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Online Food Ordering Management System

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Abstract: The main purpose of the Online Food Ordering Management System is to use it in the food-service industry. This feature helps hotels and restaurants to increase their online food ordering systems. Customers can choose from a wide range of food menu items within just a few minutes. In today's modern food business, it's also able to deliver fast and easily to a customer's place. The work presented as Online Food Ordering Management System simplifies the ordering process. The proposed solution presents a user interface and changes the menu to include all available options, creating customer work easier. Allows customers to order any item that they like and adjust the quantity of the food item. The order confirmation is displayed to the customer on the Homepage of the website. The order is put to the queue, updated across both the database and the admin panel, and provided in real-time. This system aids the staff with checking over orders in real-time and executing them effectively and easily with few errors. Here, the customer can also reserve a table at a restaurant of his/her choice and will get the confirmation of their reserved table on the homepage of our website.

Keywords: Food, Online, Management, DBMS (Database Management System), Use Case Diagram, Entity Relationship Diagram, Flowchart, Statechart, Gantt Chart, Sequence Diagram.

I. INTRODUCTION

The food industry is highly labour intensive and the biggest expense in the food industry is the cost of employing the right kind of people to do the work. Labour rates are steadily rising year in and year out, making it difficult to hire labour. One of the ways to reduce this expense is to use modern technology to replace some of the jobs done by human beings and make machines do the work. Here we propose an "Online Food Ordering Management System" that has been designed for Fast Food restaurants, Take-Out or College Cafeterias. The system may well be implemented in any organization that distributes foodstuff. Because the whole process of accepting orders is automated, the meal ordering experience for both the client and the restaurant is optimized. Online food real-time ordering management system's objective is to give customers a way to order food and drinks over the internet. The primary reason for all of this is because it is beneficial to both the client and vendor.

II. PROPOSED SYSTEM

The simulation first starts with the admin entering his/her credentials (ID and password). Once that has been verified, the admin can access the main admin panel where he/she can edit the categories, the food items as well can view the orders placed and reservations made. Now we get a window that displays the order number, customer ID, food name, price and quantity. Once the customer finalizes his/her order, they are asked to enter their name, address and other contact details where the total price is displayed and the customer can click the 'order now' button to get a message of confirmation of order. Once you enter the admin portal, you get the option of adding food, deleting food or updating food. Any option of choice leads you to the food menu. Once the selected operation is carried out, the end result, i.e., the added food or the updated food list is displayed and if you have deleted a food, that particular food disappears from the main menu on the website which will be visible to the customer.

III. DESIGN AND IMPLEMENTATION

The implementation of the website is done in PHP, HTML CSS and the datasets are stored in the PhpMyAdmin SQL database as well as in the Admin Panel which can only be accessed by the registered Admin. We have developed a web-based data management system. A PC or laptop with a browser and internet connection, and the XAMPP control panel, is required for our website.

For the initial implementation of the website we have considered a few restaurants in our datasets. Implementation of our system consists of a real time feedback system where once the customer places an order or makes a reservation at a home restaurant, the admin will be able to see the order or reservation that the customer has made on the food ordering website and can manage them easily. The entire programming of the website is done on Sublime Text Editor and Microsoft Visual Studio Code, and for that we have used Google Chrome as the browser of choice. For creating the database, we have used PhpMyAdmin, which was possible only because of the xampp control panel installed on our systems.

First, we created the front-end of the website where we have given our own logo which was designed on Canva and we have focused more on the CSS to make our website stand out. Then we created the database in PhpMyAdmin to get started with the backend of our website which was very much necessary as it would help us store all the details from the front-end into the backend of our website and also help with the responsiveness of our project. And last but not the least, we created the Admin Panel of our management system which was the most important part as it would store all the details that were being entered into the website by the customer and also help the admin to manage the food items, categories, orders and reservations made.

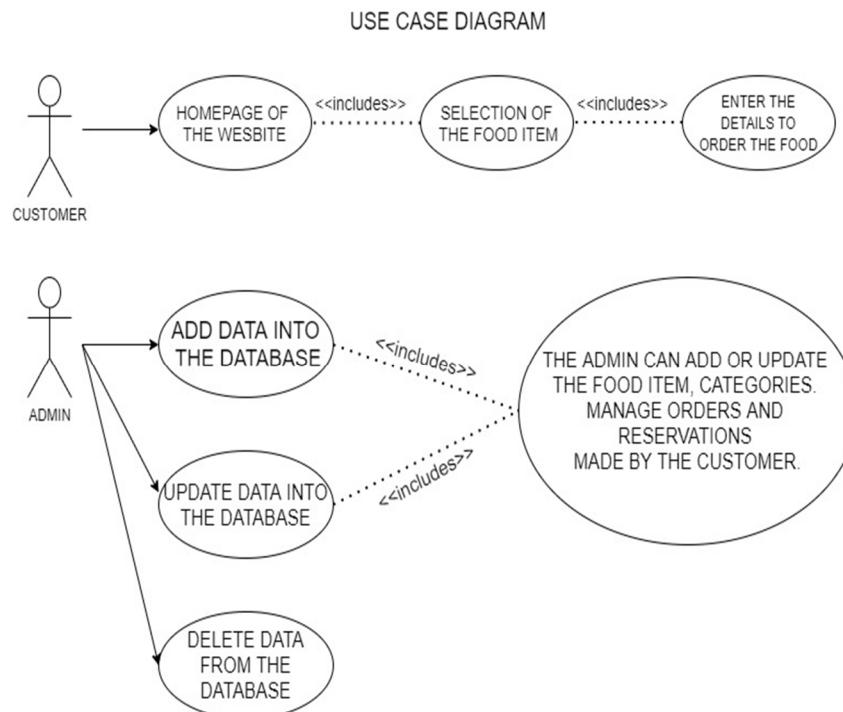


Fig. 3.1: Use Case Diagram

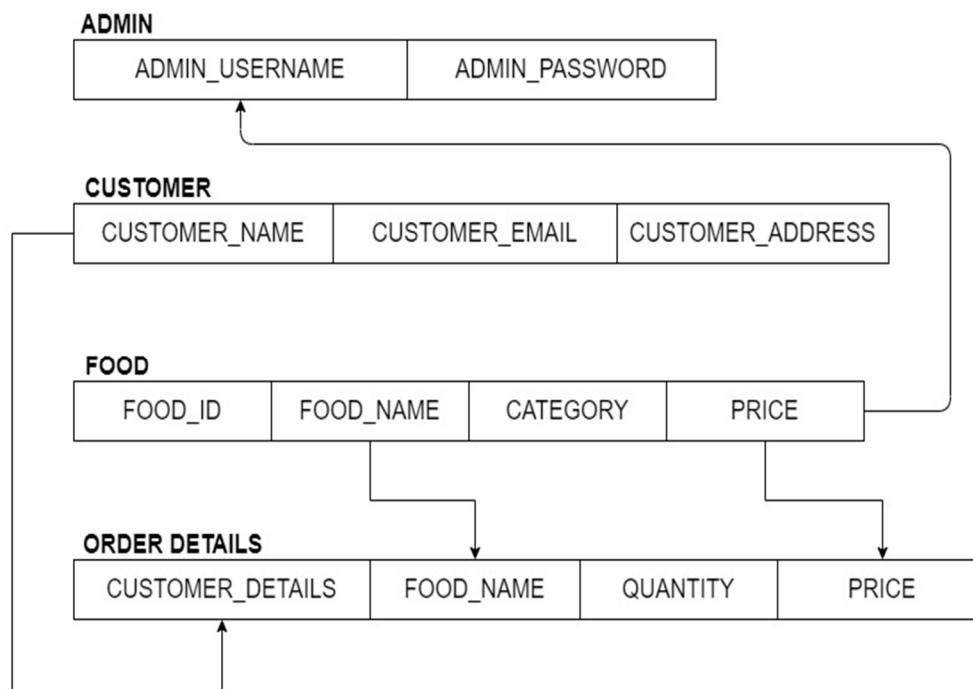


Fig. 3.2: Entity Relationship Diagram

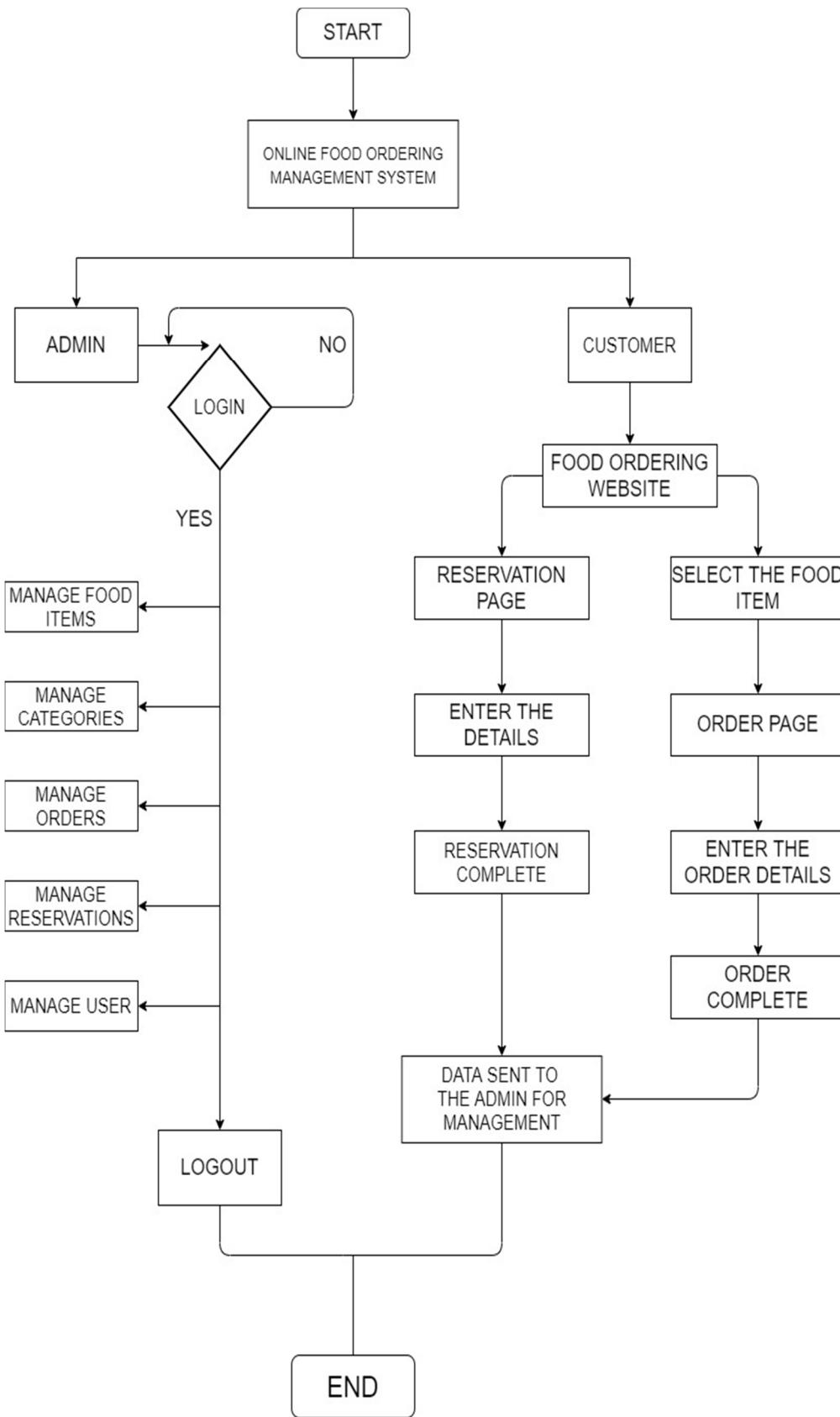


Fig. 3.3: Flowchart

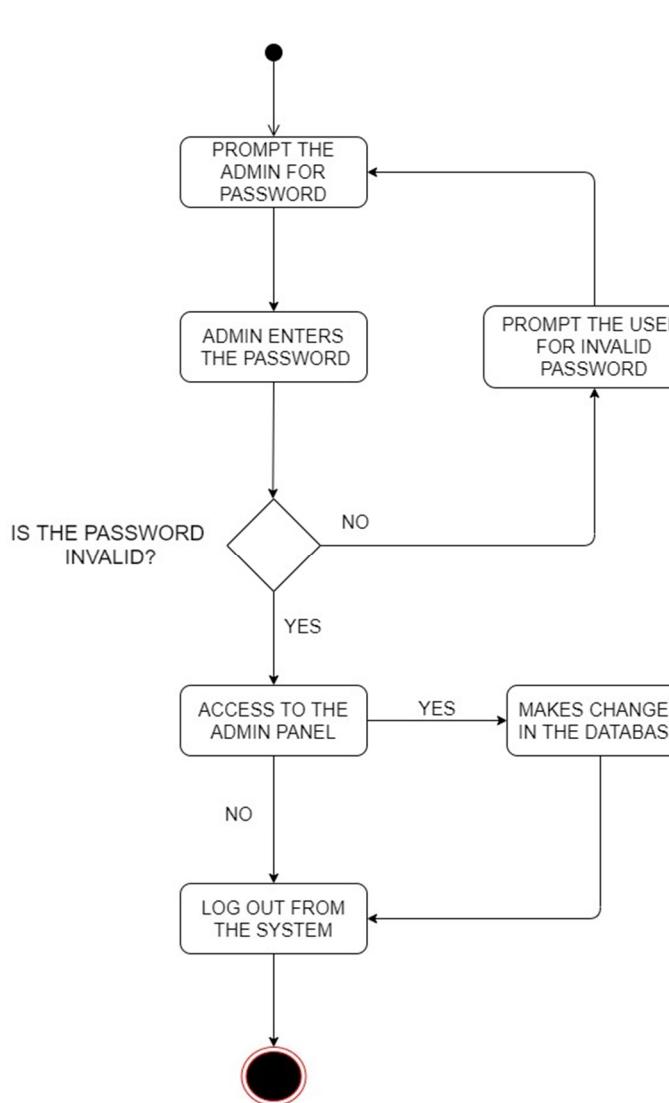


Fig. 3.4: Admin Panel State Chart

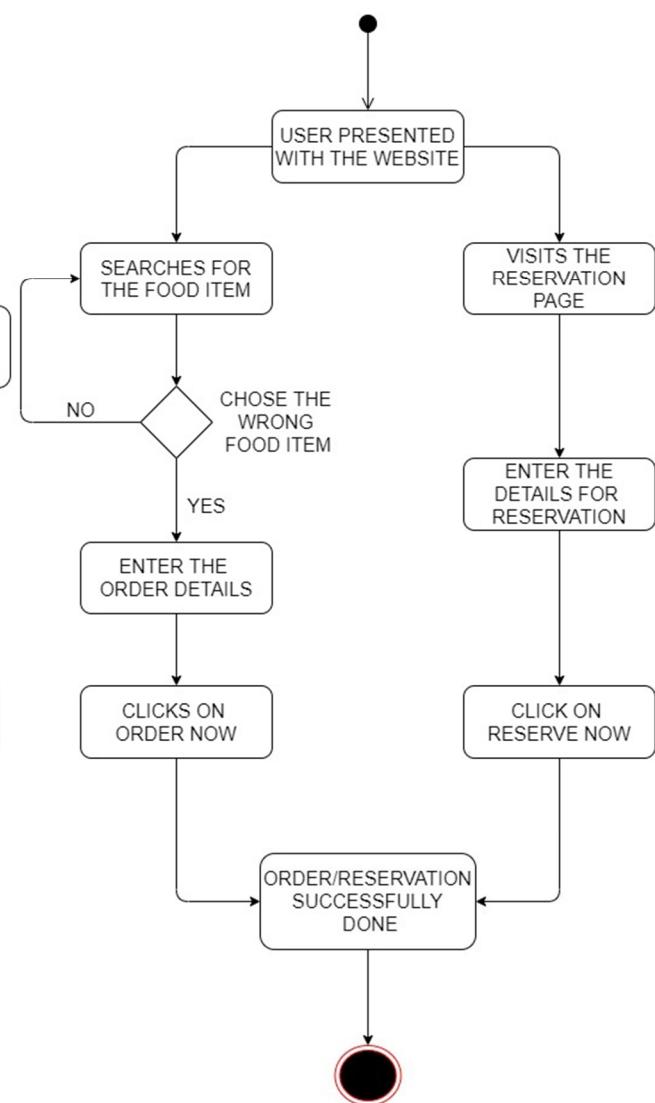


Fig. 3.5: Customer State Chart

FOOD ORDERING MANAGEMENT SYSTEM

ROLL NO: B-28 & B-31

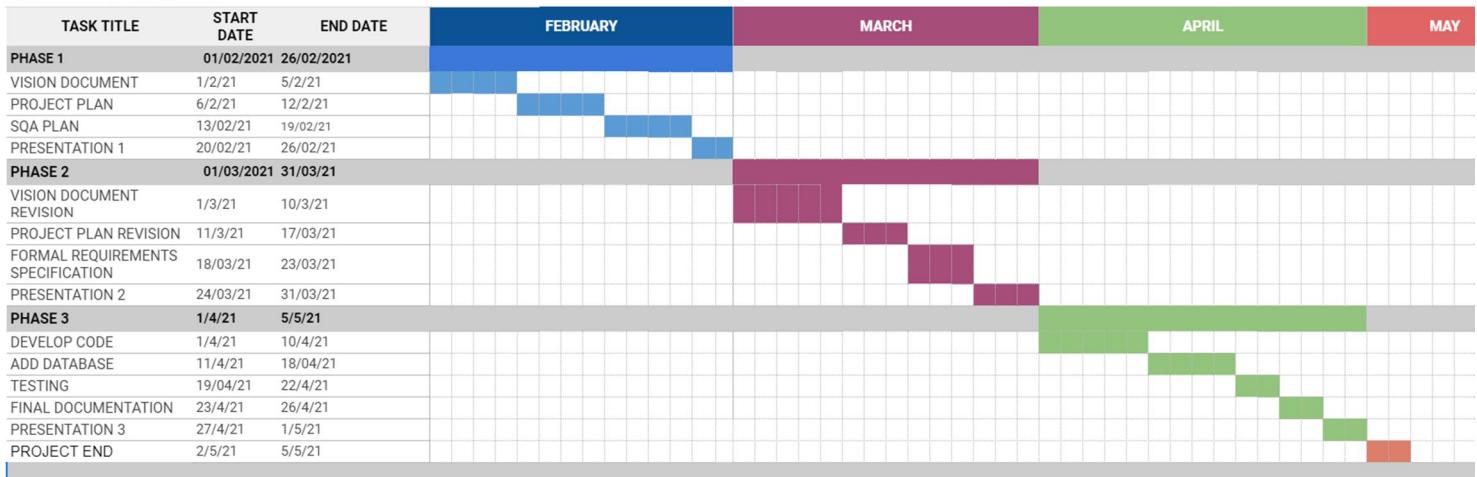


Fig. 3.6: Gantt Chart



IV. LITERATURE SURVEY

Various studies have identified the problems they faced when setting up a restaurant. During the assessment of the current system, the following concerns were discovered:

- A. Putting orders for customers who come to the restaurant, reviewing the menu items available, picking the appropriate things, placing the order, and paying. This method requires manual labour and time for the customer.
- B. When a customer wants to order by phone, the customer is unable to see a visual copy of the menu available at the restaurant, this also has no guarantee that the order has been placed on the appropriate menu items. Every restaurant needs someone or someone to take the order in person or by phone, to give the customer a rich feel and even consider payment.
- C. The main difference between the online ordering of food and dining at the environmental restaurant around us. If one person eats at home or does not feel the change in nature and relaxes. But comfort is the highest level of online food that is removed. When eating out — a luxury restaurant with good design and bright music that place offers better relaxation than anything else.

V. SCOPE AND FEATURES

- A. The suggested method allows people to properly order meals.
- B. There will be fewer employees needed at the rear desk.
- C. The method will aid in the reduction of labour costs as well as the space necessary to set up cafeterias in the restricted region.
- D. Mistakes are less probable to occur since it is an admin-controlled system.
- E. Customers can prevent long lines at the counter by executing tasks at an acceptable speed and throughput.

VI. DESIGN AND CONNECTIVITY

User experience or design (UI) is a process in which designers create integrations on software or electronic devices with an emphasis on aesthetic or style. Designers strive to improve both easy-to-use connectors and to the delight of users. The graphical user interface and the various types of the user interface are examples of UI design. To create a System Layout Architecture we need to have a UI and Database and connect the two using a PHP connection.

VII. DATABASE DESIGN

Databases can be compared to a complex digital cabinet. That is what can help us organize all or most of the information throughout our app. We completely control the installation, modification, and deletion of our database. Tables, which can be viewed as file references, generate details. Tables are lines of information that can be considered as separate pages within a file folder. We will add new entries to that database each time a fee is charged, just as we can add other pieces of paper to our file folder. Our database contains the amount of data, such as an item of food, category, and customer id, customer name, placed order, etc. We will be able to collect, store, modify and evaluate data in our web application because of the database. We have the ability to access the information stored in our database.

VIII. DATABASE CONNECTIVITY

```
<?php  
$host = "localhost";  
$user = "root";  
$pass = "";  
$db_name = "foodorder";  
$con = new mysqli($host,$user,$pass,$db_Name);  
function formatDate($date)  
{  
return date('g:i a',strtotime($date));  
}  
?>
```

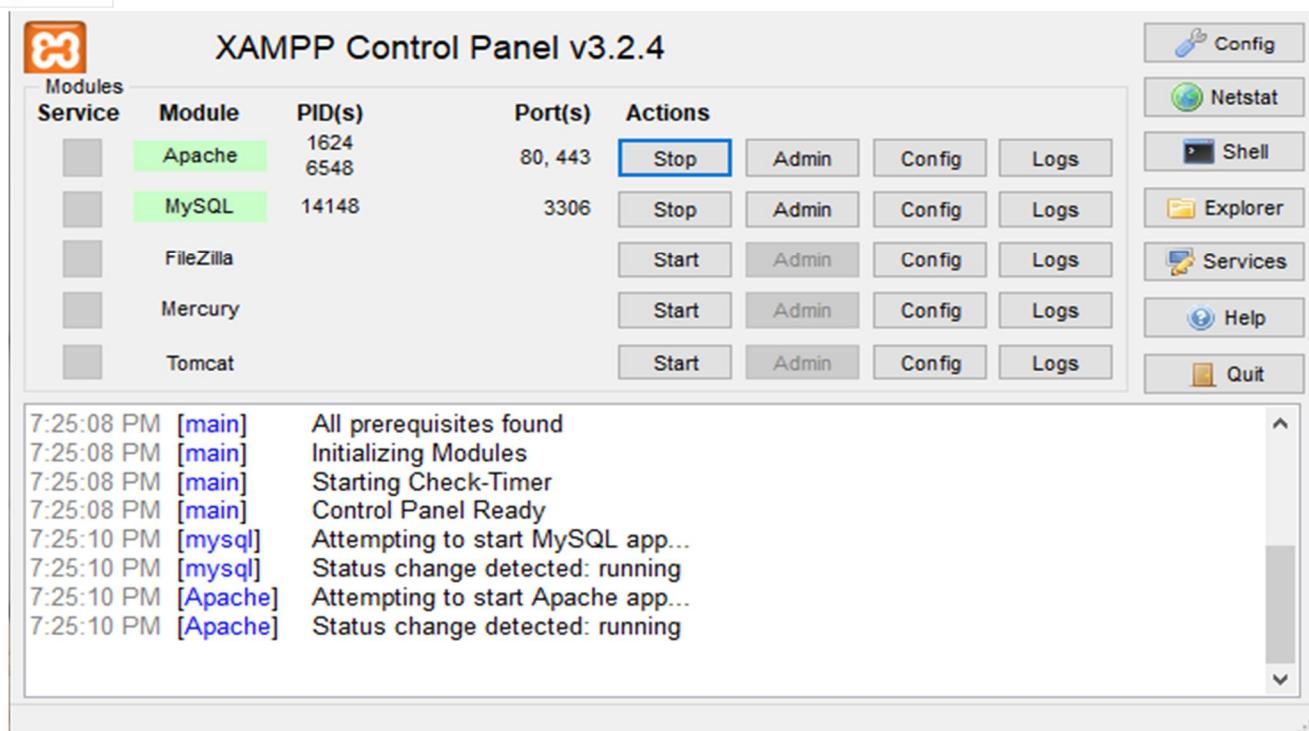


Fig. 6.1: Xampp Control Panel

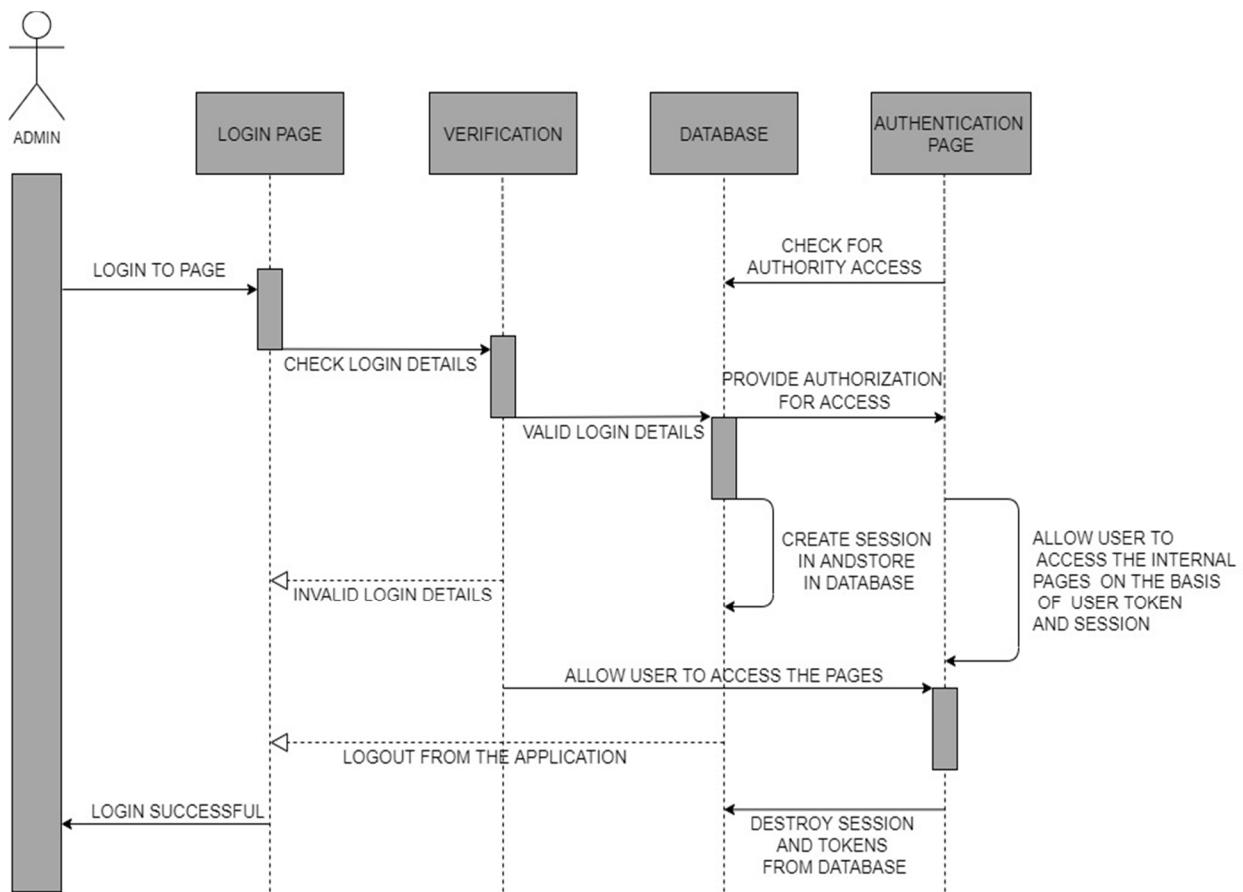


Fig. 8.1: Login Sequence Diagram

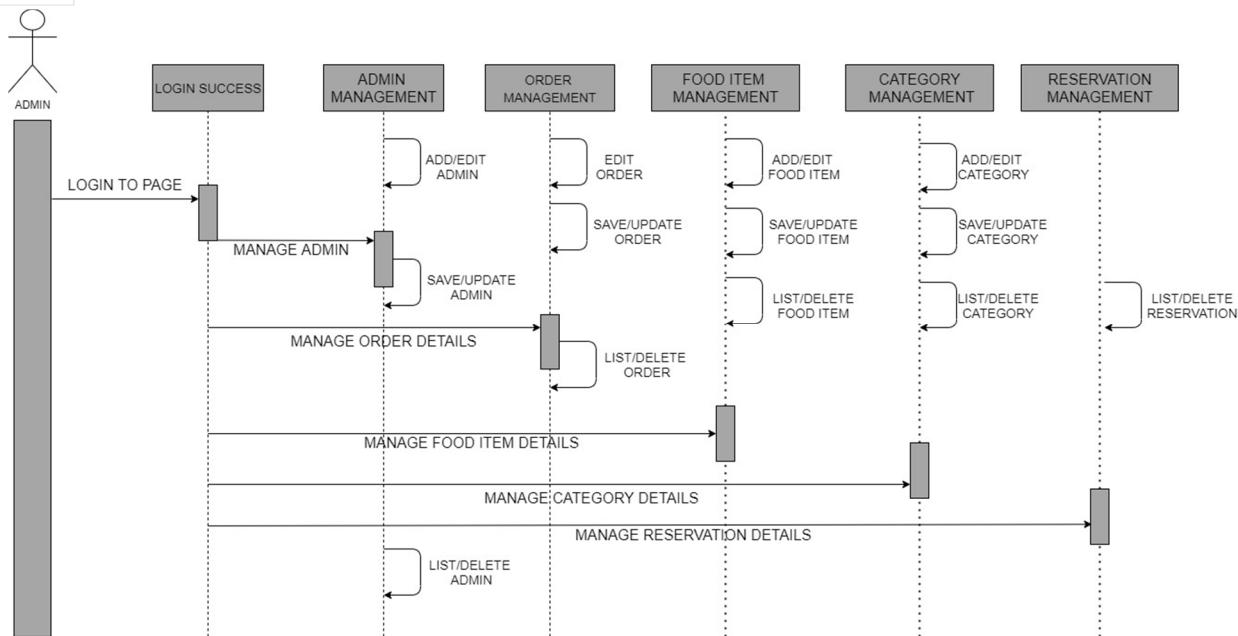


Fig. 8.2: Order Sequence Diagram

IX. RESULTS

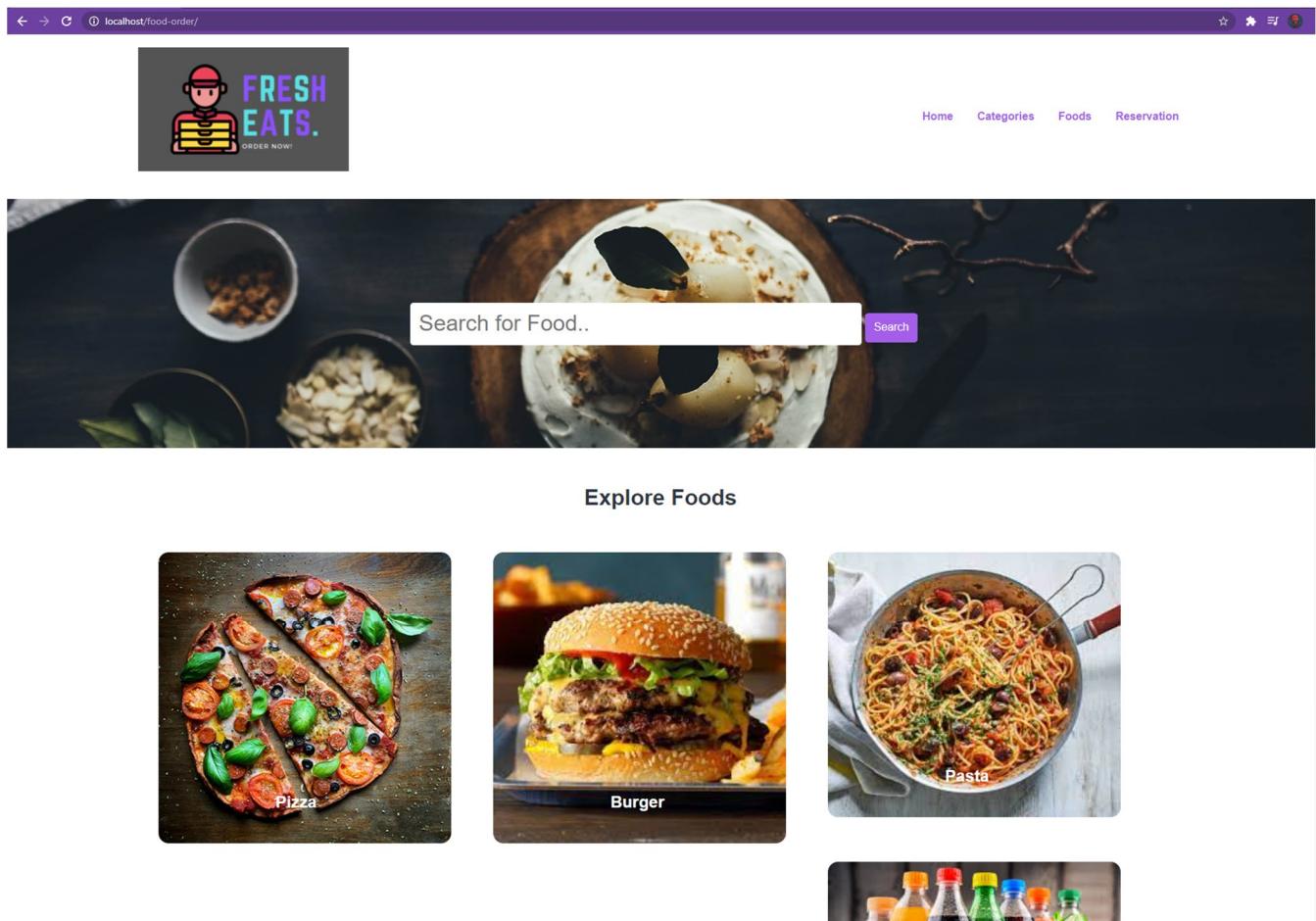


Fig 9.1: Homepage

The screenshot shows a food delivery application interface. At the top left is a logo with a chef icon and the text "FRESH EATS." Below it is a button labeled "ORDER NOW!". At the top right are navigation links: Home, Categories, Foods, and Reservation. A large search bar in the center contains the placeholder text "Search for Food..". To the right of the search bar is a purple "Search" button. Below the search bar is a photograph of a dessert, possibly a cake or pie, with a slice removed. In the background, there are smaller images of bowls containing ingredients like flour and sugar. The main title "Food Menu" is centered above two cards. The first card features an image of a pasta dish, with the name "Pasta Italia", price "\$80.00", and a description "pasta in red sauce". It also has a "Order Now" button. The second card features an image of a pizza, with the name "Pizza italia", price "\$80.00", and a description "Garden fresh chicken pizza". It also has a "Order Now" button.

Fig 9.2: Food Search Page

The screenshot shows a category page for food exploration. At the top left is a logo with a chef icon and the text "FRESH EATS." Below it is a button labeled "ORDER NOW!". At the top right are navigation links: Home, Categories, Foods, and Reservation. The main title "Explore Foods" is centered above three food items. The first item is a pizza with toppings like basil and tomatoes, labeled "Pizza". The second item is a double cheeseburger with lettuce and pickles, labeled "Burger". The third item is a bowl of spaghetti with olives and herbs, labeled "Pasta". Below these three items is a horizontal row of small bottles of various condiments or oils.

Fig 9.3: Category Page

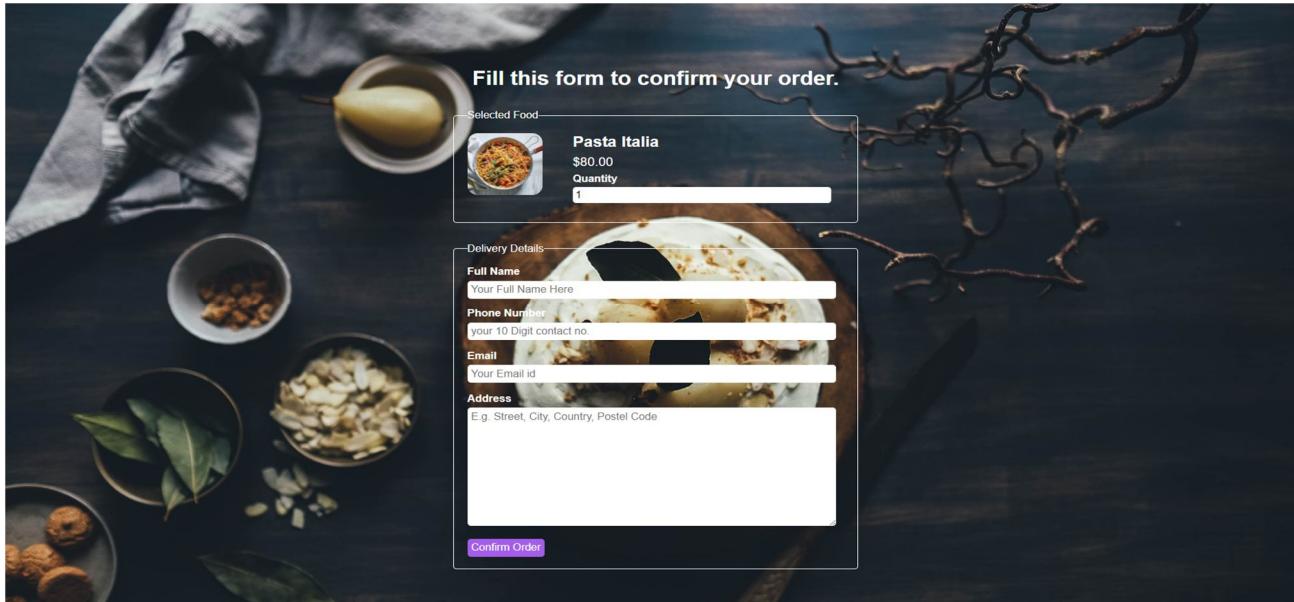


Fig 9.4: Order Form

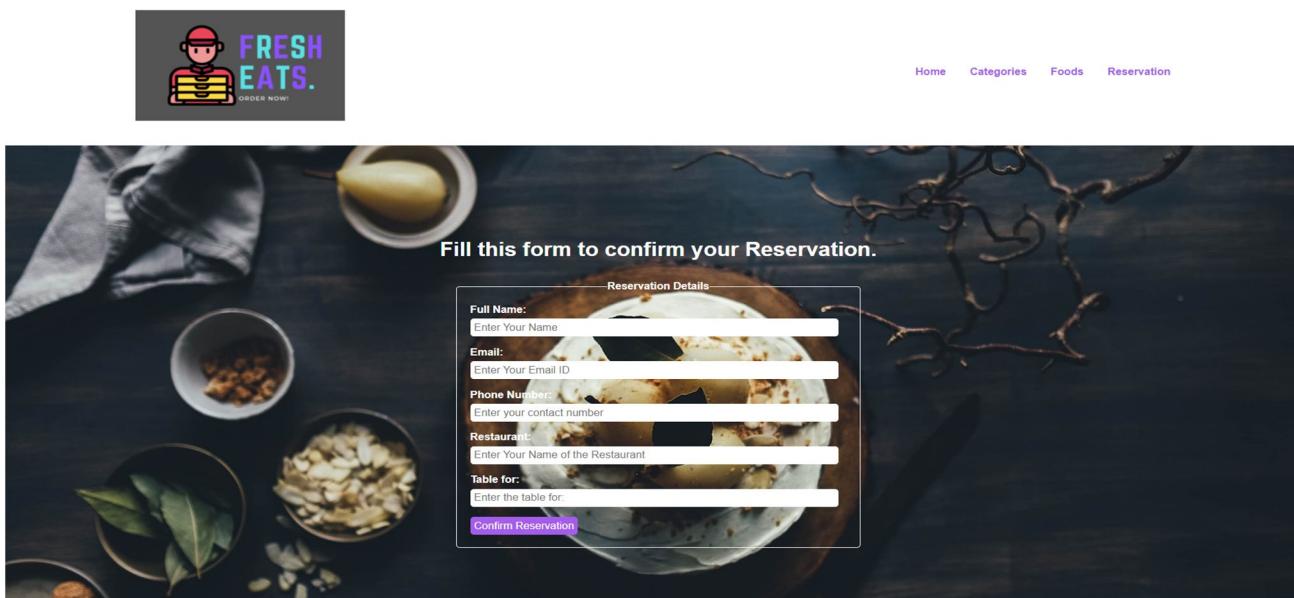


Fig 9.5: Reservation Form

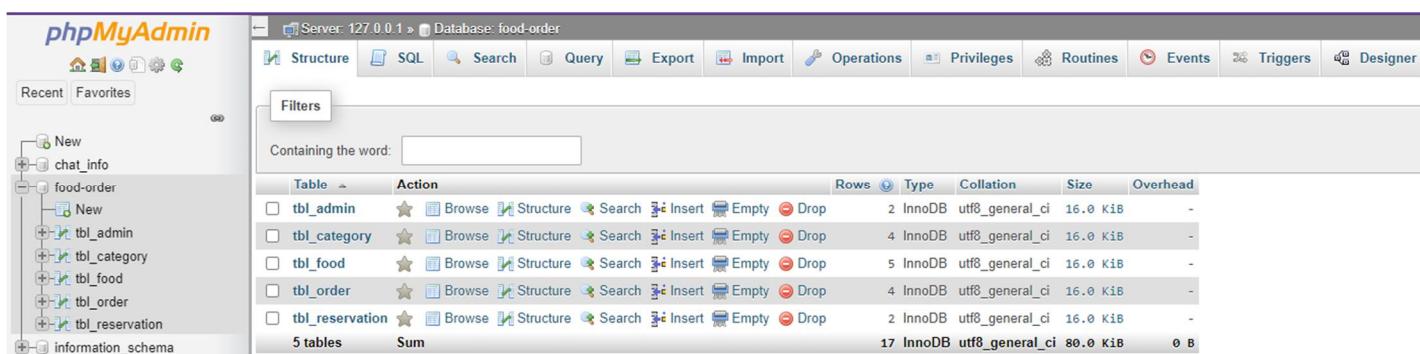


Fig 9.6: Database

[Home](#) [Admin](#) [Category](#) [Food](#) [Order](#) [Reservations](#) [Logout](#)

DASHBOARD

Login Successful.

5
Categories5
Food Items4
Total Orders\$160.00
Revenue Generated2
Reservations Made

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Fig 9.7: Admin Panel

[Home](#) [Admin](#) [Category](#) [Food](#) [Order](#) [Reservations](#) [Logout](#)

Manage Admin

[Add Admin](#)

S.No	Full Name	Username	Actions		
1	karan	karan@07	Change Password	Update Admin	Delete Admin
2	Mayuresh Phansikar	Mayu@13	Change Password	Update Admin	Delete Admin

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Fig 9.8: Manage Admin Page

[Home](#) [Admin](#) [Category](#) [Food](#) [Order](#) [Reservations](#) [Logout](#)

Manage Category

[Add Category](#)

S.No	Title	Image	Featured	Active	Actions	
1	Pizza		Yes	Yes	Update Category	Delete Category
2	Burger		Yes	Yes	Update Category	Delete Category
3	Pasta		Yes	Yes	Update Category	Delete Category
4	Drinks		Yes	Yes	Update Category	Delete Category

Fig 9.9: Manage Category Page

[Home](#) [Admin](#) [Category](#) [Food](#) [Order](#) [Reservations](#) [Logout](#)

Manage Food

[Add Food](#)

S.No	Title	Price	Image	Featured	Active	Actions
1.	Pasta Italia	\$80.00		Yes	Yes	Update Food Delete Food
2.	Pizza Italia	\$80.00		Yes	Yes	Update Food Delete Food
3.	Burger	\$45.00		Yes	Yes	Update Food Delete Food
4.	Drinks	\$10.00		Yes	Yes	Update Food Delete Food

Fig 9.10: Manage Food Page

[Home](#) [Admin](#) [Category](#) [Food](#) [Order](#) [Reservations](#) [Logout](#)

Manage Order

S.No	Food	Price	Qty	Total	Order Date	Status	Customer Name	Contact	Email	Address	Actions
1	Pizza Italia	80.00	1	80.00	2021-04-30 01:29:05	Ordered	karan dhiman	35999511	email@email.com	dngnfgnzf	Update Order Delete Order
2	Burger	45.00	2	90.00	2021-04-29 08:11:05	On Delivery	Karan S. Dhiman	996575210	email@email.com	bsdvbowdbv sbtvnwodv	Update Order Delete Order
3	Pizza Italia	80.00	2	160.00	2021-04-29 12:06:06	Delivered	karan dhiman	35999511	email@email.com	street 101	Update Order Delete Order
4	Pizza Italia	80.00	1	80.00	2021-04-29 12:03:28	Cancelled	karan dhiman	35999511	email@email.com	food street	Update Order Delete Order

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Fig 9.11: Manage Order Page

[Home](#) [Admin](#) [Category](#) [Food](#) [Order](#) [Reservations](#) [Logout](#)

Manage Reservation

S.No	Customer Name	Customer Email	Customer Contact	Restaurant	Date	Tables	Status	Actions
1	steve jobs	steve@email.com	2147483647	The cold cafe	2021-04-30 01:33:53.000000	2	Reserved	Delete Reservation
2	steve jobs	steve@email.com	2147483647	The cold cafe	2021-04-30 01:01:33.000000	2	Reserved	Delete Reservation

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Fig 9.12: Manage Reservation Page

X. CONCLUSIONS

Finally, an online food ordering system is presented that may be used in small family-run eateries as well as locations such as college canteens, etc. This project has the potential to be scaled up in the future. It is designed for restaurants to help them reduce their everyday management and operational tasks while also improving their customers' eating satisfaction. By offering relatively quality services, restaurant operators may also build strong customer connections. The technology also allows the restaurant to see what foods are on sale in real-time and make modifications to their food and beverage inventory depending on orders submitted and orders processed.

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