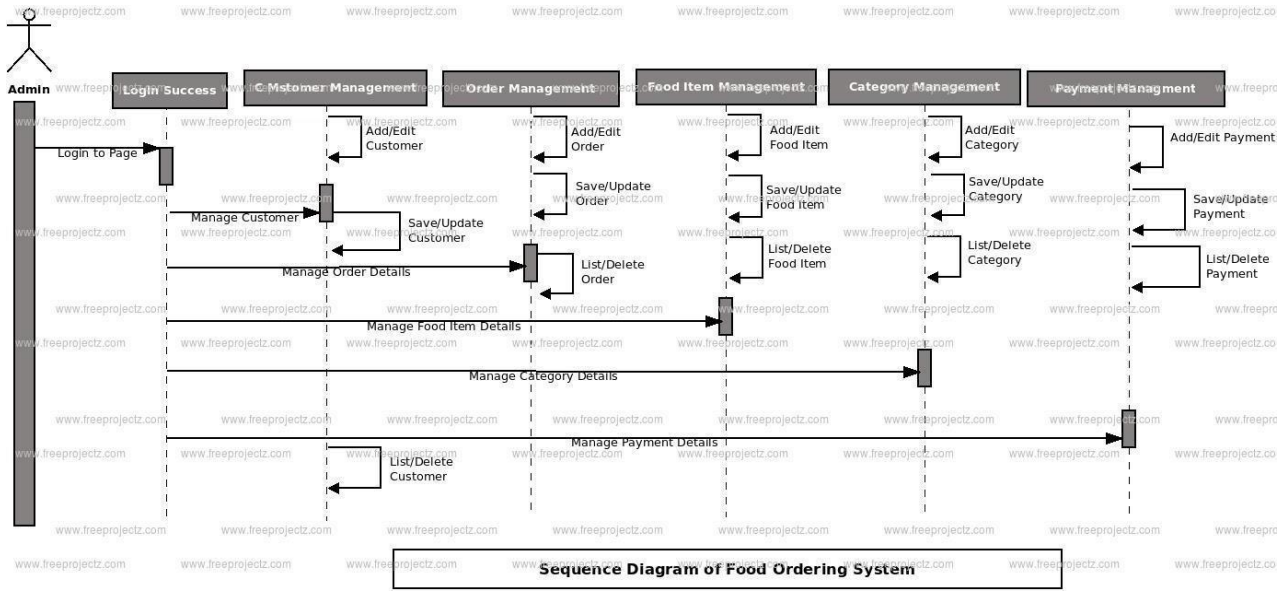
The diagram is a graphical representation of the flow of data through an information system. It differs from the system flowchart as it shows the flowchart as it shows the flow of data through processes instead of hardware. A data flow diagram is a logical model of the system and shows the flow of the data and the flow of logic so this all thing describes what takes place in a proposed system, not how the activities are accomplished. DFD consists of a series of symbols joined together by a line. There may be a single DFD for the entire system or it may be exploded into various levels.


Seek Menus
User
1
System
Check Available Menus
Menu List
Menu Details
D1
Menus
Adding to cart
Login Request
Available Menus
2
System
Check User Status
User Details
D2
Users
User Details
Cart details
Order Placement
Confirmation
Valid Info
3
System
Add Menus to Cart
Cart Items
D3
Cart
Valid Info
4
System
Payment
Cart items
Order Details
D4
Order

5.4 SEQUENCE DIAGRAM:

A sequence diagram or system sequence diagram (SSD) shows object interactions arranged in time sequence in the field of software engineering. It depicts the objects involved in the scenario and the sequence of messages exchanged between the objects needed to carry out thefunctionality of the scenario. Sequence diagrams are typically associated with use case realizationsin the logical view of the system under development. Sequence diagrams are sometimes calledevent diagrams or event scenarios.

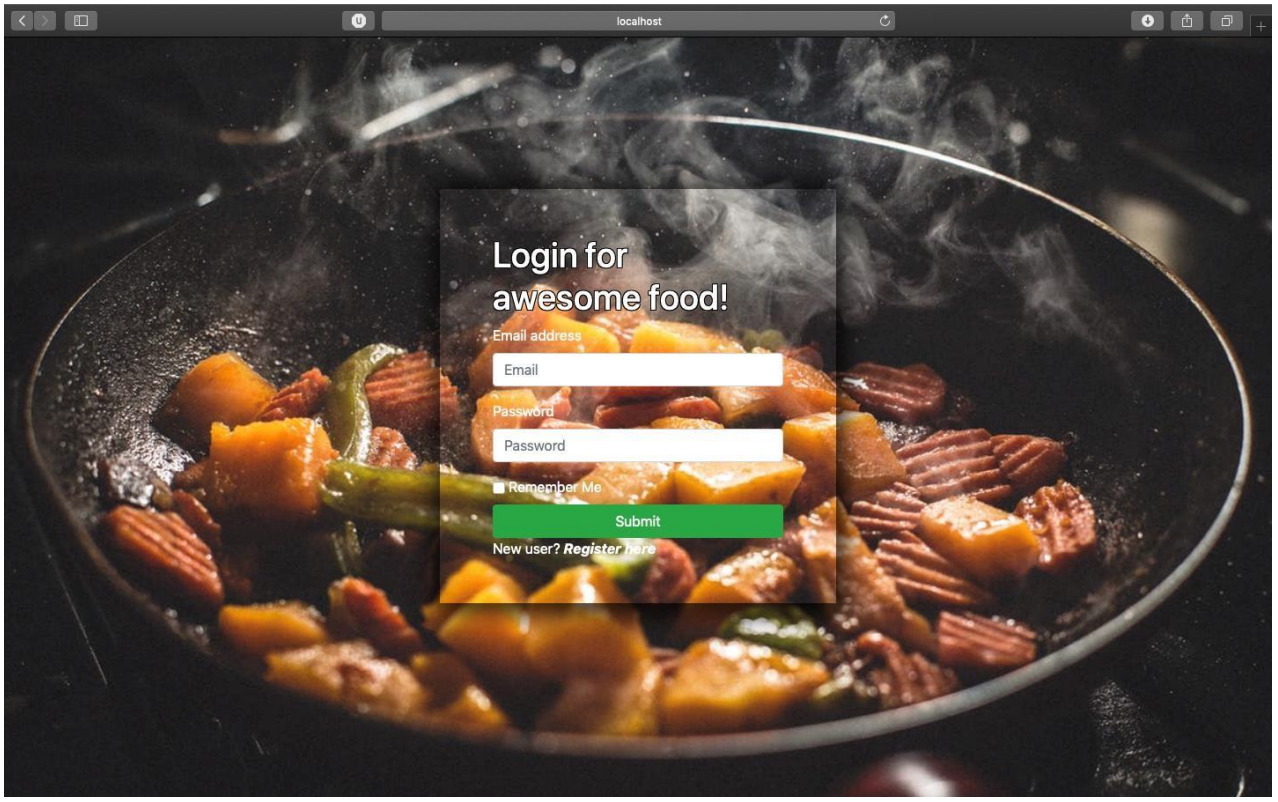
The sequence diagram represents the flow of messages in the system and is also termed an event diagram. It helps in envisioning several dynamic scenarios. It portrays thecommunication between any two lifelines as a time-ordered sequence of events, such that theselifelines took part in the run time. In UML, the lifeline is represented by a vertical bar, whereasthe message flow is represented by a vertical dotted line that extends across the bottom of the page. It incorporates the iterations as well as branching.

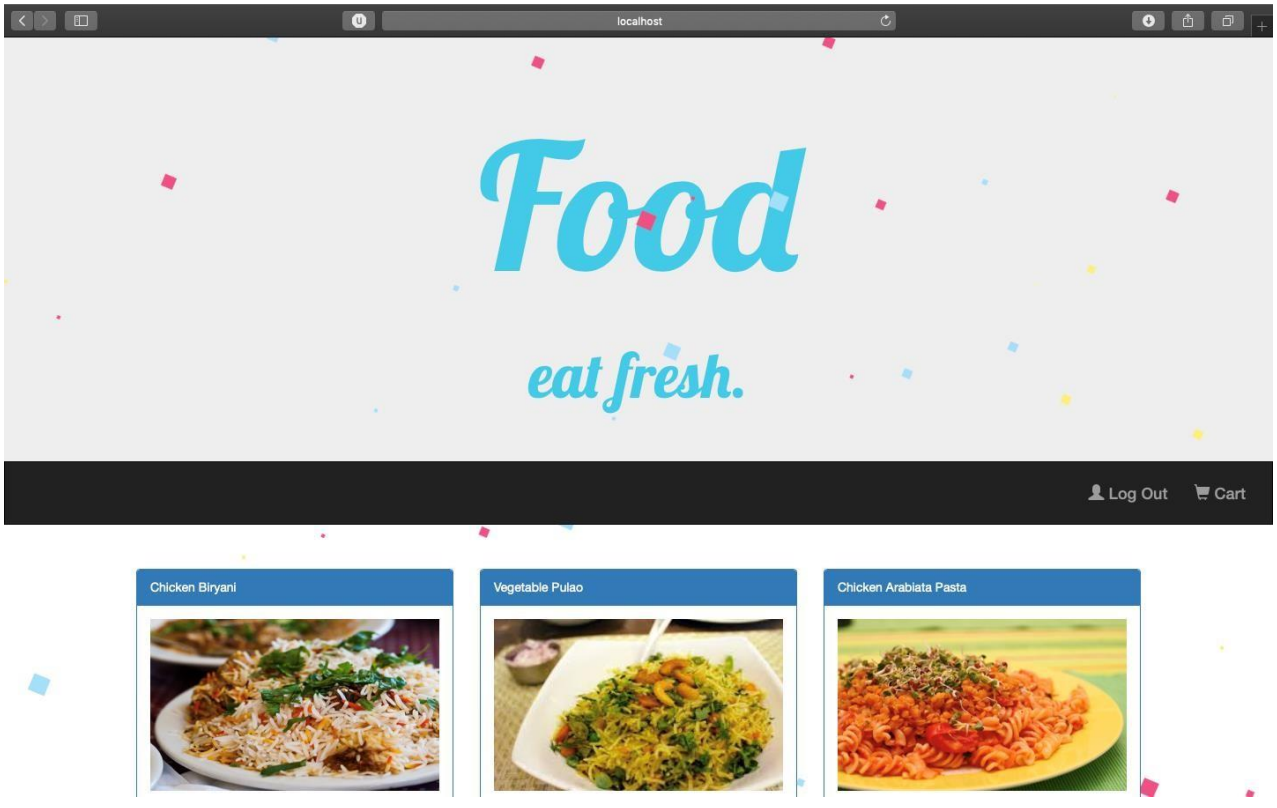


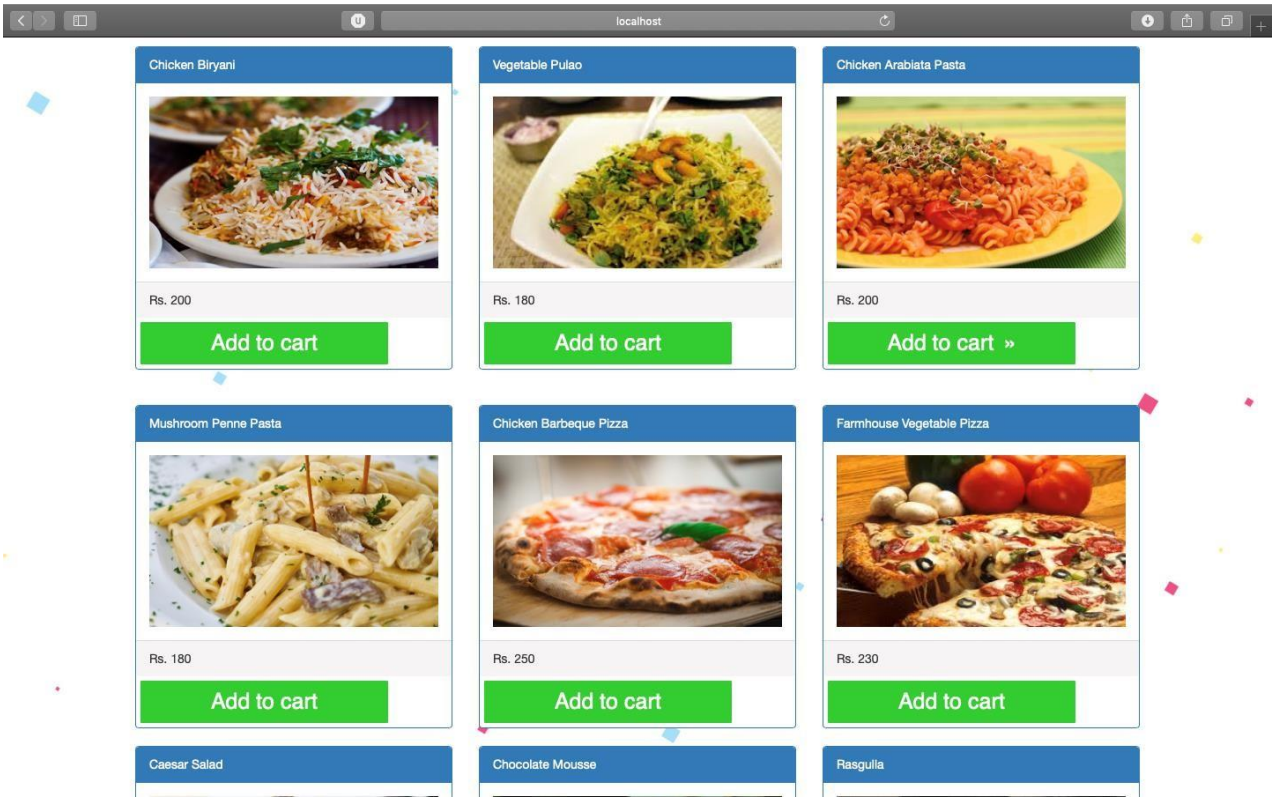
Sequence Diagram of Food Ordering System

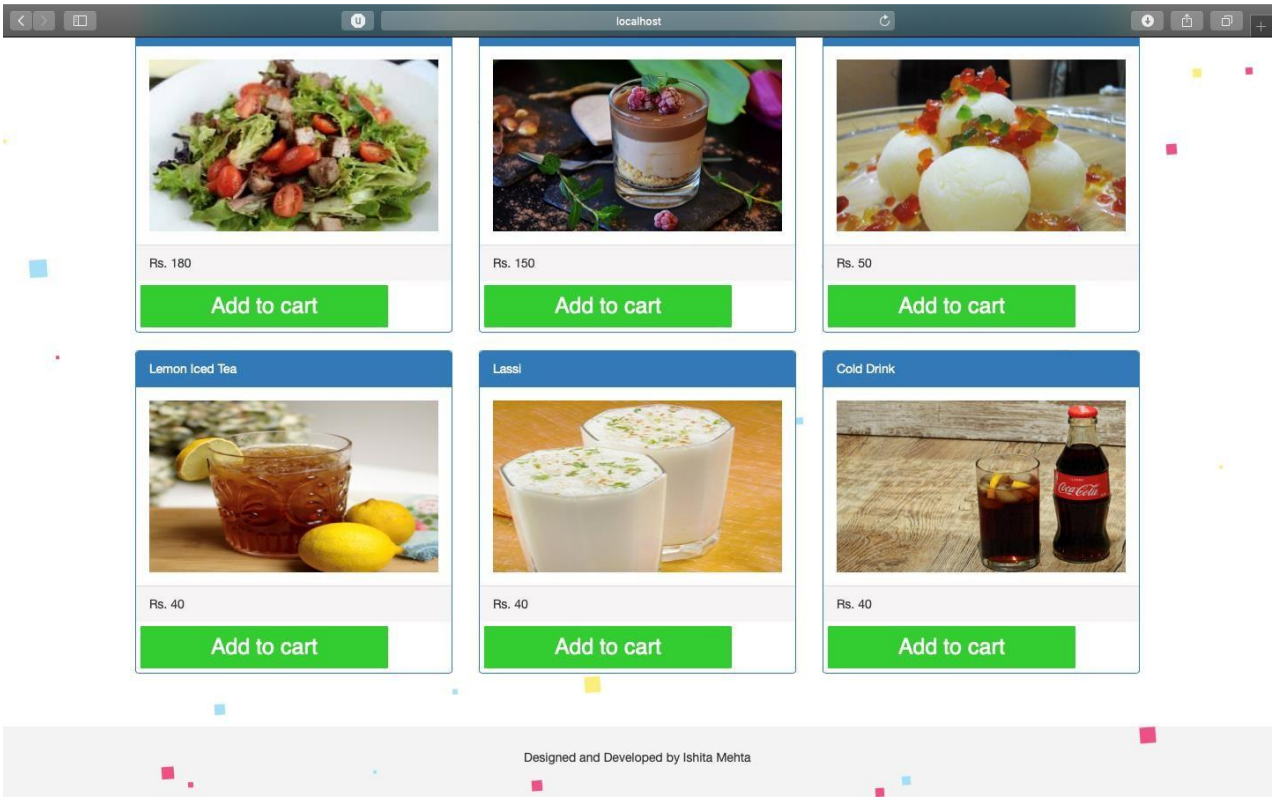
CHAPTER 6: IMPLEMENTATION

6.1 Web User Screen






localhost
Chicken Biryani
Rs. 200
Add to cart
Vegetable Pulao
Rs. 180
Add to cart
Chicken Arabiata Pasta
Rs. 200
Add to cart »
Mushroom Penne Pasta
Rs. 180
Add to cart
Chicken Barbeque Pizza
Rs. 250
Add to cart
Farmhouse Vegetable Pizza
Rs. 230
Add to cart
Caesar Salad
Chocolate Mousse
Rasgulla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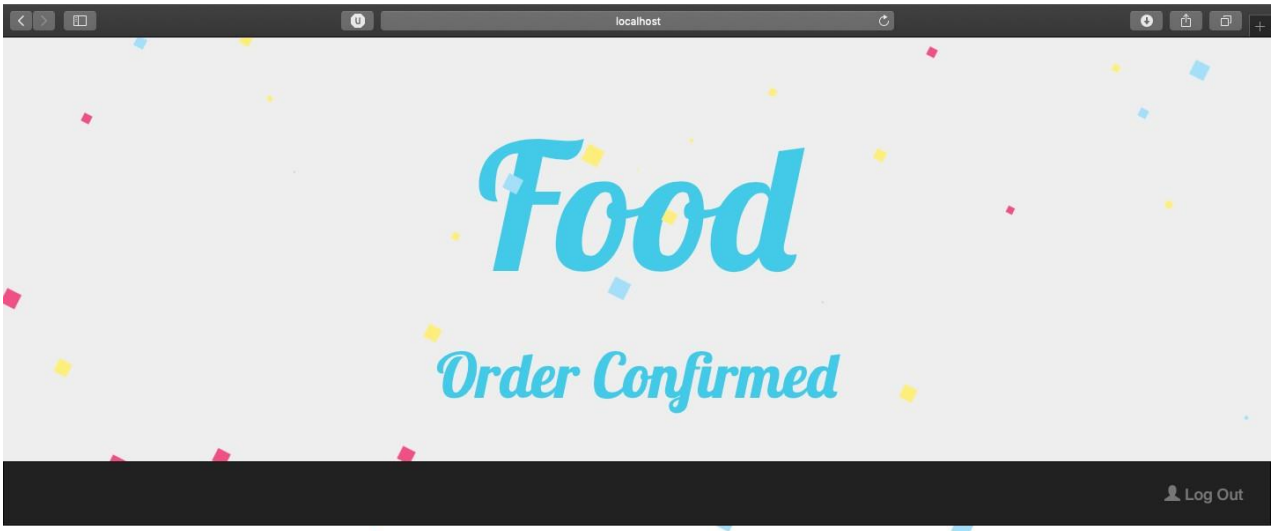
Rs. 180
Add to cart
Rs. 150
Add to cart
Rs. 50
Add to cart
Lemon Iced Tea
Rs. 40
Add to cart
Lassi
Rs. 40
Add to cart
Cold Drink
Rs. 40
Add to cart
Designed and Developed by Ishita Mehta

Product	Price	Quantity	Subtotal
Chicken Biryani	200	1	200
Vegetable Pulao	180	1	180

Total Rs.
380

Product	Price	Quantity	Subtotal
Coke	40	1	40
Chicken Biryani	200	1	200
Vegetable Pulao	180	1	180
Chicken Arabiata Pasta	200	1	200
Chocolate Mousse	150	1	150

Total Rs.
770



Great! Your order with order_id 35 has been confirmed.
It will reach you within 45 mins!
Keep Rs. 770 ready.
Thank you for ordering with us!

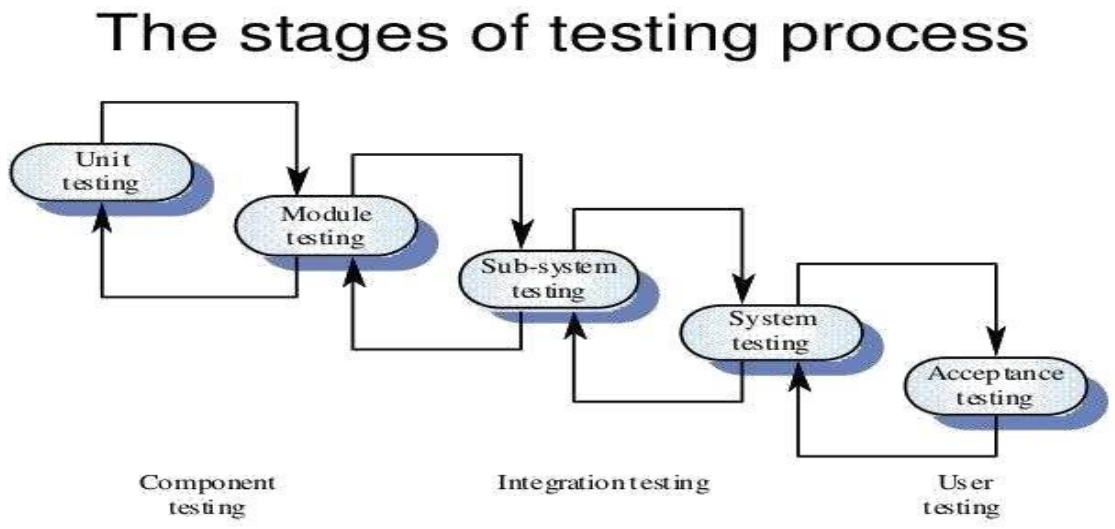
CHAPTER 7: TESTING

7.1 TESTING PLAN/STRATEGY

A test plan is a systematic approach to testing a system such as a machine or software.

Depending on the product and the responsibility of the organization to which the test planapplies, a test plan may include one or more of the following:

1. Design Verification or Compliance test - to be performed during the development or approval stages of the product, typically on a small sample of units.
2. Manufacturing or Production test - to be performed during the preparation or assembly of the product in an ongoing manner for purposes of performance verification and quality control.
3. Acceptance or Commissioning test - to be performed at the time of delivery or installation of the product.
4. Regression test - to be performed on an existing operational product, to verify thatexisting functionality didn't get broken when other aspects of the environment are changed (e.g., upgrading the platform on which an existing application runs)



In this project we have done the manual testing to verify that all our functionality works properly or not. The testing process is carried out when we had completed the implementation of all the functionality So here, the testing had been done at the end of the internship.

In this project, we have done the functional testing that check each functionality works properly

or not. All the testing procedure is carried out manually.

7.2 Test Results:

Test id	Testing conditions	Expected output	Actual output	remarks
1	Navigation traversing	Should be done without any glitch	Happened without any glitch	No
2	Work in all dimensions of screen	Design should not distort	Design adjusted according to screen	No
3	Items details	Should show item details and various selection of items	It shows product description sand selectable Quantity	No
4	Cart	Should show cart and items to order	It shows listed items	No

CHAPTER 8: CONCLUSION AND DISCUSSION

8.1 Overall Analysis of Internship

During the internship first of all I got the basic knowledge of our languages and then the project. In the project first of all we have to design the webpages according they have given as per the SRS (Software Requirements Specification),we have to do testing of our website. Along with the project implementation, we were working with Git and managing the front

8.2 Dates of Continuous Evaluation (CE-I and CE-II)

CE-1: 22/01/2023

CE-2: 05/03/2023

8.3 Problem Encountered and Possible Solutions

Sometimes the problem occurs suppose two customers try to order the same product and the same time slot then in the database concurrency problem arises. So, there would be possible solutions that in our algorithms we have to implement the synchronization methods so by implementing this method the concurrency issues are solved.

Another problem is that we have to enhance the distance calculation between the customer and product providers by using third-party libraries or APIs. As more efficient the calculation of distance more efficient would be assigned to the service providers properly.

8.4Summary of Internship

In conclusion, online ordering has revolutionized the way we order food, offering unparalleled convenience, a vast selection of items, competitive prices, and doorstep delivery. It has empowered consumers with information, simplified the ordering process, and provided access to a global marketplace.

REFERENCES:

https://github.com
https://www.geeksforgeeks.org
https://getbootstrap.com/