



PROJECT REPORT ON "FOOD ORDERING SYSTEM"

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Abstract

The purpose of Online Food Ordering System is to automate the existing manual system by the help of computerized equipment's and full-fledged computer software, fulfilling their requirements, so that their valuable data/information can be stored for a longer period with easy accessing and manipulation of the same. The required software and hardware are easily available and easy to work with.

The Online Food Ordering System's main purpose is to maintain track of information such as Item Category, Food, Delivery Address, Order, and Shopping Cart. It keeps track of information about the Item Category, the Customer, the Shopping Cart, and the Item Category. Only the administrator gets access to the project because it is totally built at the administrative level. The project's purpose is to develop software that will cut down on the time spent manually managing Item Category, Food, Customer, and Delivery Address. It saves the Delivery Address, Order, and Shopping Cart information.

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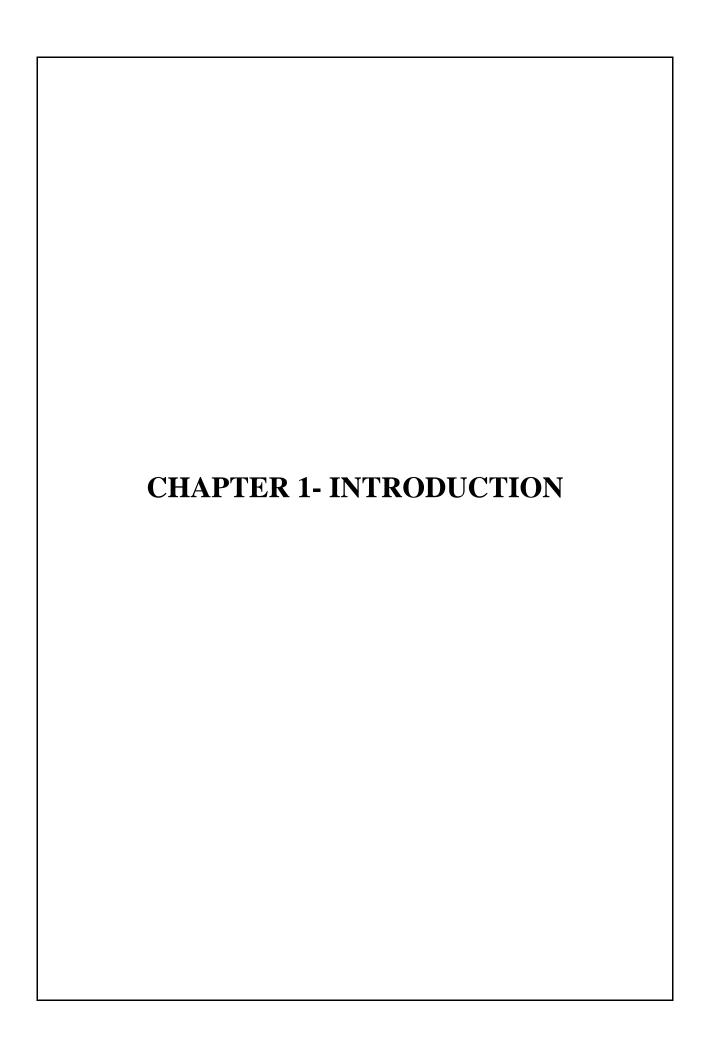
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1.2 Introduction

Online food ordering is the process of ordering food from a website. The product can either be food that has been specially prepared for direct consumption (such as vegetables straight from a farm or garden, frozen meats, etc.) or food that has not been (such as direct from a certified home- kitchen, restaurant). The effort to create an online food ordering system aims to replace the manual method of taking orders with a digital one. The ability to rapidly and correctly create order summary reports whenever necessary is a key factor in the development of this project.

The potential of an online food ordering system is enormous. Any restaurant or fast food chain can use this PHP project to keep track of customer orders. This project is simple, quick, and precise. There is less disk space needed. MYSQL Server is used as the backbone by the online food ordering system, eliminating the risk of data loss and ensuring data security. Customers have the option of either having the food delivered or picked up. A customer starts by selecting the restaurant of their choice, then scans the menu, picks an item, and then decides whether they want it delivered or picked up. Then, when picking up the food, you can pay with cash at the restaurant or with a credit card or debit card using the app or website. The customer is informed by the website and app about the food's quality, how long it takes to prepare, and when it will be ready for pick-up or delivery.

1.3 Objectives of the study

- User Experience Evaluation: Assess the website's usability and user interface to identify areas for improvement.
- Customer Satisfaction Analysis: Measure customer satisfaction levels to gauge the effectiveness of the website in meeting user needs.
- Order Processing Efficiency: Evaluate the efficiency of the order processing system, including order placement, payment processing, and delivery.
- **Menu Optimization:** Analyze the menu offerings and customer preferences to optimize menu selection and customization options.
- **Performance Assessment:** Measure website performance metrics such as load times, uptime, and responsiveness to ensure a smooth user experience.
- **Security Assessment:** Assess the security measures implemented on the website to safeguard user data and payment information.
- **Competitive Analysis:** Conduct a comparative analysis with competitors' websites to identify strengths, weaknesses, and opportunities for differentiation.

1.4 Scope of the study:

- User Experience (UX): Assessing the ease of navigation, user interface design, and overall satisfaction of users when using the website.
- Ordering Process Efficiency: Analyzing the speed and efficiency of the ordering process from selecting items to completing the order.
- **Payment Systems:** Evaluating the security and convenience of payment methods offered on the website, such as credit card, PayPal, or mobile payment options.
- Customer Satisfaction: Gathering feedback from users to measure satisfaction levels
 with various aspects of the website, including order accuracy, delivery time, and
 customer service.
- **Delivery Logistics:** Studying the effectiveness of the delivery process, including delivery time, accuracy, and communication with customers.
- **Menu Optimization:** Analyzing the menu offerings to ensure they meet customer preferences, dietary restrictions, and trends in the food industry.
- Market Analysis: Conducting research on the target market, competitors, and industry trends to identify opportunities for growth and improvement.
- **Technological Infrastructure:** Assessing the backend systems, database management, and security measures to ensure smooth operation and protection of user data.
- **Promotional Strategies:** Examining the effectiveness of promotional campaigns, discounts, and loyalty programs in attracting and retaining customers.
- Accessibility: Ensuring that the website is accessible to users with disabilities and complies with relevant accessibility standards and guidelines

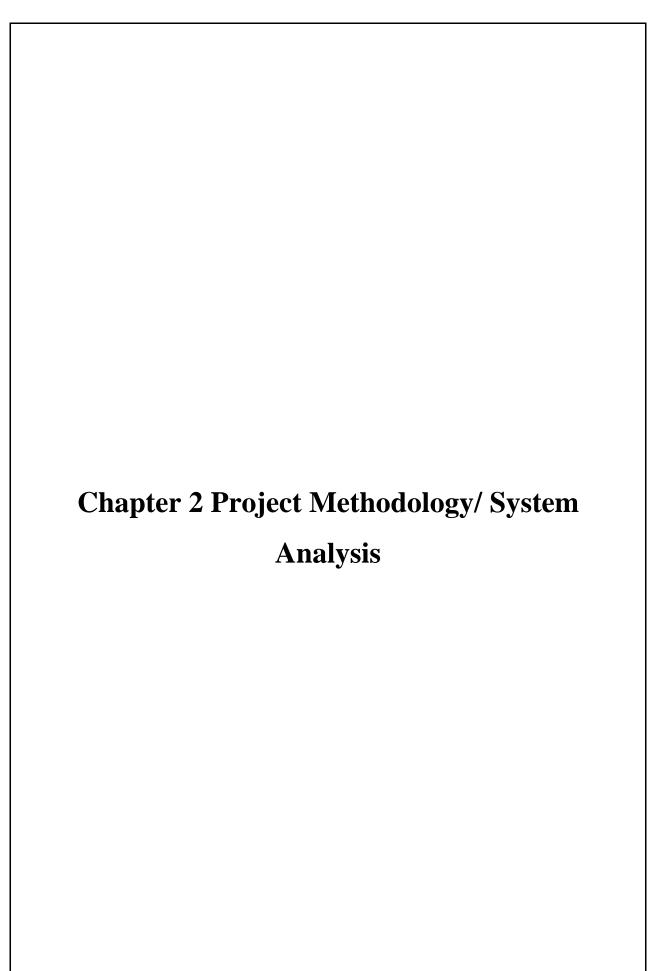
1.5 Proposed System

- User Registration/Login: Users can create an account or log in using their email, social media accounts, or phone number.
- **Browse Menu:** Users can browse the menu, filter items by category, cuisine type, or dietary preferences, and view detailed descriptions and images of each item.
- Order Placement: Users can add items to their cart, specify customization options (e.g., toppings, sauces), and proceed to checkout.
- Checkout Process: Users enter delivery details (address, contact information) and select a payment method. They can also apply discounts or promo codes.
- Payment Processing: Secure payment processing is handled through integration with payment gateways like Stripe or PayPal, supporting credit/debit cards, digital wallets, and other payment options.
- **Order Confirmation:** Users receive a confirmation email or SMS with order details and an estimated delivery time.
- Order Management: Restaurant staff receive orders through a dashboard or mobile app, enabling them to track order status, manage inventory, and communicate with delivery drivers.
- **Delivery Tracking:** Users can track the status of their order in real-time, including preparation, dispatch, and estimated arrival time.
- **Feedback and Ratings:** After delivery, users can provide feedback and ratings on their experience, helping to improve service quality.
- **Customer Support:** Users can contact customer support via chat, email, or phone for assistance with orders, inquiries, or issues.

- **Promotions and Loyalty Programs:** The website can offer promotional discounts, special deals, and loyalty rewards to incentivize repeat orders and customer retention.
- Analytics and Reporting: The system collects data on user behavior, order trends, and sales performance, enabling business analysis and decision-making.
- Accessibility and Security: The website adheres to accessibility standards and implements robust security measures to protect user data and transactions.
- **Mobile Responsiveness:** The website is optimized for mobile devices, providing a seamless user experience across desktop, tablet, and smartphone platforms.
- **Integration with External Systems:** Integration with external systems such as inventory management, POS systems, and third-party delivery services streamlines operations and enhances efficiency.

1.6 Limitations of the study

- Implement user authentication and authorization to ensure secure access and prevent unauthorized actions on the website.
- Utilize session management to keep track of user activity and maintain their shopping cart contents throughout their browsing session.
- Integrate a robust search functionality allowing users to easily find specific dishes or restaurants based on various criteria such as cuisine, price, or location.
- Incorporate a responsive design to ensure the website is accessible and user-friendly across different devices and screen sizes.
- Implement an order tracking system that provides real-time updates to users on the status of their orders, from confirmation to delivery.



2.1 Method of study

2.1.1 Survey

In a survey regarding the method of study related to the food order website, researchers would typically aim to investigate various aspects of the website's functionality, user experience, and effectiveness. The study might involve collecting data from various website and users to understand their perspectives, preferences, and challenges. Researchers may employ a combination of qualitative and quantitative research methods to gather comprehensive insights.

Quantitative methods, such as surveys or questionnaires, could be employed to gather numerical data on participants' usage patterns, preferences, and satisfaction levels. Likert scale questions and rating scales may be used to assess factors such as ease of use, reliability, and responsiveness of the website.

By analyzing the survey data, researchers can identify areas for improvement and inform recommendations for enhancing the food order website's functionality, user experience, and overall effectiveness.

To study food order websites, researchers typically use methods such as user surveys, usability testing, competitive analysis, market research, data analysis, and expert evaluation

2.1.2 Project Design:

- System Design The system design is created in this phase after studying the requirement specifications from the first phase. This system design aids in determining the overall system architecture as well as the hardware and system requirements.
- Implementation The system is initially built in discrete programs known as units, which are then combined in the following phase, using inputs from the system design. Unit testing is the process of developing and evaluating each unit for functionality.
- Integration and Testing Following the testing of each unit created during the implementation phase, the entire system is merged. The entire system is tested for errors and failures after integration.
- Deployment of system Once the product has undergone functional and non-functional testing. it is either published to the market or deployed in the customer's environment.
- Maintenance Various problems can arise in a client environment. Patches are published
 to address certain problems. Additionally, improved versions of the product are issued.
 To bring about these changes in the surroundings of the consumer, maintenance is
 performe

2.1.3 Requirements Determination:

Determining the requirements for a food order website involves identifying key features such as user registration, menu browsing, order placement, payment processing, delivery options, and possibly, integration with third-party delivery services. It's crucial to consider user experience, security, scalability, and any specific functionalities tailored to your target audience or cuisine type. Additionally, think about administrative features like order management, menu updates, and customer support tools.

Requirement analysis focuses on the tasks that determine the needs or conditions to meet the new or altered product or project, taking account of the possibly conflicting requirement of the various stakeholders, analyzing, documenting, validating and managing software or system requirements. The requirements can be classified as functional and non-functional requirements.

Functional Requirement are the state of services the system should provide how the system should react to the particular input and how the system should behave in particular situation. A typical functional requirement will contain a unique name and number, a brief summary. and a rational. This information is used to help the reader understanding why the requirement is needed, and to track the requirement through the development of the system. Some of the functional requirements of "Online Food Ordering System" includes:

- Customer should be able to view menu.
- Customer should be able to add menu item into the cart.
- Customer should be able to place order.
- Customer should be able to track their order.
- Customer should be able to view invoice.
- Admin should be able to update menu.

2.1.4 Hardware and Software Requirements:

Hardware Requirements:

Client Side:

RAM	8 GB
Hard disk	10 GB
Processor	Intel core i5

Server side:

RAM	8 GB
Hard disk	20 GB
Processor	Intel core i5

Software Requirement:

Client Side:

Web Browser	Google Chrome or any compatible browser
Operating System	Windows or any equivalent OS

Server Side:

Web Server	АРАСНЕ
Server side Language	PHP5.6 or above version
Database Server	MYSQL
Web Browser	Google Chrome or any compatible browser
Operating System	Windows or any equivalent OS

2.1.5 Feasibility Study:

A feasibility study is an analysis of how successfully a project can be completed, accounting for factors that affect it such as economic, technological, legal and scheduling factors. It shows how the business is associated with the business strategy. The categories within the feasibility study that need to be discussed are technical, economical and operational feasibility. The technical issue usually rises during the feasibility stage of the investigation. Online Food Ordering System is a system that effectively and efficiently manage the mass numbers of food order at a same time.

The current system develop is technically feasible. So, cost of maintenance will reduce. It provides an easy access to the users and it provides the technical guarantee of accuracy and reliability. As all the hardware and software tools required for implementation of the system is under the budget of the organization.

The software and hardware requirements for the development of this project are not many and are already available as free as open source. Also, software can be easily upgraded to accomplish specific user requirements. The programming language and database are open source. The system is based on a real-time database that provides real-time updates to the information change in the database. They all are easily available to the public.

This system allows for the feasible work operation of the restaurant, where the data may change constantly and assures for the availability of real-time updated data. Hence technically there is no limitation for the development of the software.

As the software was developed to solve the problem of the organization according to the requirements and the organization is also satisfying with the solution suggested. So, they are ready to operate software once it is developed and operative once it is installed. It is easier to use and there is no need of skilled manpower to use this system. That will meet the organization's operating requirement. This system will provide all the information to customer without having any direct contact to organization.

2.2 System Requirement Specification i.e. Sampling

2.2.1 Frame (Stakeholders and there modules)

System Requirement Specification (SRS):

The SRS for the food ordering website for SIP report outlines what the system needs to do and how it should work. It ensures that the website efficiently manages food order for restaurants and generates reports required for the SIP (Systematic Investment Plan) process.

User Interface and Application Interface Specification):

The User Interface (UI) of the website is designed to be user-friendly for customers. The Application Interface ensures smooth communication between different parts of the website, like order management and report generation.

Frame (Stakeholders and their modules):

Stakeholders involved in the website include customers, admin, and restarants. Each stakeholder group has its own module within the website tailored to their specific needs. This modular approach ensures that each stakeholder can efficiently perform their tasks within the system.

2.2.2 Size, determination of sample size (Who use? Stakeholders)

Determining the sample size and understanding the stakeholder demographics are crucial for conducting meaningful usability testing and gathering actionable feedback. Here are several points that detail considerations for the sample size and identification of key stakeholders for this project:

- 1. Project Scope and Complexity: The complexity and the breadth of the website's features (e.g., menu browsing, order customization, payment processing) should guide the sample size. A more complex site usually requires a larger sample size to capture varied interactions and potential issues across different functionalities.
- 2. Target User Demographics: The primary users of the food ordering website are likely to be individuals who prefer the convenience of ordering food online. This could include working professionals, busy parents, or students. Understanding the age, techsavacity, and lifestyle of these groups will help in selecting a representative sample.
- **3. Technological Proficiency**: Stakeholders should include both tech-savvy users and those who are less comfortable with digital platforms to ensure the website is user-friendly across the board. This variance helps in refining UI/UX to cater to all skill levels.
- **4. Stakeholder Roles**: Stakeholders are not just the end users but also include the restaurant owners or food providers who will use the admin side of the website. Including them in the sample helps ensure their needs (like ease of updating menu items, managing orders, viewing earnings) are met.
- **5. Frequency of Use**: Consider the expected frequency of use among different user groups. Regular users might focus more on features like order history and quick reordering while occasional users might prioritize ease of navigation and clarity of menu items.
- **6. Inclusion of Special Needs**: It's beneficial to include users with special needs, such as those with visual impairments or dietary restrictions, to ensure the website is accessible and caters effectively to all customer requirements.

By considering these factors, the project can define a sample size and composition that will yield useful insights during usability testing and other feedback mechanisms, ultimately leading to a more successful deployment of the food ordering website.

2.2.3 Method of Selection (Why these Stakeholders?)

Our stakeholder selection process was grounded in identifying key roles that hold significant influence over the project's success. We focused on the following criteria:

- 1. Expertise and Knowledge: We prioritized individuals and groups who bring essential knowledge and expertise in the food service industry, web development, cybersecurity, and customer service. This includes chefs, restaurant owners, IT specialists, and customer support staff.
- 2. Representation of User Base: To create a user-centric platform, it was imperative to include stakeholders who represent the broad spectrum of our potential user base. This encompasses demographics such as age, dietary preferences, geographic location, and tech-savviness. Including such diversity helps in tailoring the user experience to meet varied needs and preferences.
- **3. Influence and Decision-Making Power:** Stakeholders with high influence over critical resources and decision-making processes were considered crucial. This includes senior management who can allocate budgets, legal advisors to ensure compliance with regulations, and marketing professionals who understand customer acquisition and retention.

The selected stakeholders are integral to both the strategic direction and operational execution of the food order website. For instance, engaging with local restaurant owners and chain operators provides insights into the daily operational challenges and customer engagement strategies, which are vital for the platform's functionality design. IT professionals help in architecting a secure and scalable system, while marketing experts ensure that the platform reaches its target audience effectively.

Moreover, including end users from the outset allows us to validate our assumptions and iterate on the design based on real feedback, thereby increasing the likelihood of the platform's market acceptance. Legal and compliance advisors ensure that the platform adheres to all regulatory standards and practices, safeguarding the business and its customers.

2.3 Data Collection

2.3.1 Database Design including file layout

Table Name	Fields	Description
tbladmin	ID (Primary Key), AdminName,	Stores information about
	UserName, MobileNumber, Email,	administrators of the food
	Password, AdminRegdate	order system.
tbldishesh	ID (Primary Key), d_id, r_id, name,	Stores detail information
	about, price, img	about each restaurant dishes.
tblrestaurent	ID (Primary Key), CategoryName,	Contains information about
	Description, Price, Date	different restaurant.
tblres_category	ID (Primary Key), Name,	Stores information about
	MobileNumber, Email, Message,	restaurant category and dishes
	EnquiryDate, IsRead	category.
tbluser	ID (Primary Key), FacilityTitle,	Contains information about
	Description, Image, CreationDate	all the registered users.
Tbluser_order	ID (Primary Key), PageType, PageTitle,	Stores information about all
	PageDescription, Email, MobileNumber,	the past and present orders.
	UpdationDate	

2.3.2 Data Dictionary

tbladmin

Field	Data Type	Description
Admin_id	int(11)	Primary Key - Unique identifier for each administrator.
UserName	varchar(255)	Username used for login.
Password	varchar(255)	Password for the administrator's account.
Email	varchar(255)	Email address of the administrator
Date	timestamp	Date of administrator registration

Tbldishesh

Field	Data Type	Description
D_id	int(11)	Primary Key - Unique identifier for each ordering.
R_Id	int(11)	Primary Key - Unique identifier for each ordering.
Name	varchar(255)	Unique identifier for each food order.
About	int(255)	Information about the restaurent which user selected.
Price	float	Price of the selected food.
Img	text	Image of the restaurant selected by user.

Tblrest_category

Field	Data Type	Description
C_id	int(11)	Primary Key - Unique identifier for each category.
C_name	varchar(255)	Name of the category.

Tblrestaurent

Field	Data Type	Description	
R_id	int(11)	Primary Key - Unique identifier for each restaurent.	
C_id	int(11)	Primary Key - ID	
Name	varchar(255)	Name or title of the resturent.	
Email	varchar(255)	Email address of the resturent.	
Phone	varchar(255)	Phone number of the resturent.	
Url	varchar(255)	Url of the resturent.	
o_hr	Varchar(255)		
C_hr	varchar(255)		
O_day	varchar(255)	On which day order in placed.	
address	Text	Address of the resturent.	
Image	Text	File name or path of the resturent image.	

Tblusers

Field	Data Type	Description
U_id	int(11)	Primary Key - Unique identifier for each contact message.
Username	varchar(255)	Name of the person sending the message.
F_Number	varchar(255)	
I_number	varchar(255)	
Email	varchar(255)	Email address of the person sending the message.
Phone	varchar(255)	Date and time of message submission.
Password	varchar(255)	Password for the user's account.
Address	text	Address of the

Tbluser_order

Field	Data Type	Description
O_id	int(11)	Primary Key - Unique identifier for each user.
U_id	varchar(200)	Primary Key-Unique identifier for each user.
D_id	Int(11)	Mobile number of the user.
D_name	varchar(255)	Email address of the user.
Quantity	int(255)	Password for the user's account.
Price	Float	Date and time of user registration.
Status	Varchar(255)	
Date	Datetime	
Success_date	Timestamp	
R_id	Int(11)	

2.3.3 Collection- Instruments, Tools & Techniques used

Aspect	Details	Description	
Database	phpMyAdmin	phpMyAdmin is a free and open-source administration	
Software		tool for managing MySQL and MariaDB databases.	
DBMS	MySQL	MySQL is an open-source relational database management system (RDBMS) widely used for web applications.	
Programming Language	РНР	PHP is a server-side scripting language used for web development. It is commonly used to generate dynamic web pages.	
Web Development Tool	phpMyAdmin	phpMyAdmin is a web-based tool for managing MySQL databases, providing a graphical interface to perform various database operations.	
Database Analysis	SQL	SQL (Structured Query Language) is a domain- specific language used for managing and manipulating relational databases. It is used to query and update data in databases.	

2.3.4 Measurement scales (How many modules? How many Data dictionaries? How many Records? Etc.)

Table	Modules	Data Dictionaries	Records
tbladmin	1	1	1
tblrestaurant	1	1	8
tblcategory	1	1	5
tblcontact	1	1	1
tblorder	1	1	8
Tblpayment	1	1	2
tbldishesh	1	1	6
tbluser	1	1	8

2.4 Presentation of Data, Tools of analysis & Interpretation

1. Editing & Coding (Data Preparation):

This involves cleaning and organizing the data for analysis. Tasks include removing duplicates, handling missing values, standardizing formats, and encoding categorical variables.

2. Presentation of Data:

- Methods: Tables, bar charts, pie charts, histograms, line graphs, scatter plots, box plots, etc.

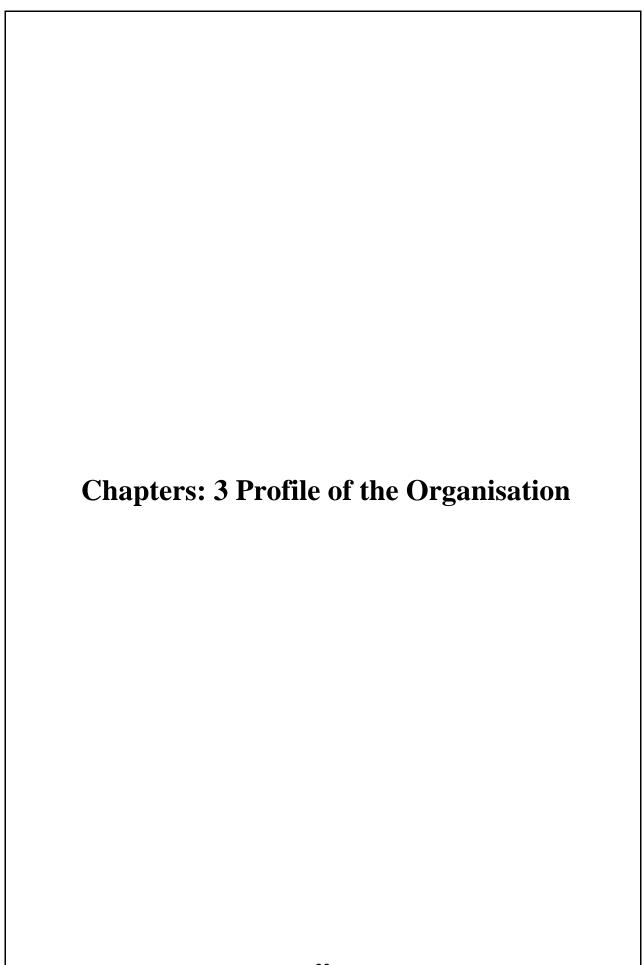
3. Describing the Data (Descriptive Statistics):

4. Analysis of Data:

- Univariate Analysis: Examines the distribution of individual variables.
- Bivariate Analysis: Studies the relationship between two variables.
- Multivariate Analysis: Analyzes relationships between multiple variables simultaneously. Techniques can include factor analysis, cluster analysis, multidimensional scaling (MDS), principal component analysis (PCA), etc.

5. Testing Hypotheses and Models (Inferential Statistics):

Makes inferences or predictions about a population based on sample data. Includes techniques like hypothesis testing, analysis of variance (ANOVA), chi-square tests, regression analysis, etc.



Organization Name: Raybot Automation Pvt Ltd.

Organization Address: Flat No 4 Rahul Apartment Old Pandit Colony gangapur Road

Nashik 422002

3.1 History & General Information

Raybot Automation Pvt Ltd. embodies a relentless commitment to innovation in the world of automation and robotics, utilizing AI and ML technologies. Founded by visionary entrepreneur Mr. Sagar Patil, our journey commenced with remarkable achievements in renowned events such as IIT Bombay Techfest, IIT Kharagpur, IIT Indore, NIT Calicut, and other prestigious Indian robotics competitions. This is just a start, followed by numerous victories in almost every state and prominent city of India. The journey took a significant upward turn when accomplishments from international competitions were added to the list. These early victories not only brought us recognition but also garnered admiration from students, educational institutions, and industry leaders alike.

3.2 Organisation Nature, Scope, Structure, Departments, Shareholding

- Nature: Raybot Automation is a company committed to innovation in automation and robotics, leveraging AI and ML technologies.
- Scope: The company's scope encompasses various sectors including education, industrial services, and consulting.
- Structure: The company seems to have a diversified structure, with departments focusing on different aspects of robotics, IoT, AI, and industrial services.
- Robotics in Education: Focuses on educational initiatives to teach robotics, covering mechanical, electrical/electronics, and computer science.
- Products/Activities: Involves the development and provision of educational products like AI labs for schools, virtual reality, robotics kits, and consultancy services.

3.3 Products/Activities Product line, Features of the Product

• Next-Gen AI Lab for Schools

- o Features:
- State-of-the-art AI & Robotics Lab designed for schools.
- o Interactive journey offering hands-on experience in Coding, Artificial Intelligence, **Robotics**, and Machine Learning.
- o Applied curriculum focusing on cutting-edge technology skills.
- o Preparation of students for success in the digital era.
- o Aimed at shaping tomorrow's innovators and problem-solvers.

• Virtual Reality Lab Services

- o Features:
- o Cutting-edge AR (Augmented Reality) and VR (Virtual Reality) lab services.
- o Equipped with the latest hardware, software, and development tools.
- Tailored immersive experiences for training, simulation, visualization, and more.
- o Applications in employee training, product design, customer engagement, etc.
- o Leveraging advancements in AR and VR technology.

• Robotics Kits and Projects

- Features:
- Led Blinking Projects
- Obstacle Avoiding Robots
- Line Following Robot
- Aimed at providing hands-on experience and practical learning opportunities in robotics.

• Consulting Services

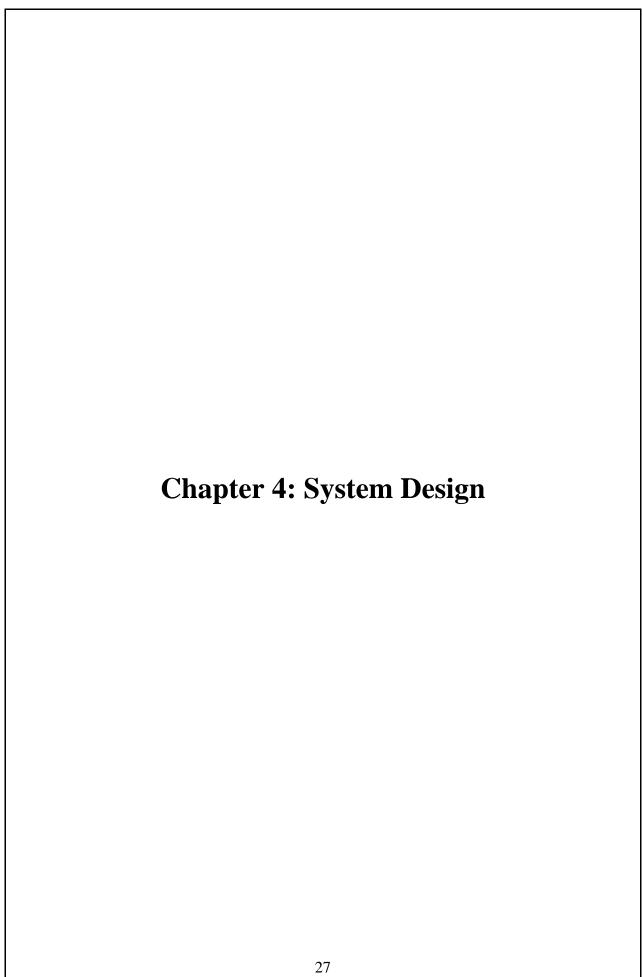
- o Features:
- o Consulting services to assess robotics, IoT, and automation needs.
- Customization options in Robotics, IoT, and Drones.
- O Solutions tailored to meet the specific requirements of clients.

• Industrial Services

- o Laser Cutting
- o Precision laser cutting services with unparalleled accuracy and efficiency.
- o Capability to cut a wide range of materials with intricate detail.
- o PCB Manufacturing
- o Production of high-quality, precision-engineered circuit boards.
- o Ensuring reliability crucial in the field of robotics and electronics.
- o 3D Printing
- o Cutting-edge additive manufacturing services.
- Seamless printing solutions tailored to specific needs.
- o Applications in rapid prototyping and creating intricate designs.

3.4 Corporate & Functional Practices

- HRM (Human Resource Management):Likely responsible for recruitment, training, and employee relations to support the company's workforce.
- Finance: Handles financial planning, budgeting, accounting, and investment strategies for the company.
- Marketing: Responsible for promoting products and services, market research, branding, and customer engagement.
- Production: Oversees the manufacturing and production processes, ensuring the timely delivery of products and services.
- Inventory: Manages inventory levels, procurement, and supply chain logistics to optimize efficiency.
- CSR (Corporate Social Responsibility): Engages in social and environmental initiatives aligned with the company's values and mission
- Frontend / Backend Development: While not explicitly mentioned, the company may engage in frontend and backend development to support its software and technology solutions, including AI and ML applications.
- Desktop Development: Raybot Automation may develop desktop applications for various purposes, such as simulation software or control interfaces for robotics and automation systems.
- Web Development: The company may offer web development services to create online platforms for educational purposes, consulting, or showcasing their products and services.
- Network Management: Given the emphasis on IoT and automation, Raybot Automation
 may engage in network management practices to ensure the seamless connectivity and
 operation of their devices and systems.
- Cloud Computing: While not explicitly mentioned, the company may utilize cloud computing infrastructure to host data, applications, and services, especially for AI and ML applications that require significant computational resources.
- Mobile Application: Raybot Automation may develop mobile applications to complement their educational offerings or provide remote access and control of their robotics and automation systems.



4.1 Why we use Frontend as.... & Backend asetc

1. Frontend Technologies:

- HTML (HyperText Markup Language): HTML provides the structure and content of web pages. It defines elements such as headings, paragraphs, images, links, and forms, which are essential for displaying information on the user's browser.
- CSS (Cascading Style Sheets): CSS is used to style the HTML elements, controlling aspects such as layout, color, typography, and responsiveness. It enhances the visual presentation and user experience of the application.
- JavaScript: JavaScript adds interactivity and dynamic behavior to web pages. It enables features like form validation, DOM manipulation, asynchronous requests, animations, and event handling, making the application more engaging and responsive to user actions.

2. Backend Technologies:

- MySQL: MySQL is a relational database management system (RDBMS) used for backend data storage and management. It provides a structured way to organize and retrieve data efficiently, supporting features like data integrity, transactions, indexing, and querying.
- PHP (Hypertext Preprocessor): PHP is a server-side scripting language commonly used for backend development in web applications. It enables developers to generate dynamic content, interact with databases, handle user authentication, and perform server-side processing.
- Apache Web Server (XAMPP): Apache is a widely-used open-source web server that serves web content over the HTTP protocol. In the context of XAMPP, Apache is bundled with other components like PHP, MySQL, and Perl, providing a local development environment for building and testing web applications on a personal computer.

4.2 Basic Theories of the Topic

- 1. **Database Management**: Knowledge of database management is essential for storing and retrieving information about users, restaurants, menus, orders, etc. Familiarize yourself with database design principles, normalization, and SQL queries for effective data manipulation.
- 2. **User Authentication and Authorization**: Implementing secure user authentication (login) and authorization (access control) mechanisms is vital to ensure that only authorized users can place orders, access certain features, or manage their accounts.
- 3. Session Management: Sessions are crucial for maintaining state across multiple requests. Understanding how to manage sessions securely in PHP is essential for tracking user interactions and maintaining their context throughout their browsing and ordering experience.
- 4. **Menu Management**: This involves creating and managing menus for various restaurants, including adding, updating, and deleting menu items. Understanding how to represent menu items in a database and display them dynamically to users is key.
- 5. **Order Processing**: Designing an efficient order processing system involves managing the order lifecycle from placement to delivery or pickup. This includes features like order confirmation, payment processing, and notifications to users and restaurants.
- 6. **Payment Integration**: Integrating payment gateways for online transactions requires knowledge of secure payment processing protocols and APIs. Understanding concepts like PCI compliance and tokenization is essential for handling sensitive payment information securely.
- 7. **Responsive Web Design**: Given the widespread use of mobile devices, designing a responsive user interface that adapts to different screen sizes and devices is crucial for providing a seamless user experience.
- 8. **Scalability and Performance**: Considerations for scalability and performance are important as the system grows. Designing for scalability involves using efficient algorithms and data structures, while optimizing database queries and server-side code can enhance performance.

4.3 Basic ideas of the Project on the selected topic

Process Design

Design is the first step in the development phase for any techniques and principles for the purpose of defining a device, a process or system in sufficient detail to permit its physical realization. Once the software requirements have been analyzed and specified the software design involves three technical activities - design, coding, implementation and testing that are required to build and verify the software.

The design activities are of main importance in this phase, because in this activity, decisions ultimately affecting the success of the software implementation and its ease of maintenance are made. These decisions have the final bearing upon reliability and maintainability of the system. Design is the only way to accurately translate the customer's requirements into finished software or a system.

Design is the place where quality is fostered in development. Software design is a process through which requirements are translated into a representation of software. Software design is conducted in two steps. Preliminary design is concerned with the transformation of requirements into data

4.3.1 Entity Relationship Diagram ERD password email date o_hr c_hr o_day username img address Restaurant manage Admin admin_id address bill_id generate > username email closed r_id (bill_amount) name Bill users **⊲**ecive> c_id password bill_date i_name phone email f_name Carts Visit about dishesh r_id name img price

Fig 4.1: ERD diagram for Food Order management system

4.3.2 USECASE DIAGRAMS:

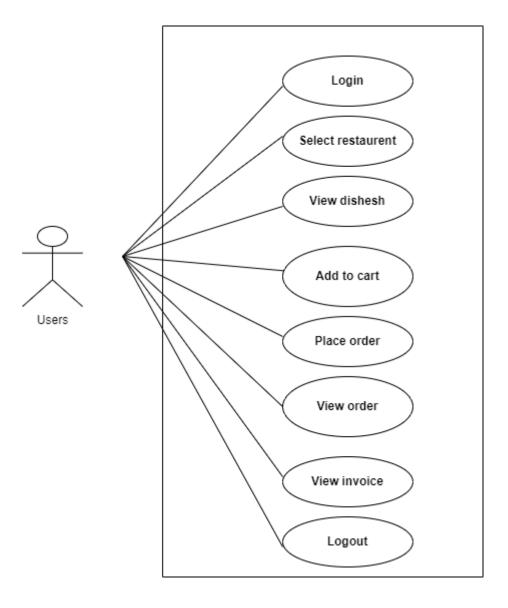
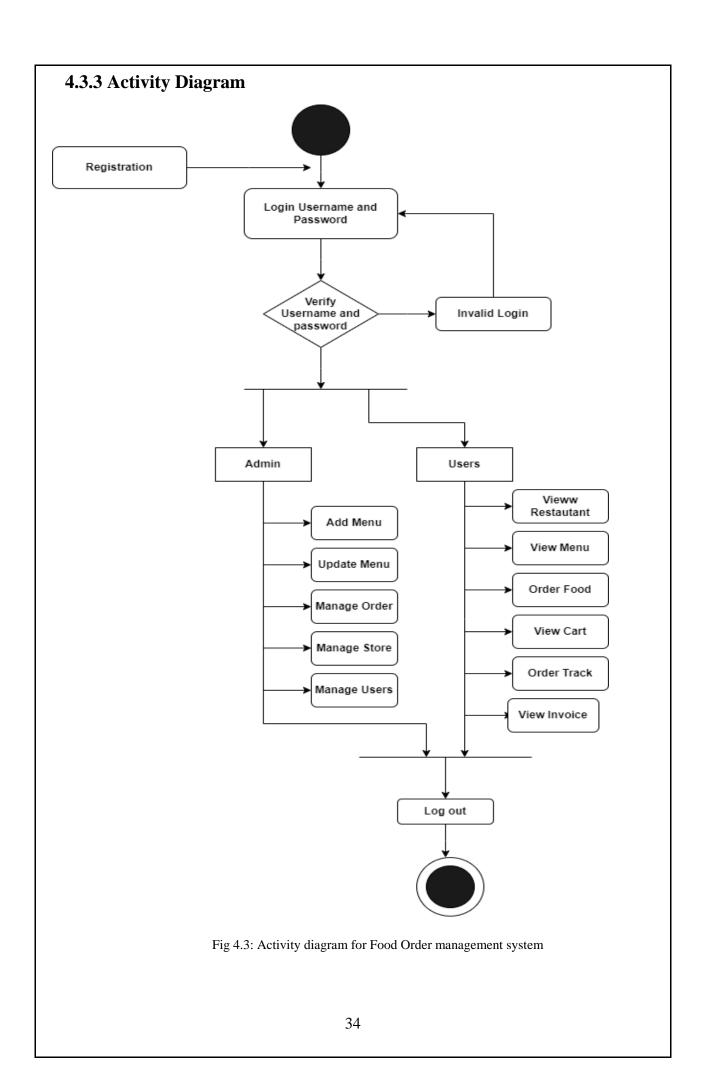


Fig 4.2: Use Case diagram for Food Order management system

4.3.2 USECASE DIAGRAMS Logout Add Menu Update Menu Manage User Manage order Admin Manage Restaurent Manage Category Add Category Logout

Fig 4.2: Use Case diagram for Food Order management system



4.3.4 Sequence Diagram Food Order Users System Restaurant Login-Verify Confirm View Menu Add items order -Confirm order-Send order Accept order Deliver Food Cash Payment See Invoice Logout Fig 4.4: Sequence for Food Order management system

4.3.5 Component daigram Customer Data Access Customer Data Access Control Food Order Persistance Access Control Access Control Data Access Data Access

Fig 4.5: Component for Food Order management system

4.3.6 Deployment Diagram

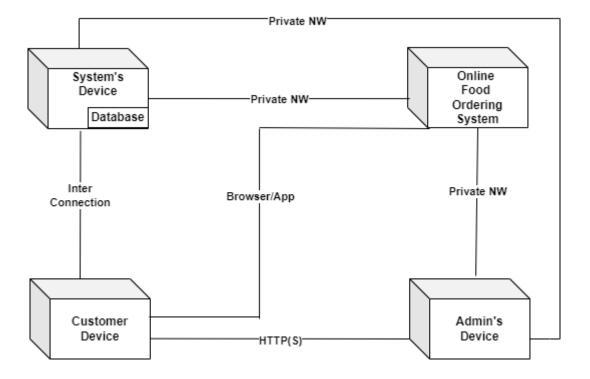
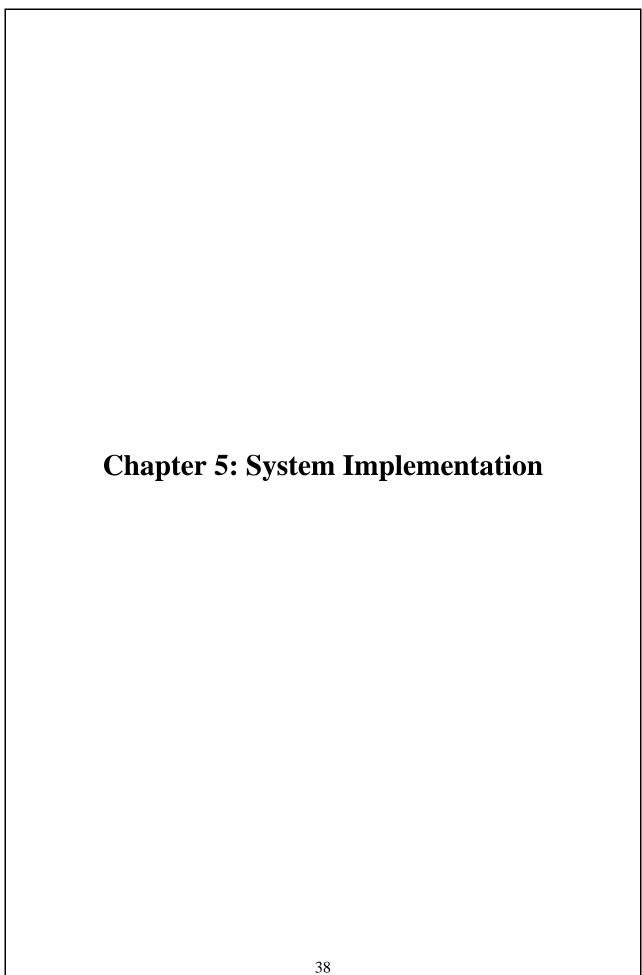


Fig 4.6: Deployment diagram for Food Order management system



5.1 Coding

5.1.1 Database Designing

Admin Table: (Table name is admin)

This store admin personal and login details.

#	Name	Туре	Collation	Attributes	Null	Default	Comments	Extra
1	admin_id 🔑	int(11)			No	None		AUTO_INCREMENT
2	username	varchar(255)	utf8mb4_general_ci		No	None		
3	password	varchar(255)	utf8mb4_general_ci		No	None		
4	email	varchar(255)	utf8mb4_general_ci		No	None		
5	date	timestamp			No	current_timestamp()		ON UPDATE CURRENT_TIMESTAMP()

Dishes Table: (Table name is tbldishesh)

This store different dishes details

#	Name	Туре	Collation	Attributes	Null	Default	Comments	Extra
1	d_id 🔑	int(11)			No	None		AUTO_INCREMENT
2	r_id	int(11)			No	None		
3	name	varchar(255)	utf8mb4_general_ci		No	None		
4	about	varchar(255)	utf8mb4_general_ci		No	None		
5	price	float			No	None		
6	img	text	utf8mb4_general_ci		No	None		

Restaurant Category Table: (Table name tblcategory)

This store the restaurant category details

7	# Name	Туре	Collation	Attributes	Null	Default	Comments	Extra
	1 c_id 🔑	int(11)			No	None		AUTO_INCREMENT
2	c_name	varchar(255)	utf8mb4_general_ci		No	None		

Restaurant Table: (Table name is tblrestaurant)

This table stores restaurant details

#	Name	Туре	Collation	Attributes	Null	Default	Comments	Extra	
1	r_id 🔑	int(11)			No	None		AUTO_INCREMEN	Ī
2	c_id	int(11)			No	None			
3	name	varchar(255)	utf8mb4_general_ci		No	None			
4	email	varchar(255)	utf8mb4_general_ci		No	None			
5	phone	varchar(255)	utf8mb4_general_ci		No	None			
6	url	varchar(255)	utf8mb4_general_ci		No	None			
7	o_hr	varchar(255)	utf8mb4_general_ci		No	None			
8	c_hr	varchar(255)	utf8mb4_general_ci		No	None			
9	o_days	varchar(255)	utf8mb4_general_ci		No	None			
10	address	text	utf8mb4_general_ci		No	None			
11	img	text	utf8mb4_general_ci		No	None			

Users Table: (Table name is tbluser)

This table stores the data of users

# Name	Туре	Collation	Attributes	Null	Default	Comments	Extra
1 u_id 🔑	int(11)			No	None		AUTO_INCREMENT
2 username	varchar(255)	utf8mb4_general_ci		No	None		
3 f_name	varchar(255)	utf8mb4_general_ci		No	None		
4 I_name	varchar(255)	utf8mb4_general_ci		No	None		
5 email	varchar(255)	utf8mb4_general_ci		No	None		
6 phone	varchar(255)	utf8mb4_general_ci		No	None		
7 password	varchar(255)	utf8mb4_general_ci		No	None		
8 address	text	utf8mb4_general_ci		No	None		

Users Order Table: (Table name is tbluserorders)

This table stores the details about the users orders

#	Name	Туре	Collation	Attributes	Null	Default	Comments	Extra
	1 o_id 🔑	int(11)			No	None		AUTO_INCREMENT
	2 u_id	int(11)			No	None		
	3 d_id	int(11)			No	None		
	4 d_name	varchar(255)	utf8mb4_general_ci		No	None		
	5 quantity	int(255)			No	None		
	price	float			No	None		
	7 status	varchar(255)	utf8mb4_general_ci		Yes	NULL		
	3 date	datetime			No	current_timestamp()		
	success-date	timestamp			No	current_timestamp()		ON UPDATE CURRENT_TIMESTAMP()
1	r_id	int(11)			No	None		

5.1.2 Sample Coding

Home.php:

```
<?php
defined('BASEPATH') OR exit('No direct script access
allowed');
class Home extends CI_Controller {
  public function index()
     $this->load->model('Menu_model');
     $dish = $this->Menu_model->getMenu();
     $data['dishesh'] = $dish;
     $this->load->view('front/partials/header');
     $this->load->view('front/home', $data);
     $this->load->view('front/partials/footer');
  }
  public function sendMail() {
     $this->load->library('form_validation');
        $this->form_validation->set_rules('name', 'name',
'trim|required');
       $this->form_validation->set_rules('email', 'email',
'trim|required');
    $this->form_validation->set_rules('subject', 'subject',
'trim|required');
                                 $this->form_validation-
>set_rules('message', 'message', 'trim|required');
     if($this->form_validation->run() == true) {
       $name = $this->input->post('name');
       $emailFrom = $this->input->post('email');
```

```
$subject = $this->input->post('subject');
       $message = $this->input->post('message');
       $toEmail = "rahulrajendrashewale@gmail.com";
     $mailHeaders = "From: ". $name . "<". $emailFrom
.">\r\n";
                 if(mail($toEmail, $subject, $message,
$mailHeaders)) {
          $this->session->set_flashdata("msg","mail has
been sent successfully");
       } else {
           $this->session->set_flashdata("msg","mail is
not sent, try again.");
       }
       redirect(base_url().'home/index');
     } else {
       redirect(base_url().'home/index');
     }
  }
}
```

Login.php: <?php defined('BASEPATH') OR exit ('No direct script access allowed'); class Login extends CI_Controller { public function __construct(){ parent::__construct(); \$this->load->model('User_model'); } public function index() { \$this->load->view('front/login'); } public function authenticate() { \$this->load->library('form_validation'); \$this->form_validation->set_rules('username', 'Username', 'trim|required'); \$this->form_validation->set_rules('password','Password', 'trim|required');

if(\$this->form_validation->run() == true) {

>getByUsername(\$username);

\$user['password']) == true) {

if(!empty(\$user)) {

\$username = \$this->input->post('username');

\$password = \$this->input->post('password');

\$user = \$this->User_model-

if(password_verify(\$password,

```
$userArray['user_id'] = $user['u_id'];
             $userArray['username'] = $user['username'];
                      $this->session->set_userdata('user',
$userArray);
            redirect(base_url().'home/index');
          } else {
              $this->session->set_flashdata('msg', 'Either
username or password is incorrect');
            redirect(base_url().'login/index');
          }
        } else {
             $this->session->set_flashdata('msg', 'Either
username or password is incorrect');
          redirect(base_url().'login/index');
        }
        //success
      } else {
        //Error
       $this->load->view('front/login');
      }
  }
  public function logout() {
     $this->session->unset_userdata('user');
     redirect(base_url().'login/index');
  }
}
```

Checkout.php:

```
<?php
defined('BASEPATH') OR exit ('No direct script access
allowed');
class Checkout extends CI_Controller {
  function __construct() {
     parent::__construct();
     $user = $this->session->userdata('user');
       if(empty($user)) {
              $this->session->set_flashdata('msg', 'Your
session has been expired');
          redirect(base_url().'login/');
       }
     $this->load->helper('date');
     $this->load->library('form_validation');
     $this->load->library('cart');
     $this->load->model('Order_model');
     $this->load->model('User_model');
     $this->controller = 'checkout';
  }
  public function index() {
    $loggedUser = $this->session->userdata('user');
    $u_id = $loggedUser['user_id'];
    $user = $this->User_model->getUser($u_id);
     if($this->cart->total_items() <= 0) {
       redirect(base_url().'restaurant');
```

```
}
       $submit = $this->input->post('placeholder');
       $this->form_validation->set_error_delimiters('<p
class="invalid-feedback">','');
             $this->form_validation->set_rules('address',
'Address','trim|required');
       if($this->form_validation->run() == true) {
                  $formArray['address'] = $this->input-
>post('address');
            //insert data into customer table and get last
inserted custid
        $this->User_model->update($u_id,$formArray);
          $order = $this->placeOrder($u_id);
          if($order) {
            $this->session->set_flashdata('success_msg',
'Thank You! Your order has been placed successfully!');
              redirect(base_url().'orders');
          } else {
                 $data['error_msg'] = "Order submission
failed, please try again.";
          }
       }
     $data['user'] = $user;
     $data['cartItems'] = $this->cart->contents();
     $this->load->view('front/partials/header');
     $this->load->view('front/checkout',$data);
     $this->load->view('front/partials/footer');
  }
  public function placeOrder($u_Id) {
     $cartItems = $this->cart->contents();
```

```
\$i = 0;
     foreach($cartItems as $item) {
       \sigma[i][u_id'] = u_id;
       $orderData[$i]['d_id'] = $item['id'];
       $orderData[$i]['r_id'] = $item['r_id'];
       $orderData[$i]['d_name'] = $item['name'];
       $orderData[$i]['quantity'] = $item['qty'];
       $orderData[$i]['price'] = $item['subtotal'];
      $orderData[$i]['date'] = date('Y-m-d H:i:s', now());
      $orderData[$i]['success-date'] = date('Y-m-d H:i:s',
now());
       $i++;
     }
     if(!empty($orderData)) {
                 $insertOrder = $this->Order model-
>insertOrder($orderData);
       if($insertOrder) {
          $this->cart->destroy();
          //return order id
          return $insertOrder;
     }
  return false;
  }
}
```

Profile.php:

```
<?php
defined('BASEPATH') OR exit ('No direct script access
allowed');
class Profile extends CI_Controller {
  function __construct(){
     parent::__construct();
     $user = $this->session->userdata('user');
       if(empty($user)) {
              $this->session->set_flashdata('msg', 'Your
session has been expired');
          redirect(base_url().'login/');
       }
     $this->load->model('User_model');
  }
  public function index() {
     $loggedUser = $this->session->userdata('user');
     $id = $loggedUser['user_id'];
     $user = $this->User_model->getUser($id);
     $data['user'] = $user;
     $this->load->view('front/partials/header');
     $this->load->view('front/profile', $data);
     $this->load->view('front/partials/footer');
  }
  public function edit($id) {
     $user = $this->User_model->getUser($id);
     if(empty($user)) {
```

```
$this->session->set_flashdata('error', 'User not
found');
       redirect(base_url().'profile');
     }
     $this->load->library('form_validation');
       $this->form_validation->set_error_delimiters('<p
class="invalid-feedback">','');
          $this->form_validation->set_rules('username',
'Username', 'trim|required');
     $this->form_validation->set_rules('firstname', 'First
Name', 'trim|required');
     $this->form_validation->set_rules('lastname', 'Last
Name', 'trim|required');
              $this->form_validation->set_rules('email',
'Email', 'trim|required');
              $this->form_validation->set_rules('phone',
'Phone', 'trim|required');
             $this->form_validation->set_rules('address',
'Address','trim|required');
     if($this->form_validation->run() == true) {
                $formArray['username'] = $this->input-
>post('username');
                 $formArray['f_name'] = $this->input-
>post('firstname');
                 $formArray['l_name'] = $this->input-
>post('lastname');
       $formArray['email'] = $this->input->post('email');
      $formArray['phone'] = $this->input->post('phone');
                 $formArray['address'] = $this->input-
>post('address');
       $this->User_model->update($id,$formArray);
```

```
$this->session->set_flashdata('success', 'User
updated successfully');
       redirect(base_url(). 'profile/index');
     } else {
       $data['user'] = $user;
       $this->load->view('front/partials/header');
       $this->load->view('front/profile', $data);
       $this->load->view('front/partials/footer');
     }
  }
  public function editPassword($id) {
     $user = $this->User_model->getUser($id);
     if(empty($user)) {
          $this->session->set_flashdata('error', 'User not
found');
       redirect(base_url().'profile');
     }
     $this->load->library('form_validation');
       $this->form_validation->set_error_delimiters('<p
class="invalid-feedback">','');
         $this->form_validation->set_rules('cPassword',
'Current password', 'trim|required');
   $this->form_validation->set_rules('nPassword', 'New
password', 'trim|required');
        $this->form_validation->set_rules('nRPassword',
'New password', 'trim|required');
     if($this->form_validation->run() == true) {
       $cPassword = $this->input->post('cPassword');
```

```
$nPassword = $this->input->post('nPassword');
      $nRPassword = $this->input->post('nRPassword');
     if(password_verify($cPassword, $user['password'])
== true) {
          if($nPassword != $nRPassword) {
              $this->session->set_flashdata('pwd_error',
'password not match');
            redirect(base_url(). 'profile/index');
          }else {
                              $formArray['password'] =
password_hash($this->input->post('nPassword'),
PASSWORD_DEFAULT);
          $this->User_model->update($id,$formArray);
           $this->session->set_flashdata('pwd_success',
'Password updated successfully');
            redirect(base_url(). 'profile/index');
          }
       }else {
        $this->session->set_flashdata('pwd_error', 'Your
old password is incorrect');
          redirect(base_url(). 'profile/index');
       }
     }else {
       $data['user'] = $user;
       $this->load->view('front/partials/header');
       $this->load->view('front/profile', $data);
       $this->load->view('front/partials/footer');
     }
  }
```

Menu.php:

```
<?php
defined('BASEPATH') OR exit ('No direct script access
allowed');
class Menu extends CI_Controller {
  public function __construct(){
     parent::__construct();
     $admin = $this->session->userdata('admin');
    if(empty($admin)) {
      $this->session->set_flashdata('msg', 'Your session
has been expired');
       redirect(base_url().'admin/login/index');
     }
     $this->load->helper('url');
  }
  public function index() {
     $this->load->model('Menu_model');
     $dishesh = $this->Menu_model->getMenu();
     $data['dishesh'] = $dishesh;
     $this->load->view('admin/partials/header');
     $this->load->view('admin/menu/list', $data);
     $this->load->view('admin/partials/footer');
  }
  public function create_menu(){
     $this->load->helper('common_helper');
     $this->load->model('Store_model');
     $store = $this->Store_model->getStores();
```

```
$config['upload_path']
'./public/uploads/dishesh/';
     $config['allowed_types']
                                  = 'gif|jpg|png|jpeg';
     //$config['encrypt_name']
                                    = true;
     $this->load->library('upload', $config);
     $this->load->model('Menu_model');
     $this->load->library('form_validation');
       $this->form_validation->set_error_delimiters('<p
class="invalid-feedback">','');
        $this->form_validation->set_rules('name', 'Dish
name','trim|required');
              $this->form_validation->set_rules('about',
'About','trim|required');
               $this->form_validation->set_rules('price',
'Price', 'trim|required');
              $this->form_validation->set_rules('rname',
'Restaurant name', 'trim|required');
     if($this->form_validation->run() == true) {
       if(!empty($_FILES['image']['name'])){
          //image is selected
          if($this->upload->do_upload('image')) {
            //file uploaded successfully
            $data = $this->upload->data();
            //resizing image
            resizeImage($config['upload_path'].$data['fi
le_name'],
$config['upload_path'].'thumb/'.$data['file_name'],
300,270);
```

```
resizeImage($config['upload_path'].$data['fi
le_name'],
$config['upload_path'].'front_thumb/'.$data['file_name'],
1120,270);
            $formArray['img'] = $data['file_name'];
                    $formArray['name'] = $this->input-
>post('name');
                    $formArray['about'] = $this->input-
>post('about');
                    $formArray['price'] = $this->input-
>post('price');
                     $formArray['r_id'] = $this->input-
>post('rname');
            $this->Menu_model->create($formArray);
            $this->session->set_flashdata('dish_success',
'Menu added successfully');
            redirect(base_url(). 'admin/menu/index');
          } else {
            //we got some errors
             $error = $this->upload->display_errors("<p</pre>
class='invalid-feedback'>","");
            $data['errorImageUpload'] = $error;
            $data['stores']= $store;
            $this->load->view('admin/partials/header');
            $this->load->view('admin/menu/add_menu',
$data);
            $this->load->view('admin/partials/footer');
          }
```

```
} else {
            //if no image is selcted we will add res data
without image
                   $formArray['name'] = $this->input-
>post('name');
                   $formArray['about'] = $this->input-
>post('about');
        $formArray['price'] = $this->input->post('price');
       $formArray['r_id'] = $this->input->post('rname');
          $this->Menu_model->create($formArray);
            $this->session->set_flashdata('dish_success',
'Dish added successfully');
          redirect(base_url(). 'admin/menu/index');
       }
     } else {
       $store_data['stores']= $store;
       $this->load->view('admin/partials/header');
            $this->load->view('admin/menu/add_menu',
$store_data);
       $this->load->view('admin/partials/footer');
     }
  }
  public function edit($id) {
     $this->load->model('Menu_model');
     $dish = $this->Menu_model->getSingleDish($id);
     $this->load->model('Store_model');
     $store = $this->Store_model->getStores();
```

```
if(empty($dish)) {
          $this->session->set_flashdata('error', 'Dish not
found');
       redirect(base_url(). 'admin/menu/index');
     }
     $this->load->helper('common_helper');
              $config['upload_path']
'./public/uploads/dishesh/';
     $config['allowed_types']
                                  = 'gif|jpg|png|jpeg';
     //$config['encrypt_name']
                                    = true;
     $this->load->library('upload', $config);
     $this->load->library('form_validation');
       $this->form_validation->set_error_delimiters('<p
class="invalid-feedback">','');
        $this->form_validation->set_rules('name', 'Dish
name','trim|required');
              $this->form_validation->set_rules('about',
'About', 'trim required');
               $this->form_validation->set_rules('price',
'Price', 'trim|required');
              $this->form_validation->set_rules('rname',
'Restaurant name', 'trim|required');
     if($this->form_validation->run() == true) {
       if(!empty($_FILES['image']['name'])){
          //image is selected
          if($this->upload->do_upload('image')) {
            //file uploaded successfully
```

```
$data = $this->upload->data();
            //resizing image
            resizeImage($config['upload_path'].$data['fi
le_name'],
$config['upload_path'].'thumb/'.$data['file_name'],
300,270);
            $formArray['img'] = $data['file_name'];
                    $formArray['name'] = $this->input-
>post('name');
                    $formArray['about'] = $this->input-
>post('about');
                     $formArray['price'] = $this->input-
>post('price');
                      $formArray['r_id'] = $this->input-
>post('rname');
                       $this->Menu_model->update($id,
$formArray);
            //deleting existing images
                                                       if
(file_exists('./public/uploads/dishesh/'.$dish['img'])) {
                unlink('./public/uploads/dishesh/'.$dish['i
mg']);
            }
             if(file_exists('./public/uploads/dishesh/thum
b/'.$dish['img'])) {
                unlink('./public/uploads/dishesh/thumb/'.
$dish['img']);
```

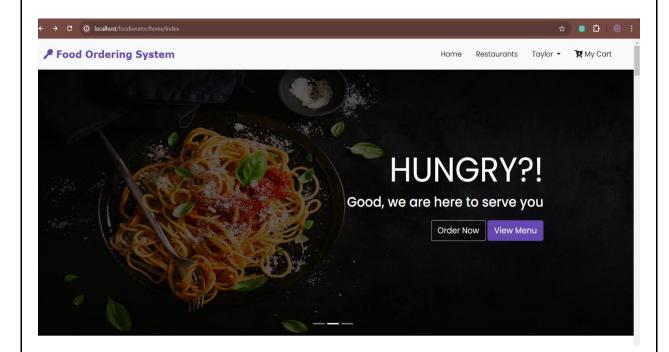
```
$this->session->set_flashdata('dish_success',
'Dish updated successfully');
            redirect(base_url(). 'admin/menu/index');
          } else {
            //we got some errors
             $error = $this->upload->display_errors("<p</pre>
class='invalid-feedback'>","");
            $data['errorImageUpload'] = $error;
            $data['dish'] = $dish;
            $data['stores'] = $store;
            $this->load->view('admin/partials/header');
           $this->load->view('admin/menu/edit', $data);
            $this->load->view('admin/partials/footer');
          }
       } else {
            //if no image is selcted we will add res data
without image
                    $formArray['name'] = $this->input-
>post('name');
                    $formArray['about'] = $this->input-
>post('about');
        $formArray['price'] = $this->input->post('price');
        $formArray['r_id'] = $this->input->post('rname');
        $this->Menu_model->update($id, $formArray);
            $this->session->set_flashdata('dish_success',
'Dish updated successfully');
          redirect(base_url(). 'admin/menu/index');
       }
```

```
} else {
       $data['dish'] = $dish;
       $data['stores'] = $store;
       $this->load->view('admin/partials/header');
       $this->load->view('admin/menu/edit', $data);
       $this->load->view('admin/partials/footer');
     }
  public function delete($id){
     $this->load->model('Menu_model');
     $dish = $this->Menu_model->getSingleDish($id);
     if(empty($dish)) {
          $this->session->set_flashdata('error', 'dish not
found');
       redirect(base_url().'admin/menu');
     }
                                                        if
(file_exists('./public/uploads/dishesh/'.$dish['img'])) {
       unlink('./public/uploads/dishesh/'.$dish['img']);
     }
     if(file_exists('./public/uploads/dishesh/thumb/'.$dis
h['img'])) {
         unlink('./public/uploads/dishesh/thumb/'.$dish['i
mg']);
     }
     $this->Menu_model->delete($id);
```

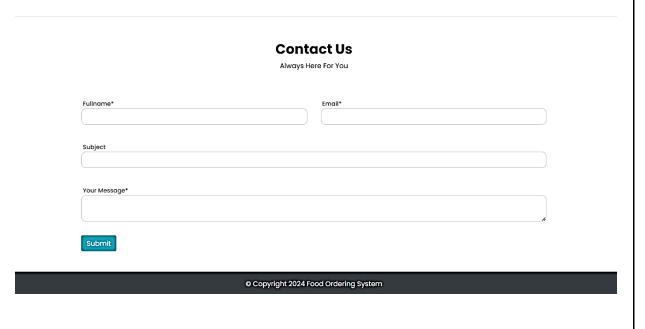
```
\label{lem:continuous} $$ \sinh -\sec _flashdata('dish\_success', 'dish\_success', 'd
deleted successfully');
                                                                                                   redirect(base_url().'admin/menu/index');
                                                    }
     }
```

5.1.3 Sample Interfaces

Home



Contact us

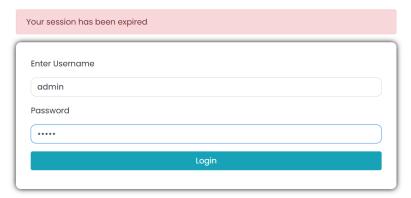


Input screen

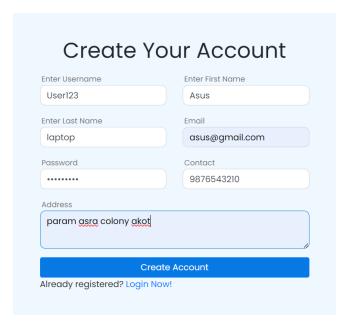
Admin login

Admin Panel

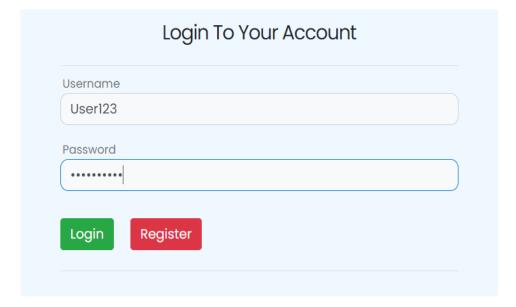
Please Login To Continue



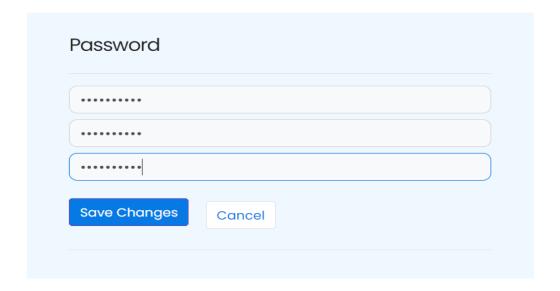
User Registration/signup

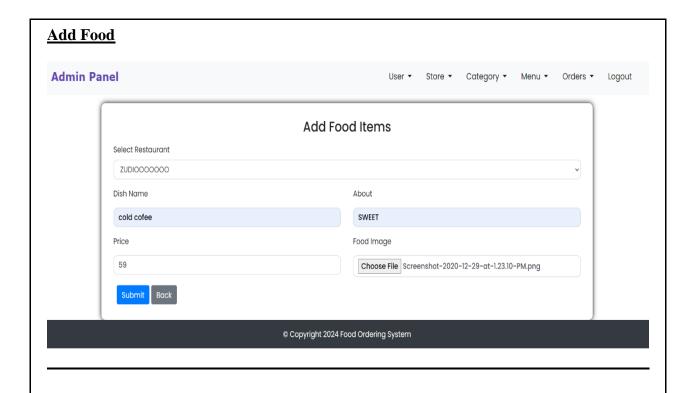


User Signin/Login

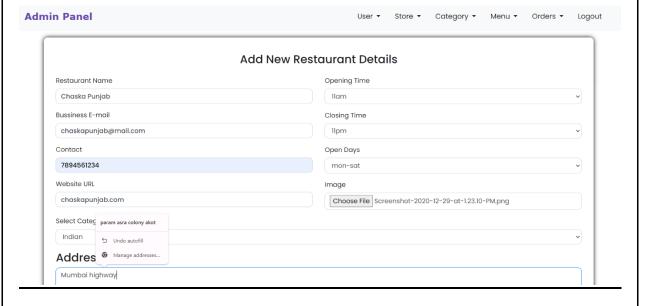


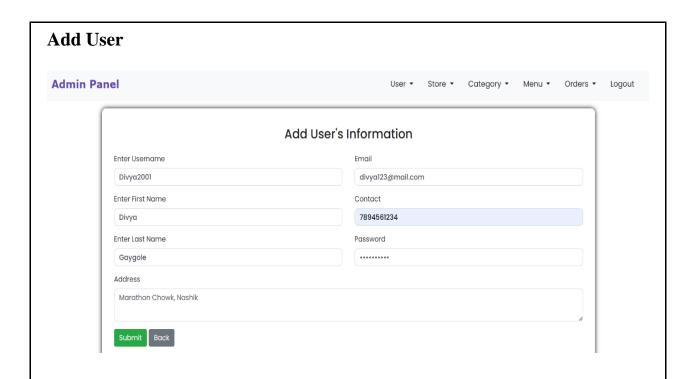
Change Password





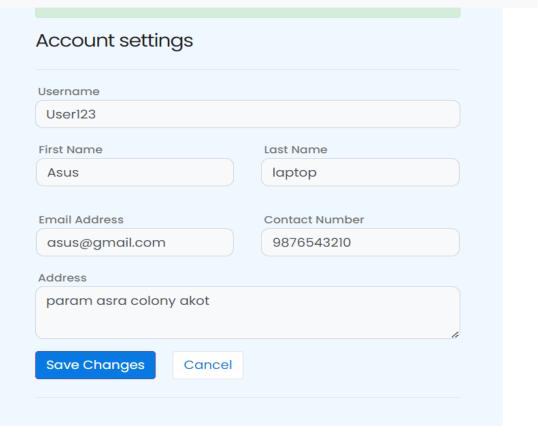
Add Restaurant





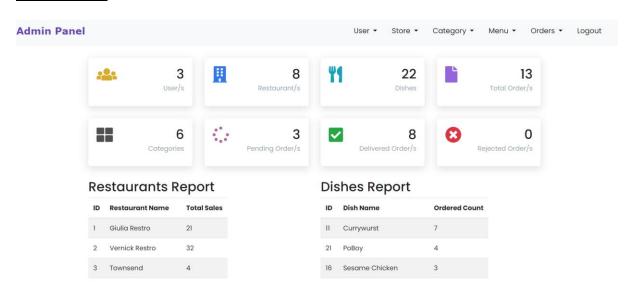
Manage Profile

Food Ordering System

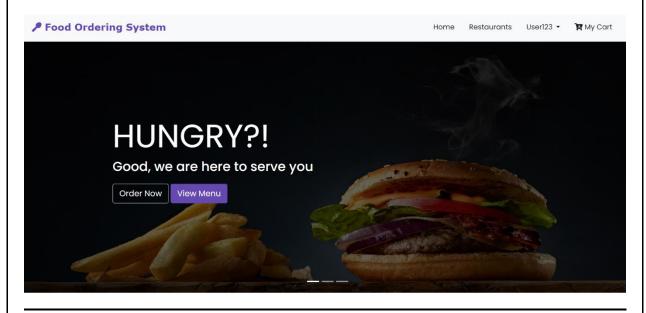


Output Screen

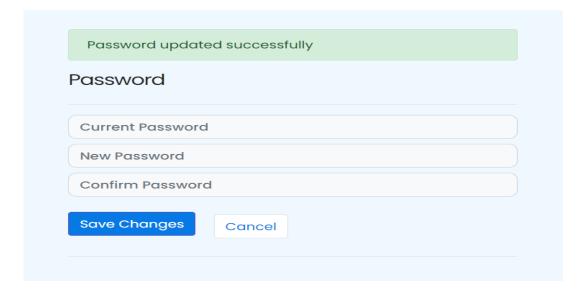
Admin Login



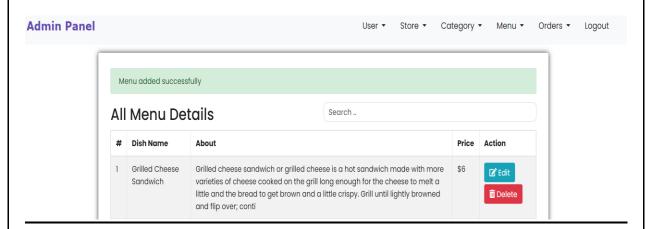
User login



Password Change

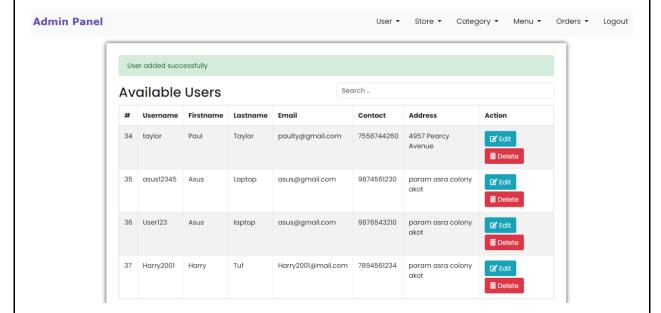


Add Food



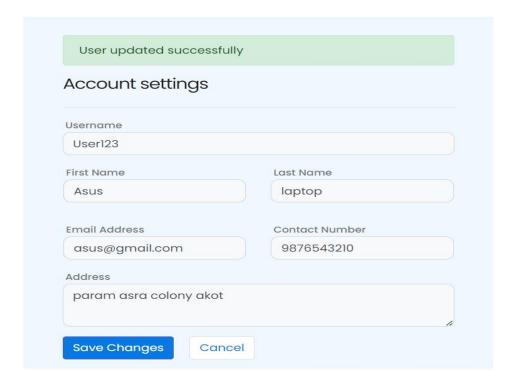
Add Restaurant Admin Panel User ▼ Store ▼ Category ▼ Menu ▼ Orders ▼ Logout Restaurant added successfully Available Restaurant/s Search .. Close Open Email Contact Website Address Action # Name Giulia Restro gr69stro@gmail.com 1-555-555-7pm 5555 Wood Street 1-567-567-2 Vernick Restro vernic@gmail.com foodvernick.com 10am 7pm 24hr-1812 8888 Fleming Street 3 Townsend townsend@gmail.com 1-333-222townsend.com 8am 8pm 528 mon-Veltri sat Drive 1-222-333-4 Artisan Bar & grilltisan@gmail.com artisanbargr.com 11am 8pm 24hr-1659 Ritter Grill 7878

Add User



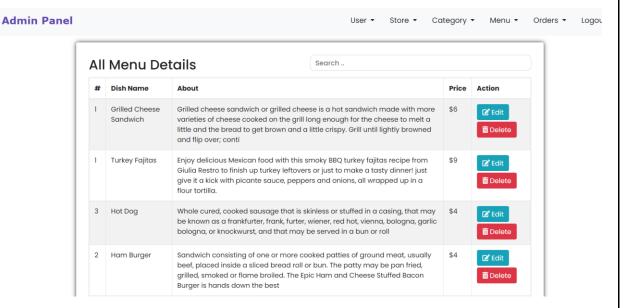
Manage Profile



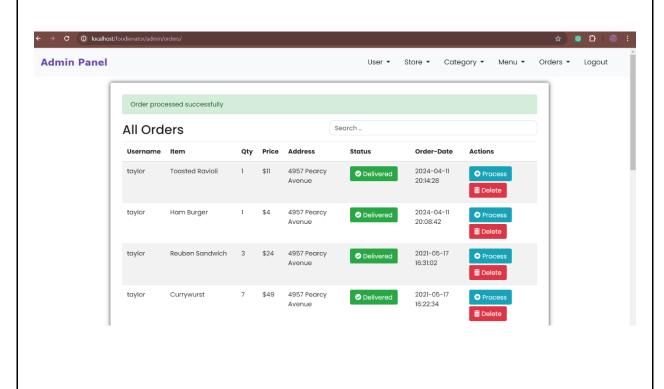


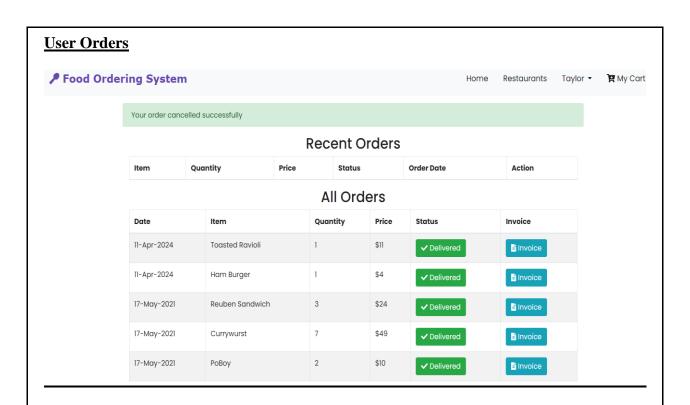
Other Screen

Manage Food

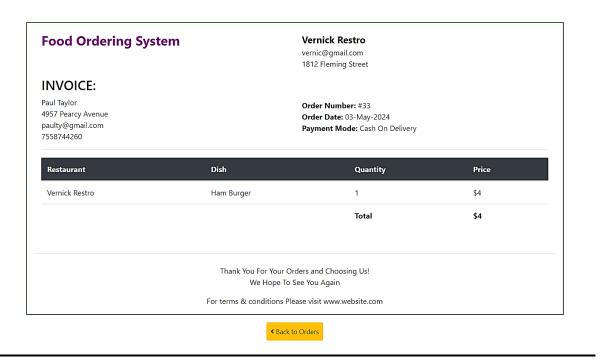


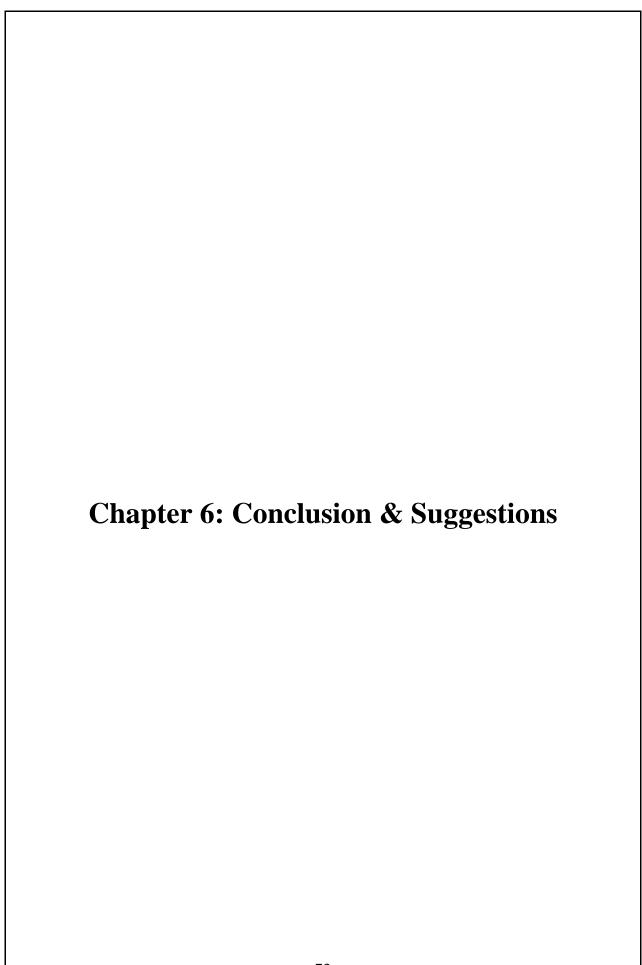
All Orders





Invoice





6.1 Conclusion

The development of a food ordering website using PHP has been a comprehensive project that integrates various technological and user-centric aspects to create a functional and efficient online platform. Throughout this project, we have managed to construct a seamless interface that allows users to browse menus, place orders, and make payments with ease, all powered by a robust back-end built with PHP and supported by databases like MySQL. Key achievements of this project include:

• User-Friendly Interface:

The website features an intuitive design that caters to users of all technical capabilities. The interface promotes easy navigation and swift order placement, thereby enhancing user experience.

• Secure and Scalable Architecture:

Employing PHP has enabled the creation of a secure environment for transactions and user data. Additionally, the use of scalable coding practices ensures that the website can handle increased traffic as the business grows.

• Real-Time Data Interaction:

Through AJAX and PHP, the site offers real-time data processing, which is crucial for updating menu items, processing orders, and managing user profiles without the need to refresh the webpage.

• Responsive Design:

The application is responsive, ensuring that it works seamlessly across various devices and screen sizes, thus accommodating mobile users and increasing overall accessibility.

6.2 Suggestions

Some future suggestions for enhancing a food order website PHP project:

1. Implement AI-driven Recommendations:

Integrate machine learning algorithms to analyze user preferences and order history. This can help in providing personalized food recommendations, suggesting new dishes, or upselling complementary items based on past orders.

2. Enhance User Experience:

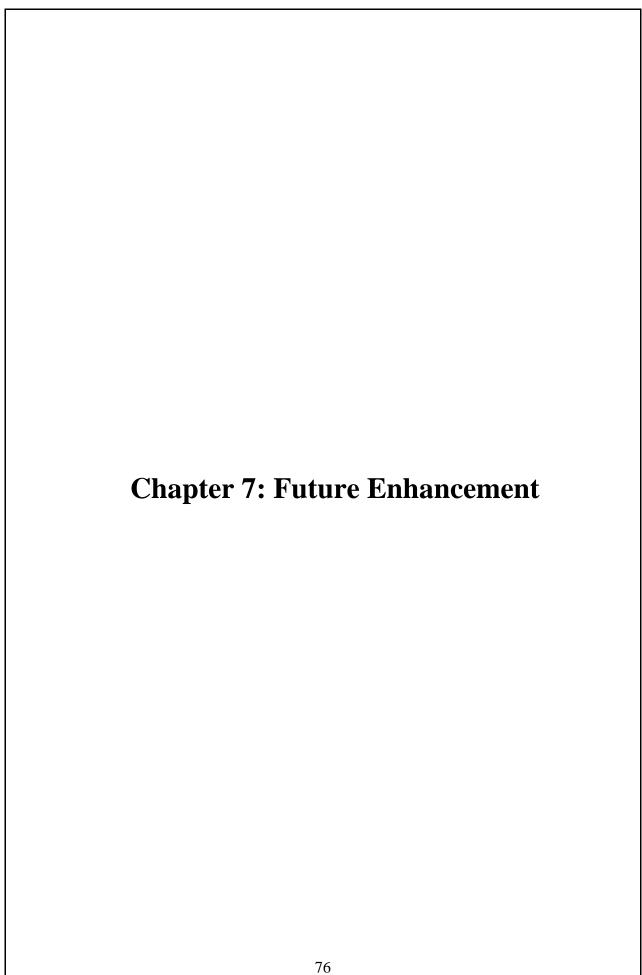
Convert the website into a PWA to offer a more seamless experience for users across devices. PWAs enable faster load times, offline functionality, and the ability to install the app directly from the browser, enhancing user engagement and retention.

3. Integrate Social Media Sharing and Reviews

Allow users to share their food orders and experiences directly on social media platforms like Facebook, Twitter, or Instagram. Additionally, implement a review system where customers can rate and leave feedback about the food quality, delivery speed, and overall experience, fostering trust and credibility.

4. Enable Real-time Order Tracking:

Introduce a feature that enables customers to track their orders in real-time, similar to popular food delivery apps. This can be achieved by integrating GPS tracking technology with the delivery process, providing users with updates on the status of their order from preparation to delivery.



Future Enhancement

1. User Interface

- **Responsive Design:** Ensure the website is fully responsive and provides an optimal viewing experience across all devices, including smartphones, tablets, and desktops..
- **Customization Options:** Allow users to customize their dashboard and settings, such as favorite cuisines or preferred restaurants.

2. Order Management and Tracking

- **Real-Time Updates:** Provide real-time updates on order status from preparation to delivery using web sockets or similar technologies.
- Order Scheduling: Enable users to schedule orders in advance, facilitating better planning for both customers and restaurants.

3. Payment System Enhancements

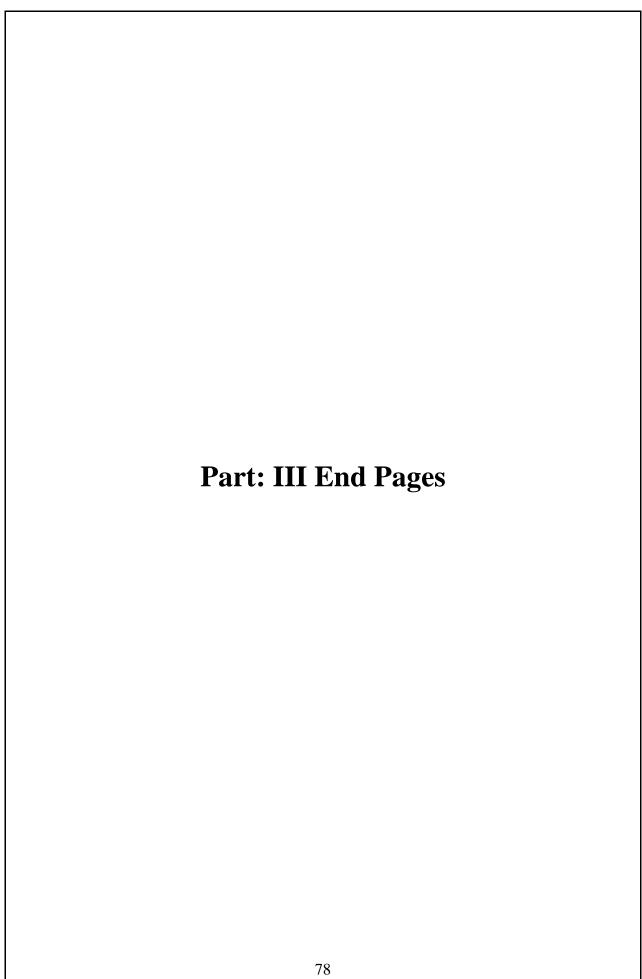
- **More Payment Options:** Integrate additional payment methods such as digital wallets, cryptocurrencies, and UPI (for Indian markets).
- **Security Enhancements:** Implement advanced security protocols like OAuth for better security and to protect user data during transactions.

4. Integration with Social Media and Marketing Tools

- **Social Media Integration:** Allow users to connect their social media accounts for easy login and sharing of their dining experiences.
- Email and SMS Marketing: Develop capabilities for targeted email and SMS marketing campaigns based on user behavior and preferences.

5. Analytics and Reporting

- Advanced Analytics Dashboard: Provide restaurant partners with a comprehensive dashboard showcasing detailed analytics on sales, customer preferences, and operational performance.
- **Customer Feedback Analysis:** Implement tools for analyzing customer reviews and feedback to help restaurants improve their service and menu offerings.



8. Abbreviations

Some abbreviations for a food order website PHP project:

1. FOWP: Food Order Website Project

2. FOWS: Food Order Web System

3. FOPP: Food Order PHP Project

4. FOSW: Food Ordering System Website

5. FOWSP: Food Order Web Service Project

9. Concept

Below concepts should serve as a good starting point for developing a food order website project. Adjustments and additional features can be made based on specific project requirements and goals:

1. User Authentication and Authorization:

- Implement user registration and login functionality.
- Admin accounts for managing the website.

2. Admin Dashboard:

- Provide administrators with a dashboard to manage restaurants, users, and orders.
- Implement role-based access control to restrict access to sensitive functionalities.

3. Restaurant and Dishes Management:

- Allow to register and create restaurants profiles.
- Enable to add, update, and remove menu items.
- Provide categories and filters for easy navigation of the menu.

4. Ordering System:

- Users should be able to browse restaurants and menus.
- Implement a shopping cart system for users to add items.
- Allow users to place, edit, and cancel orders.

5. Payment Integration:

- Integrate payment gateways for secure transactions.
- Support various payment methods.

6. Order Tracking and Status Updates:

- Provide real-time updates on the status of orders.
- Notify users via email or SMS about order confirmation, preparation, and delivery.
- Allow users to track the delivery status of their orders.

7. Order History and Account Management:

- Maintain a history of past orders for users to reference.
- Allow users to manage their profiles, addresses, and payment methods.
- Enable users to reorder items from their order history.

10. References / Bibliography

For PHP

- https://www.w3schools.com/php/default.asp
- https://www.youtube.com/
- https://www.php.net/

For MySQL

- https://www.mysql.com/
- http://www.mysqltutorial.org

For XAMPP

https://www.apachefriends.org/download.html