ONLINE FOOD ORDERING SYSTEM

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ONLINE FOOD ORDERING PROJECT REPORT

Department of ICT

Comilla University

Submitted To: Alimul Rajee

Lecturer,

Department of Information and Communication Technology

Comilla University

Submitted By:

Group-A

Group Members:

Name	ID
Mohammad Mohiuddin	12009008
Jannatul Fertheous Riddy	12009010
Prokash Pal	12009021
Mohammad Abul Hashem	12009023
MD Mahedi Hasan	12009044

Submission Date: 31 October,2022

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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LIST OF ABBREVIATIONS

PHP Hypertext Preprocessor(Open source scripting language).

MySQL "My", the name of co-founder Michael Widenius's

daughter My, and "SQL" the abbreviation for Structured Query

Language.

CGI Common Gateway Interface.

CLI Command-Line Interface.

CRM Customer Relationship management.

XAMPP for Cross-Platform (X), Apache (A), MariaDB (M), PHP (P)

and Perl (P).(a free and open source cross-platform web server solution).

HTTP Hypertext Transfer Protocol (set of rules for transferring files).

HTML Hypertext Markup Language.

CSS Cascading Style Sheets.

API Aplication Programming Interface.

SCM Source Code Management.

E-R Diagram Entity Relationship Diagram.

CHAPTER-01

INTRODUCTION

1.1 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.

1.2 Rationale

There are several good reasons to create an online food ordering application. There is a lot of demand, which is why so many restaurants are utilizing online ordering. Customers enjoy how convenient it is to purchase food online and have it delivered to their place of residence or

workplace. By providing the services, you may maintain your competitiveness in the restaurant business.

1.3 Objectives

The management of the information regarding item category, food, delivery address, order, and shopping cart is the system's primary goal. It oversees the management of all customer, shopping cart, and item category information. Since the project was entirely developed on the administrative end, only the administrator is assured access. The goal is to develop an application program to simplify managing the food consumer item category. It keeps note of every delivery address requested.

1.4 Needs of Online Food Order

Helping customers in placing meal orders whenever they want. Customers will be able to order their preferred foods at any time, but as we've already mentioned, this is only a limited option. As a result, restaurants need to have a specific system in place that will allow them to serve a large number of customers while streamlining operations. One of the best platforms is ordering, which offers all of these services in addition to a host of cutting-edge features that have helped countless small and large enterprises establish themselves as market leaders.

1.5 Functionalities

- Provides search options based on a variety of criteria. like Food Item, Customer, Order, and Order Confirmation.
- Online food ordering systems also manage payment information for order details, order confirmation details, and food items online.
- It keeps track of all the data regarding Categories, Payments, Orders, etc.
- Manage the category's details.

- Displays the food item's information and description for the customer. Easy to manage the Food Item, Category more effectively.
- It focuses on keeping track of order's data and transactions.
- Manage the food item's information.
- Improvements in editing, adding, and updating records lead to proper resource management of food item data.
- Manage the order's information by combining all Confirm Order data.

1.6 Features

- Based on products and components.
- Easily creating and altering issues.
- Issue List can be queried in any detail.
- Reporting & Charting in a more thorough manner.
- User accounts are used to manage access and uphold security.
- Straightforward status & resolutions.
- Priorities and severity levels at various levels as well as targets and milestones for the programmers to follow.
- Attachments & Additional Comments for more information.
- A solid database back end.
- Various levels of reports are provided with many filtering options.
- It has more storage space.
- Accuracy in the work.
- Information retrieval is simple and quick. nicely crafted reports.
- Reduce the workload of the person using the current manual system.
- Individual access to any information.
- Work progresses quickly. Simple information updates.

CHAPTER-02

LITERATURE REVIEW

2.1 Background of the Studies

The research papers we considered while doing our analysis are listed below. In a wireless meal ordering system was designed and implemented together with consumer feedback for a restaurant. It makes it simple for restaurant operators to change menu presentations and set up the system in a WiFi setting. The configurable wireless meal ordering system has linked a smart phone with real-time customer feedback implementation to enable real-time contact between patrons of restaurants and business owners.[1].

The goal was investigating the variables that affect internet users' perceptions of online food ordering among university students in Turkey. Davis' Technology Acceptance Model (TAM), which he created in 1986, was used to analyze how the Web environment for ordering food was adopted. Along with TAM, three additional primary factors—Trust, Innovation, and External Influences—are included to the paradigm.[2]

The research project intends to automate the restaurant meal ordering procedure and enhance the patrons' dining experience. In this study, the design and implementation of a restaurant food ordering system were covered. The wireless data access to servers is implemented by this system. All the menu information will be available on the user's mobile Android application. Wirelessly, the kitchen and cashier receive the order information from the customer's mobile device. The central database is updated with these order specifics. The proprietor of the restaurant can quickly handle menu changes. [3]

This research examines the initiatives made by restaurant owners to implement ICTs—such as PDAs, wireless LANs, and pricey multi-touch screens—to improve the dining experience. In order to address some of the drawbacks of the traditional paper-based and PDA-based food ordering systems, a low-cost touch screen-based restaurant management system that uses an Android smartphone or tablet is suggested in this study.[4]

The study's objective was to determine whether the application is user-centered and based on user requirements. This system developed all problems pertaining to every user that it includes. Almost anyone may use the program if they know how to use an Android smart phone. The various problems with Mess service will be resolved by this system. The implementation of an online food ordering system is done to assist and resolve significant issues for consumers. Based on the application, it can be said that: This system makes placing orders simple; it gives customers the information they need to place orders. Through the program, it is able to receive orders and change their data, and it also aids the administrator in managing all the Food system. [5]

CHAPTER-03

METHODOLOGY

3.1 Complete Visualization of Online Food Ordering System

An easy-to-use table management system will also be included in a good restaurant reservation setup. This enables restaurants to see their restaurant hour by hour and receive reservations through a variety of ways.

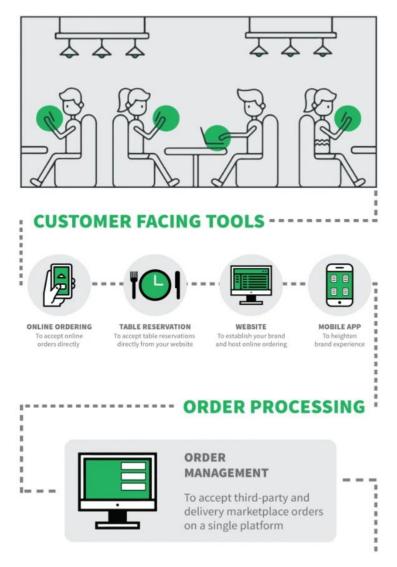




Figure 3.1.1: Complete Visualization Model

3.2 Tools and Technique

- 3.2.1 Php
- 3.2.2 XAMPP
- 3.2.3 MySQL vog
- 3.2.4 HTML

- 3.2.5 Bootstrap
- 3.2.6 Sublime Text
- 3.2.7 Git hub
- 3.2.8 Java Script
- 3.2.9 CSS

3.2.1 Php

Hypertext Preprocessor (or simply PHP) is a a server-side scripting language used for general programming purposes as well as Web development. The PHP Group now produces the PHP reference implementation, which was first developed by Rasmus Lerdorf in 1994. Personal Home Page was the first meaning of PHP, however it has since evolved into PHP: Hypertext Preprocessor. PHP code can be used alone, in conjunction with different web template systems, web content management systems, and web frameworks, or it can be incorporated into HTML code. A PHP interpreter, which can be either a web server module or a Common Gateway Interface (CGI) executable, is typically used to process PHP code. The output of the interpreted and executed PHP code, which could be any kind of data, including graphics, is combined with the created web page by the web server. PHP code can be used to create standalone graphical apps and can also be run using a command-line interface (CLI).

3.2.2 XAMPP

XAMPP is a stack of free and open source PHP and Perl interpreters, the MariaDB database, and the Apache HTTP Server are the primary components of Apache Friends' free and open source cross-platform web server solution stack. Cross-Platform (X), Apache (A), MariaDB (M), PHP (P), and Perl make up the acronym XAMPP (P). It is a straightforward, lightweight installation of Apache that makes setting up a local web server for testing and deployment very simple for developers. An extractable file contains the server program (Apache), database (MariaDB), and scripting language (PHP) required to set up a web server. Cross-platform means that XAMPP functions equally well on Linux, Mac, and Windows. Since XAMPP uses the same components

as the majority of real web server deployments, switching from a local test server to a live server is also incredibly simple.

3.2.3 MySQL yog

MySQL Workbench is a comprehensive visual tool for DBAs, database architects, and developers. Data modeling, SQL creation, and extensive administrative tools for server configuration, user management, backup, and other tasks are all provided by MySQL Workbench. There are versions of MySQL Workbench for Windows, Linux, and Mac OS X.

3.2.4 HTML

Hypertext Markup Language (HTML) is the industry-standard markup language for developing web apps and pages. It is one of three foundational technologies underpinning the World Wide Web, along with JavaScript and Cascading Style Sheets (CSS). HTML documents are downloaded from a web server or local storage by web browsers, who then turn them into multimedia web pages. HTML originally featured cues for the document's design and semantically explains the structure of a web page. The foundation of HTML pages are HTML components. Images and other objects, like interactive forms, may be embedded within the produced page using HTML techniques. By indicating structural semantics for text elements like headings, paragraphs, lists, links, quotations, and other objects, HTML offers a way to generate structured texts.

3.2.5 Bootstrap

Bootstrap is a front-end framework that is open-source and free to use while creating websites and web apps. It includes optional JavaScript extensions along with HTML and CSS-based design templates for navigation, buttons, forms, buttons, and other interface elements. It only addresses front-end development, unlike many web frameworks.

3.2.6 Java Script

JavaScript often abbreviated as JS, is an interpreted, high-level programming language. Additionally, it is a dynamic, weakly typed, prototype-based, and multi-paradigm language. One of the three fundamental technologies of the World Wide Web, together with HTML and CSS, is JavaScript. JavaScript is a crucial component of online applications because it makes web pages interactive. The vast majority of websites make use of it, and every significant web browser has an engine specifically designed to run JavaScript.

3.2.7 Sublime Text

Sublime Text is a commercial cross-platform source code editor that utilizes the Python programming language (API). Numerous programming and markup languages are supported natively, and users can add features through plugins, which are often developed and maintained by the local community under free-software licenses.

3.2.8 GitHub

GitHub is a Git-based version control hosting service on the internet. Code is where it is most frequently utilized. It has all of Git's distributed version control and source code management (SCM) features in addition to a few extras. Every project can benefit from access control and a variety of collaborative tools, including wikis, task management, issue tracking, and feature requests. Both private repositories and free accounts, which are frequently used to host open-source software projects, are available on GitHub.

3.2.9 CSS

Cascading Style Sheets (CSS) is a language for creating style sheets that describe how a document produced in a markup language like HTML will look. The World Wide Web's foundational technologies, along with HTML and JavaScript, include CSS. Layout, color, and font may all be separated from content and presentation using CSS. By describing the pertinent

CSS in a separate CSS file, this separation can make content more accessible, give definition of presentation features greater freedom and control, allow numerous web pages to share formatting, and reduce complexity and repetition in structural content.

3.3 Methodology Development Model

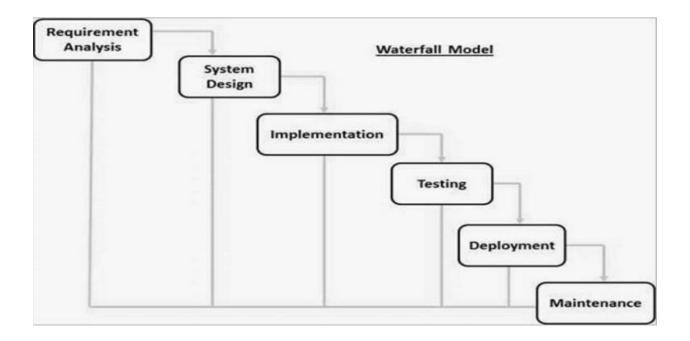


Figure 3.3.1: Methodology Development Model.

The Waterfall model's consecutive phases are:

Requirement Gathering and analysis – During this stage, all potential system needs are gathered and outlined in a requirement specification document.

• **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 performed.

3.4 System Design Model

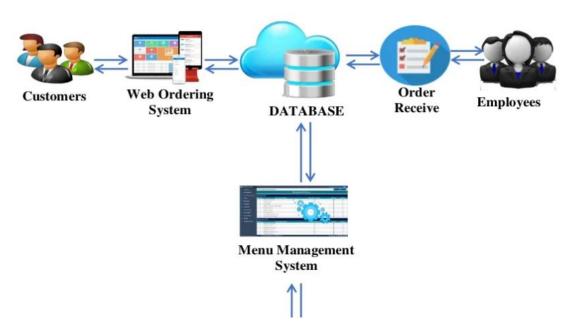


Figure 3.4.1: System Model Design

3.5 Admin workflow Process

User goes to home page of the domain. If he/she has an account then he/she can login in restaurant management system otherwise he/she need to register an account after successful registration, they can login in home page.

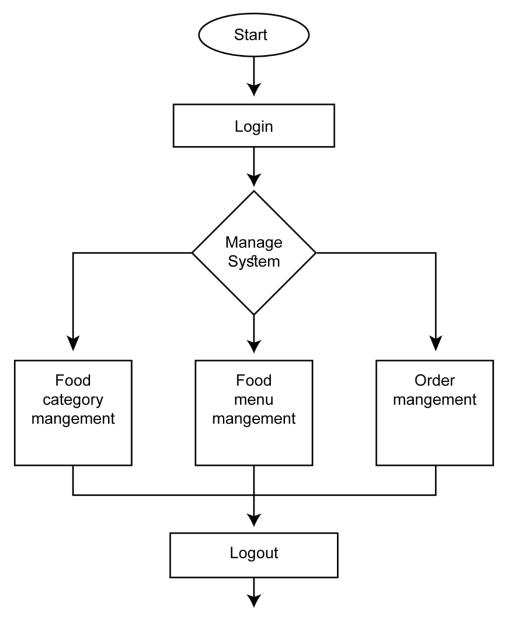


Figure 3.5.1: Admin workflow Process

3.6 Customer Workflow Process

Initially to visit the food categories or food menu, users don't need to login/register an account. After checking out the categories and menu items, if the user finds his/her desired menu and if they want to order that particular item they can go to order page. During placing any order the customer needs to provide his/her required information mentioned the order section.

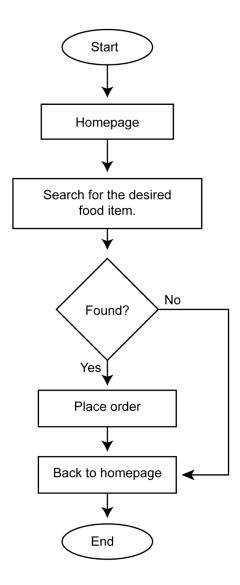


Figure 3.6.1: Customer Workflow Process

3.7 Diagram

3.7.1 Schema Diagram

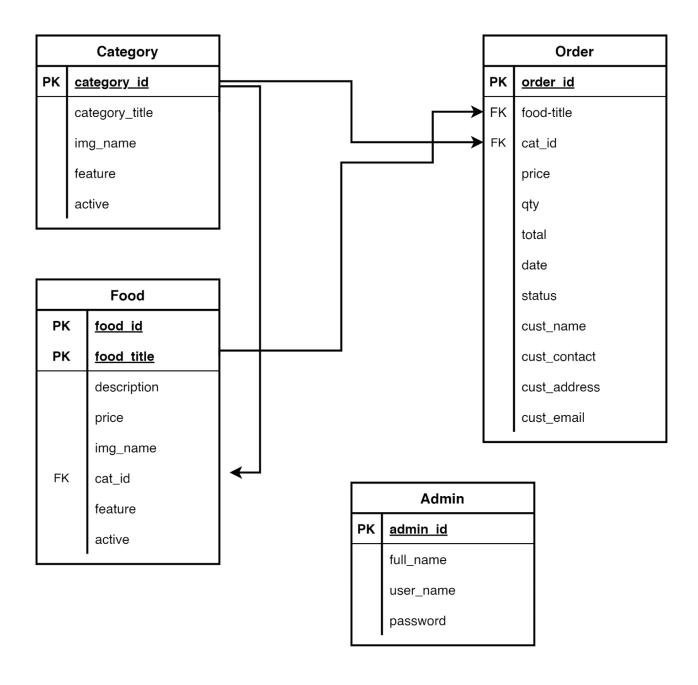


Figure 3.7.1.1 : Schema Diagram.

3.7.2 E-R Diagram

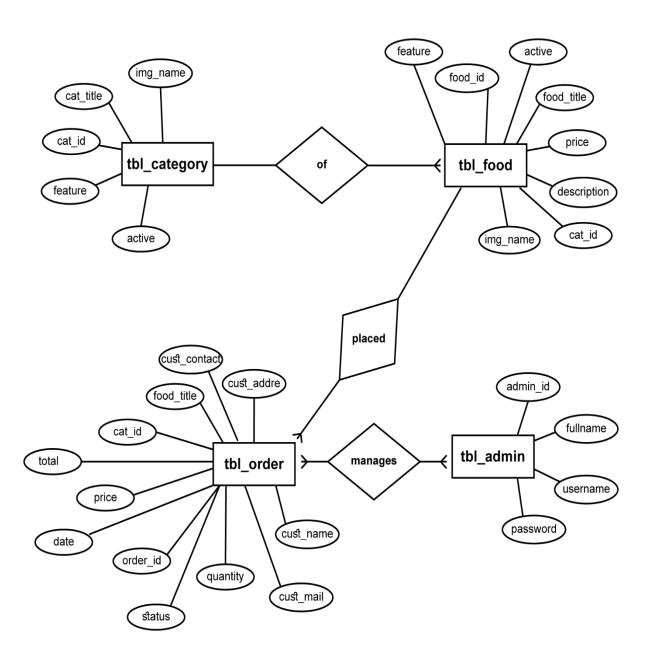


Figure 3.7.2.2 : E-R Diagram

3.8 Database Design

Database design is the management of information using a database paradigm. What data must be saved and how the various data items interact are determined by the database design that follows. Developer would start adjusting the data to the database model using this knowledge. Data classification and relationship discovery are key components of database design.

3.8.1 Table

3.8.1.1 tbl_admin Table

id	full_name	username	password

3.8.1.2 tbl_category Table

category_id	category_title	image_name	feature	active

3.8.1.3 tbl_food Table

food_id	food_title	description	price	img_name	cat_id	feature	active

3.8.1.4 tbl_order

order	food	Cat	price	qty	total	date	status	cust_	cust	cust	cust
_id	_title	_id						name	_contact	_address	_email

3.9.2 Table Creation

3.9.2.1 tbl_admin Table

CREATE TABLE `tbl_admin` (
`id` int(10) UNSIGNED NOT NULL,
`full_name` varchar(100) NOT NULL,
`username` varchar(100) NOT NULL,
`password` varchar(255) NOT NULL
) ENGINE=InnoDB DEFAULT CHARSET=utf8;

//add value & table type

INSERT INTO 'tbl_admin' ('id', 'full_name', 'username', 'password') VALUES

- (1, 'Steeve Moore', 'steeve', 'E10ADC3949BA59ABBE56E057F20F883E'),
- (9, 'Liam Johnson', 'liam', 'E10ADC3949BA59ABBE56E057F20F883E'),
- (10, 'Ramsey', 'ramsey', 'E10ADC3949BA59ABBE56E057F20F883E'),
- (12, 'Administrator', 'admin', 'E10ADC3949BA59ABBE56E057F20F883E');

#	Name	Туре	Collation	Attributes	Null	Default	Comments	Extra
1	id 🔑	int(10)		UNSIGNED	No	None		AUTO_INCREMENT
2	full_name	varchar(100)	utf8_general_ci		No	None		
3	username	varchar(100)	utf8_general_ci		No	None		
4	password	varchar(255)	utf8_general_ci		No	None		

3.9.2.2 tbl_category Table

CREATE TABLE `tbl_category` (

'id' int(10) UNSIGNED NOT NULL,

`title` varchar(100) NOT NULL,

'image_name' varchar(255) NOT NULL,

`featured` varchar(10) NOT NULL,

`active` varchar(10) NOT NULL

) ENGINE=InnoDB DEFAULT CHARSET=utf8;

// add value & table type

INSERT INTO `tbl_category` (`id`, `title`, `image_name`, `featured`, `active`) VALUES

- (4, 'Pizza', 'Food_Category_790.jpg', 'Yes', 'Yes'),
- (5, 'Burger', 'Food_Category_344.jpg', 'Yes', 'Yes'),
- (9, 'Wraps', 'Food_Category_374.jpg', 'Yes', 'Yes'),
- (10, 'Pasta', 'Food_Category_948.jpg', 'Yes', 'Yes'),
- (11, 'Sandwich', 'Food_Category_536.jpg', 'Yes', 'Yes');

#	Name	Туре	Collation	Attributes	Null	Default	Comments	Extra
1	category id 🔑	int(10)		UNSIGNED	No	None		AUTO_INCREMENT
2	title	varchar(100)	utf8_general_ci		No	None		
3	image_name	varchar(255)	utf8_general_ci		No	None		
4	featured	varchar(10)	utf8_general_ci		No	None		
5	active	varchar(10)	utf8_general_ci		No	None		

3.9.2.3 tbl_food Table

CREATE TABLE `tbl_food` (

'id' int(10) UNSIGNED NOT NULL,

`title` varchar(100) NOT NULL,

'description' text NOT NULL,

`price` decimal(10,2) NOT NULL,

`image_name` varchar(255) NOT NULL,

`category_id` int(10) UNSIGNED NOT NULL,

`featured` varchar(10) NOT NULL,

`active` varchar(10) NOT NULL

) ENGINE=InnoDB DEFAULT CHARSET=utf8;

#	Name	Туре	Collation	Attributes	Null	Default	Comments	Extra
1	id 🔑	int(10)		UNSIGNED	No	None		AUTO_INCREMENT
2	title	varchar(100)	utf8_general_ci		No	None		
3	description	text	utf8_general_ci		No	None		
4	price	decimal(10,2)			No	None		
5	image_name	varchar(255)	utf8_general_ci		No	None		
6	category_id	int(10)		UNSIGNED	No	None		
7	featured	varchar(10)	utf8_general_ci		No	None		
8	active	varchar(10)	utf8_general_ci		No	None		

//add value & table type

INSERT INTO `tbl_food` (`id`, `title`, `description`, `price`, `image_name`, `category_id`, `featured`, `active`) VALUES

(4, 'Ham Burger', 'Burger with Ham, Pineapple and lots of Cheese.', '4.00', 'Food-Name-6340.jpg', 5, 'Yes', 'Yes'),

- (5, 'Smoky BBQ Pizza', 'Best Firewood Pizza in Town.', '9.00', 'Food-Name-8298.jpg', 4, 'No', 'Yes'),
- (9, 'Chicken Wrap', 'Crispy flour tortilla loaded with juicy chicken, bacon, lettuce, avocado and cheese drizzled with a delicious spicy Ranch dressing.', '5.00', 'Food-Name-3461.jpg', 9, 'Yes', 'Yes'),
- (10, 'Cheeseburger', 'A cheeseburger is a hamburger topped with cheese. Traditionally, the slice of cheese is placed on top of the meat patty.', '4.00', 'Food-Name-433.jpeg', 5, 'Yes', 'Yes'),
- (11, 'Grilled Cheese Sandwich', 'Assembled by creating a cheese filling, often cheddar or American between two slices of bread and is then heated until the bread browns and cheese melts.', '3.00', 'Food-Name-3631.jpg', 11, 'Yes', 'Yes');

3.9.2.4 tbl_order Table

CREATE TABLE `tbl_order` (

'id' int(10) UNSIGNED NOT NULL,

`food` varchar(150) NOT NULL,

`price` decimal(10,2) NOT NULL,

`qty` int(11) NOT NULL,

`total` decimal(10,2) NOT NULL,

`order_date` datetime NOT NULL,

`status` varchar(50) NOT NULL,

`customer_name` varchar(150) NOT NULL,

`customer_contact` varchar(20) NOT NULL,

`customer_email` varchar(150) NOT NULL,

`customer_address` varchar(255) NOT NULL

) ENGINE=InnoDB DEFAULT CHARSET=utf8;

#	Name	Туре	Collation	Attributes	Null	Default	Comments	Extra
1	id 🔑	int(10)		UNSIGNED	No	None		AUTO_INCREMENT
2	food	varchar(150)	utf8_general_ci		No	None		
3	price	decimal(10,2)			No	None		
4	qty	int(11)			No	None		
5	total	decimal(10,2)			No	None		
6	order_date	datetime			No	None		
7	status	varchar(50)	utf8_general_ci		No	None		
8	customer_name	varchar(150)	utf8_general_ci		No	None		
9	customer_contact	varchar(20)	utf8_general_ci		No	None		
10	customer_email	varchar(150)	utf8_general_ci		No	None		
11	customer_address	varchar(255)	utf8_general_ci		No	None		

//add value & table type

INSERT INTO `tbl_order` (`id`, `food`, `price`, `qty`, `total`, `order_date`, `status`, `customer_name`, `customer_contact`, `customer_email`, `customer_address`) VALUES

- (2, 'Best Burger', '4.00', 4, '16.00', '2020-11-30 03:52:43', 'Delivered', 'Kelly Dillard', '7896547800', 'kelly@gmail.com', '308 Post Avenue'),
- (3, 'Mixed Pizza', '10.00', 2, '20.00', '2020-11-30 04:07:17', 'Delivered', 'Thomas Gilchrist', '7410001450', 'thom@gmail.com', '1277 Sunburst Drive'),
- (4, 'Mixed Pizza', '10.00', 1, '10.00', '2021-05-04 01:35:34', 'Delivered', 'Martha Woods', '78540001200', 'marthagmail.com', '478 Avenue Street'),
- (6, 'Chicken Wrap', '7.00', 1, '7.00', '2021-07-20 06:10:37', 'Delivered', 'Charlie', '7458965550', 'charlie@gmail.com', '3140 Bartlett Avenue'),
- (7, 'Cheeseburger', '4.00', 2, '8.00', '2021-07-20 06:40:21', 'On Delivery', 'Claudia Hedley', '7451114400', 'hedley@gmail.com', '1119 Kinney Street'),
- (8, 'Smoky BBQ Pizza', '6.00', 1, '6.00', '2021-07-20 06:40:57', 'Ordered', 'Vernon Vargas', '7414744440', 'venno@gmail.com', '1234 Hazelwood Avenue'),
- (9, 'Chicken Wrap', '5.00', 4, '20.00', '2021-07-20 07:06:06', 'Cancelled', 'Carlos Grayson', '7401456980', 'carlos@gmail.com', '2969 Hartland Avenue'),
- (10, 'Grilled Cheese Sandwich', '3.00', 4, '12.00', '2021-07-20 07:11:06', 'Delivered', 'Jonathan Caudill', '7410256996', 'jonathan@gmail.com', '1959 Limer Street');

Chapter-04

ANALYSIS RESULT & DISCUSSION

4.1 System Implementation Plan

A software design pattern called Model View Controller, or MVC as it is more formally known, is used to build online applications. There are three components to the Model View Controller pattern:

- Model The lowest level of the pattern, is in charge of maintaining the data.
- View This is in charge of showing the user all or part of the data.
- Controller The computer program that controls how the Model and View interact. MVC is well-liked because it provides for duty separation by separating the application logic and user interface layers. The Controller accepts all requests from the application and collaborates with the Model to prepare any necessary data for the View. The View then constructs a final presentable response using the data produced by the Controller. The following is a graphic representation of the MVC abstraction. Model of MVC (Model View Controller Flow)

4.1.1 Project Planning

Here is an illustration of a software project plan: 1) How will the project be carried out within the company? What are the time, financial, and human resource limitations? What does having a market strategy entail? 2) Customer meetings: Weekly or as needed customer meetings that include a progress report presentation. Additionally taking into account customer input, adjustments and changes are made as necessary. The client is also shown project deliverables and milestones.

The steps listed below can be used to create successful software projects:

Select a project. The aims and objectives of project are as follows:

- Understanding specifications and requirements.
- Using analysis, design, and implementation methods.
- Using testing procedures.
- Documenting.
- Budget allocation or exceeding limits under control.
- Understanding project milestones and deliverables
- Project estimates.
- Cost and Time.

4.2 Facing Problem During Development the Project

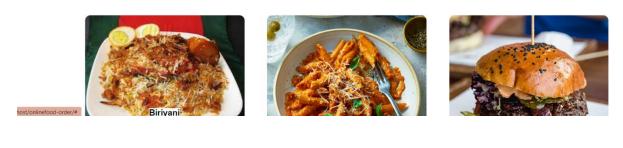
During the construction of the web application "Online Food Order," the developer ran into a few issues. Here are a few issues in brief:

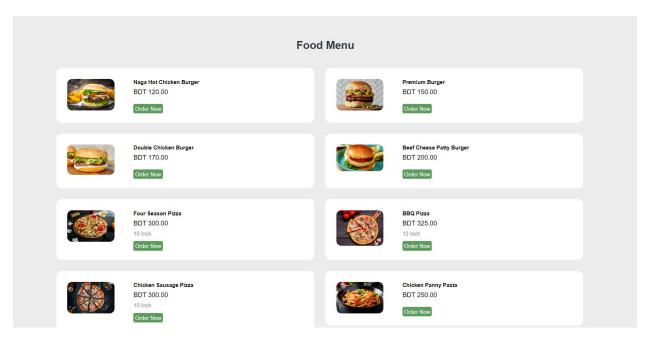
- I. Requirement Gathering Phase: It is a crucial step. The project will fail if the requirements are poor. At that time, developer became disappointed when Developer was collecting information and data then what information and data will be helpful or appropriate for this project.
- II. During Design Phase: At this moment, the developer struggled to decide which flowchart would be best for this project when creating it.
- **III. Development Phase:** It is a very major component of the undertaking. Frequently, the developer misplaced the semicolon (;) at the conclusion of the statement.
- **IV. Testing Phase:** It is an essential component of the project. This section will aid with project testing overall. During testing, developer has faced some bugs of the project.

4.3 Final Output



Explore Various Food Categories





4.4 Result & Discussion

The final output is a complete web based Restaurant Management System, which can be used in any kind of restaurant. This Restaurant Management System can help to manage the Restaurant more effectively, efficiently and smoothly. This is more secured and there will be speedy and well ordered authentication procedure for the maintenance of records. At present time, in this technology based world, people likes and wants everything to be smooth and efficient through the use of data and information. In this perspective, our Restaurant Management System can be an ideal platform for the users. Its user friendly interface can help the customers to find his/her desired menu item and place order with a few click. Customers can easily place an online order by browsing the menu options, pick what they want sitting at home. And can also receive their food in a short period of time.

4.5 Application

- Restaurants, takeaways, and businesses that sell food to go profit from internet meal ordering software designed specifically for them. Customers like the ease of online meal ordering, which is why it is expanding quickly. Expand your sales channels by downloading our online food ordering application.
- Through this food ordering website, customers may place orders from their computers, tablets, and cellphones. They can look through your menu options, choose what they want, and submit an order online. Internet-based payment will also be accepted. Meals can be picked up in person or delivered to customers.
- There are many benefits to using an online food ordering app or a restaurant ordering app, including reduced labor expenses, fewer walk-away customers, and shorter wait times. This restaurant's online ordering system is intended for independent and multi-location chains that offer food to go, including eateries, fast food outlets, take-out, and other catering services.
- Putting your company online will enable you to generate a lot more revenue, which will enhance your marketability. Your online menu will give current clients a terrific new option to

place orders, and new customers will easily find you thanks to well-known search engines. To complement the style and feel of your present website, the system is tailored. In the digital age, we help business owners grow their enterprises.

4.6 Advantages

- It is quick, simple, and pleasant.
- Managing an online menu is easier.
- Access is only a click away.
- Less work for you.

4.7 Limitations of the System

The system has certain other restrictions as well. There are only a few basic functions in the system's shopping cart, and it cannot be extensively customized. Additionally, practically all of the functionality of the application, including validation, is handled by server-side programming. It increases the server's workload, especially when a large number of users access the program. This issue can be resolved by using client-side languages, such as JavaScript or HTML 5, to check data. Additionally, the order model has been created.

CHAPTER-05

Conclusion & Future Work

5.1 Conclusion

Restaurant Management System is a web-based technology that aids the restaurant industry in carrying out tasks effectively and efficiently. It aids in managing cash flow for managers. Managers can view analytics data to assess company growth. The manager can control orders and employee schedules by using this system. The full complement is a restaurant management system. It provides access to the Online Order platform, third-party connectors software, and comprehensive CRM solution, which together cover a sizable portion of your restaurant's requirements. They are not the outdated hardware and software sets for restaurants that were previously offered. They are the hottest things around, smooth, manageable, inexpensive, and quick.

In the "Online Food Ordering Project," we made every effort to meet all the demands of the restaurant. Because it is straightforward and adaptable, the project is successful. The biggest benefit of my project is that it draws plenty of users because of its simplicity. A novice user may operate it with ease. Any type of restaurant can utilize our software. By automating meal ordering, billing, and inventory control, the restaurant management system assists the restaurant manager in managing the restaurant more successfully and efficiently. The system handles the transaction and stores the data produced. These data will be used to create reports that assist the restaurant manager in making wise business decisions. For example, the manager can decide whether more waiters, delivery men, delivery carts, and cooks are needed based on how many clients will be present during a specific time period. When this project is finished, all security concerns will be resolved. Additionally, a quick and secure authentication process will be used for record maintenance. Because it automatically pulls information about a consumer from the database on subsequent visits, data entry is quick and easy. As a result, our program will undoubtedly succeed in replacing the antiquated manual way of storing secure information. The work plan also specifies the specific

front end and back end characteristics of the technology being used in the project. Future project goals and its scope have been elaborated.

5.2 Future Work

Each project should pay close attention to future development because it contains the system's most recent features. It lessens software issues and defects. It develops a close relationship with customers based on their comments or preferences. Developer will incorporate certain dynamic elements that are briefly described below into my restaurant management system.

Reporting module with real time mechanism.

- Modern architecture with smooth transitions.
- System for email and mobile confirmation.
- Selling Point

REFERENCE

- [1] Kirti Bhandge, Tejas Shinde, Dheeraj Ingale, Neeraj Solanki, Reshma Totare,"A Proposed System for Touchpad Based Food Ordering System Using Android Application", International Journal of Advanced Research in Computer Science Technology (IJARCST 2015).
- [2] Varsha Chavan, Priya Jadhav, Snehal Korade, Priyanka Teli, "Implementing Customizable Online Food Ordering System Using Web Based Application", International Journal of Innovative Science, Engineering Technology (IJISET) 2015.
- [3] Resham Shinde, Priyanka Thakare, Neha Dhomne, Sushmita Sarkar, "Design and Implementation of Digital dining in Restaurants using Android", International Journal of Advance Research in Computer Science and Management Studies 2014.
- [4] Ashutosh Bhargave, Niranjan Jadhav, Apurva Joshi, Prachi Oke, S. R Lahane, "Digital Ordering System for Restaurant Using Android", International Journal of Scientific and Research Publications 2013.
- [5] Khairunnisa K., Ayob J., Mohd. Helmy A. Wahab, M. Erdi Ayob, M. Izwan Ayob, M. Afif Ayob, "The Application of Wireless Food Ordering System" MASAUM Journal of Computing 2009.
- [6] Noor Azah Samsudin, Shamsul Kamal Ahmad Khalid, Mohd Fikry Akmal Mohd Kohar, Zulkifli Senin, Mohd Nor Ihkasan," A customizable wireless food ordering system with real time customer feedback", IEEE Symposium on Wireless Technology and Applications(ISWTA) 2011.
- [7] Serhat Murat Alagoza, Haluk Hekimoglub," A study on tam: analysis of customer attitudes in online food ordering system", Elsevier Ltd. 2012.
- [8] Patel Krishna, Patel Palak, Raj Nirali, Patel Lalit," Automated Food Ordering System", International Journal of Engineering Research and Development (IJERD) 2015.
- [9] Mayur D. Jakhete, Piyush C. Mankar," Implementation of Smart Restaurant with e-menu Card," International Journal of Computer Applications 2015 of Smart Restaurant with e-menu Card," International Journal of Computer Applications.
- [10] Abhishek Singh, Adithya R, Vaishnav Kanade, Prof. Salma Pathan" ONLINE FOOD ORDERING SYSTEM" International Research Journal of Engineering and Technology (IRJET) 2018.

- [11] Gleditsch, N. P., Pinker, S., Thayer, B. A., Levy, J. S., & Thompson, W. R. (2013). The forum:
- [12] Data Analysis. International Data Analysis Review, 15(3), 396-419.
- [13] Google for problem solving.
- [14] https://www.slideshare.net/
- [15] Database Programming with JDBC and Java by O'Reilly
- [16] Head First Java 2nd Edition
- [17] http://www.jdbc-tutorial.com/
- [18] Java and Software Design Concepts by Apress
- [19] https://www.tutorialspoint.com/java/
- [20] http://www.javatpoint.com/java-tutorial
- [21] https://docs.oracle.com/javase/tutorial/
- [22] http://www.wampserver.com/en/
- [23] <u>http://www.JSP.net/</u>
- [24] http://www.tutorialspoint.com/mysql/
- [25] httpd://docs/2.0/misc/tutorials.html