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BATANGAS STATE UNIVERSITY
The National Engineering University
Lipa Campus

A. Tanco Drive, Brgy. Marawoy, Lipa, Batangas, Philippines 4217

Tel Nos.: (+63 43) 980-0385; 980-0387; 980-0392 to 94 loc. 3130

E-mail Address: cics.lipa@g.batstate-u.edu.ph | Website Address: <http://www.batstate-u.edu.ph>



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**Dine&Watch: Integrated System for Ordering, Reservation, and Customer
Relationship Management**

A Project Study Presented to the
College of Informatics and Computing Sciences
Batangas State University - Lipa

In Partial Fulfillment of the Requirements for the Course
IT 312 - System Integration and Architecture

By:

Caringal, Mark Laurence L.
Calingasan, Kyle Matthew D.
Patron, Kian Marcus V.

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I. PROJECT TITLE

Dine&Watch: Integrated System for Ordering, Reservation, and Customer Relationship Management

II. OUTCOMES AND GOAL

A. Objective(s)

- **General Objective:**
 - To design a comprehensive restaurant reservation system that can be user-friendly and makes the customers' experience worthwhile in terms of table selection preference by viewing location and in return allows restaurant owners to effectively manage and get insightful reporting.
- **Specific Objective:**
 - **For Restaurant Owner:**
 - The system will provide an intuitive interface for efficient reservation management with the ability to allow the allocation of specific tables based on the needs of customers, say prime view areas or quieter spots. It will be easily integrated with existing management systems such as inventory and billing. However it will offer reporting capability for tracking the seating preference of customers, thus offering very important insights that may optimize service and table arrangements.
 - **For General User(Customer):**
 - They will be allowed to make choices of tables based on location and preferences and the availability will be updated in real time to make it easy to book. It also gives the customers a choice of an interactive interface in which they can keep track of their booking history, save seating preferences for revisiting, and have personal information protected behind strong data security measures.

B. Intended Learning Outcome (ILO)

ILO 1: Develop a function view-based reservation system. Students will design and implement a software solution called Dine&Watch, which allows the customer to reserve tables in restaurants based on specific scenic views. In competency, it will be done with database management, user interface design, and integration with restaurant systems if provided.

ILO 2: Apply user-centered design principles to a real-world problem. Students will develop a user-friendly and efficient reservation system by considering the requirements and preferences of customers and restaurant



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staff. In this, the students will conduct user research, prototyping, and usability testing in order to achieve a positive user experience.

ILO 3: Analyze and solve a problem in the food industry. Students identify and analyze challenges regarding traditional reservation systems in the food industry, mainly in cases where a view-based reservation does not exist. They develop Dine&Watch as a solution to the problem identified, thus applying their problem-solving skills.

C. Sustainable Development Goal (SDG)

SDG 12: Responsible Consumption and Production. Dine&Watch should help the food industry in better resource management as the optimization of tables will prevent the service industries from wasting food and energy to offer idle capacity.

III. BACKGROUND / SCENARIO

Most restaurants offer customers a view of the place, thus making the atmosphere comfortable for the eaters. However, very few restaurants integrate the scenic feature into their booking systems. Dine&Watch has attempted to come up with a solution where a consumer can choose and book his or her tables depending on views that one might enjoy with an elevated dining experience. Dine&Watch will provide an excellent system to book the best view tables for restaurants, so they can focus on the special feature and attract even more customers seeking upscale dining experiences.

In these regards, Dine&Watch allows customers to view restaurant layouts easily by looking at panoramic images and even making table bookings according to scenic views. Dine&Watch, therefore, helps diners curate their dining experiences. This benefits restaurants both in terms of attracting patrons and bettering the utilization of seating arrangements with a chance at revenue increases.

Dine&Watch would like to see the day when scenic dining stops being left to chance. Such an innovative system will integrate view-based reservations in such a smooth manner that the needs of both customers and restaurants are fulfilled in a sustainable way.



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IV. SYSTEM MODELS/DESIGN

a. Context Diagram

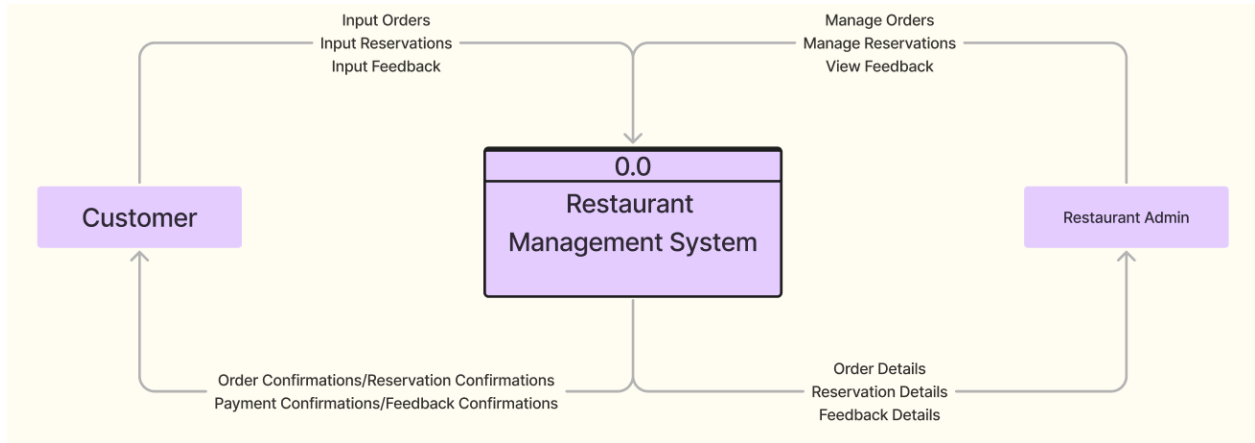


Figure 1. DFD Level 0

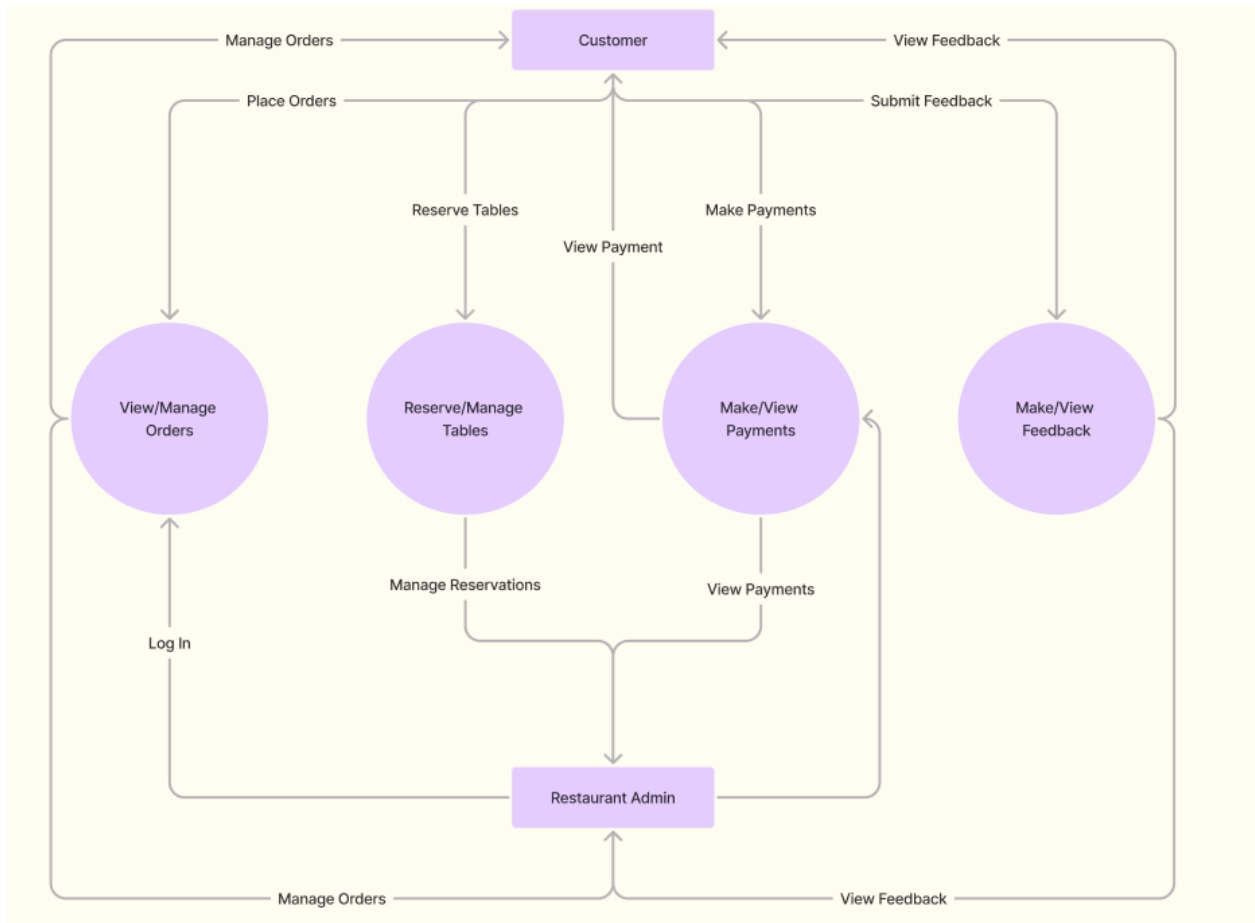


Figure 2. DFD Level 1



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- **External Entities:**

Customer

Restaurant Admin

- **Process:**

Dine&Watch System

- **Data Stores:**

1. Customer Login System – CREATE, READ, UPDATE, DELETE
2. Customer Feedback – CREATE, READ
3. Order Management – CREATE, READ, UPDATE, DELETE
4. Reservation Management – CREATE, READ, UPDATE, DELETE
5. Payment System – CREATE, READ, DELETE
6. Menu Management – CREATE, READ, UPDATE, DELETE
7. Admin Login System – CREATE, READ, UPDATE, DELETE
8. Admin Reports – READ, CREATE
9. Restaurant Feedback – READ, CREATE, DELETE
10. Table Reservation System – CREATE, READ, UPDATE, DELETE

b. Data Flow Diagram

- **Data Flows Customer and Restaurant Admin:**

1. **Customer:** Sign Up, Log In, View Menus, Place Orders, Reserve Tables, Give Feedback, Make Payments.
2. **Restaurant Admin:** Log In, Manage Reservations, Manage Orders, Manage Menus, View Reports, Log Out.

- **Data Flow Diagram (DFD - Level 0):**

1. **Customer to RMS:**

- a. Insert Orders/Reservations/Payments/Feedback: This arrow indicates that the customers submit various types of data to the RMS, which includes orders, reservations, payments, and responses for giving the feedback.



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2. RMS to Customer:

- a. Order Confirmation/Reservation Confirmation/Payment Confirmation/Response to Feedback: This arrow represents the fact that the RMS sends a response to the customer. That will include all the confirmations of orders, reservations, payments, and acknowledgment of the feedback.

3. Restaurant Admin to RMS:

- a. Manage Orders/Reservations/View Feedback: This arrow indicates that the restaurant admin can input data to handle orders, reservations, and see the feedback given by the customers.

4. RMS to Restaurant Admin:

- a. Order Details/Reservation Details/Feedback Details: This arrow indicates that the RMS provides the restaurant admin with all the details which he or she requires, pertaining to the details of orders, reservations, and customer feedback.

● **Data Flow Diagram (DFD - Level 1):**

1. Customer Sign Up and Login

- a. Input: Customer enters his/her registration and login information.
- b. Process: The system checks the information and allows access.
- c. Output: The login is successful and the main menu opens if not otherwise it shows the error message.

2. View Menus & Place Orders

- a. Input : The customer selects the food items available in the menu.
- b. Process : The system checks if the product is available. Then it proceeds with processing the order
- c. Output : Prints the summary of the order placed and updates the stock status.

3. Reserve Tables



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- a. Input: Customer selects the date, time, and preferred table through indoor or outdoor view.
- b. Process: The system verifies the available table and confirms the reservation.
- c. Output: Reservations confirmed, or may ask the customer to select another table if the table is unavailable.

4. Manage Reservations (Admin)

- a. Input: Admin log into the reservations management view.
- b. Process: Create, read, update, or delete reservations.
- c. Output: Reservations have updated in the database.

5. Manage Orders (Admin)

- a. Input: Admin log into the orders management view.
- b. Process: View orders, status updates (pending or completed), and payment management.
- c. Output: Saving newly updated information of the order in the database.

6. Make Payment

- a. Input: Customer putting details of payment like card information, CVV and date of expiry.
- b. Process: The system will validate the payment details and process the transaction.
- c. Output: Payment confirmation or error so that the respective customer can retry.

7. Provide Feedback

- a. Input: User gives the feedback on reservation or order.
- b. Process: The system stores the feedback for further processing.
- c. Output: Confirm the submission of feedback.

8. Admin Logout

- a. Input: Admin giving the log out request.
- b. Process: The system will end the session.



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- c. Log out message displayed, and the admin is moved to the log-in page.

• **DFD Notation:**

1. Processes Using ovals like "Reserve Tables," "Place Orders"
2. External Entities: Rectangles Such as "Customer", "Admin"
3. Data Flows: Arrows such as those that will delineate the flow of reservation data between "Customer" and "Reservation Store"
4. Data Stores: Open-ended rectangles e.g., "Orders," "Reservations"

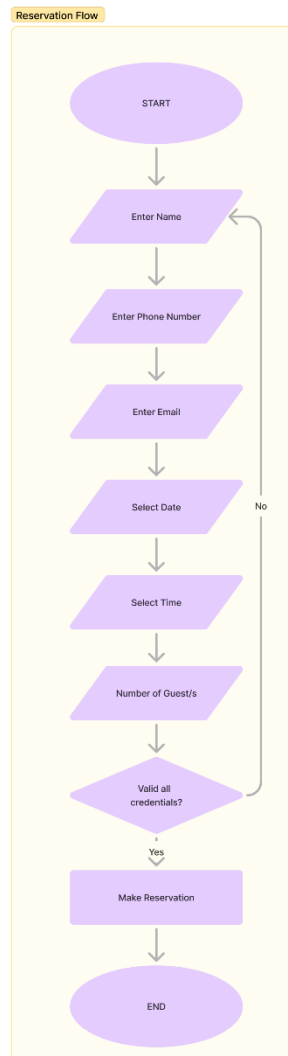


Figure 3. *Reservation Flow Diagram*



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This flowchart describes the reservation process step by step with the help of users booking a time or date. This has initially been an invitation from the application, asking the user to input any details into a corresponding input field; for instance, name, phone number, and e-mail address. Then, based on that input data, the application asks the user to input the preferred dates and times for their reservation. Lastly, the user must specify the number of guests. At the end of all the inputs, there comes the validation process to verify whether all the details given are correct or not. If all are correct then a successful reservation is done and the control ends in the flow, but in case some details are invalid, the control shifts again to the input steps so that the user could correct them. The flow chart above leads to a simple step by step reservation but with accurate information provided.



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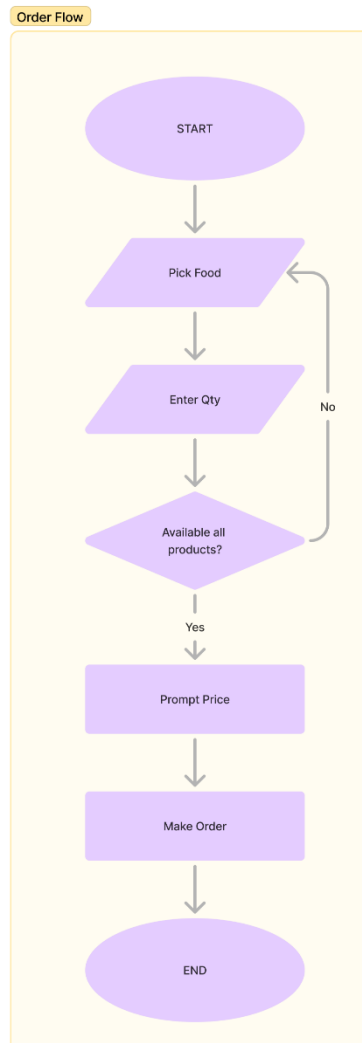


Figure 4. *Order Flow Diagram*

The flowchart shows the order food process that requires the user to choose the food they want to order. Once the user chooses the food, the user will be asked to input the required number. The system will then verify products selected to check if they are available. The system will request the user to choose other products if any of the selected products are out of stock. It requests the price for the order and then successfully places the order as a way to finalize the flow. There is an effective use of a flowchart at this point, as it ensures that the user has selected available products before this flow goes ahead to confirm the price and complete the order.



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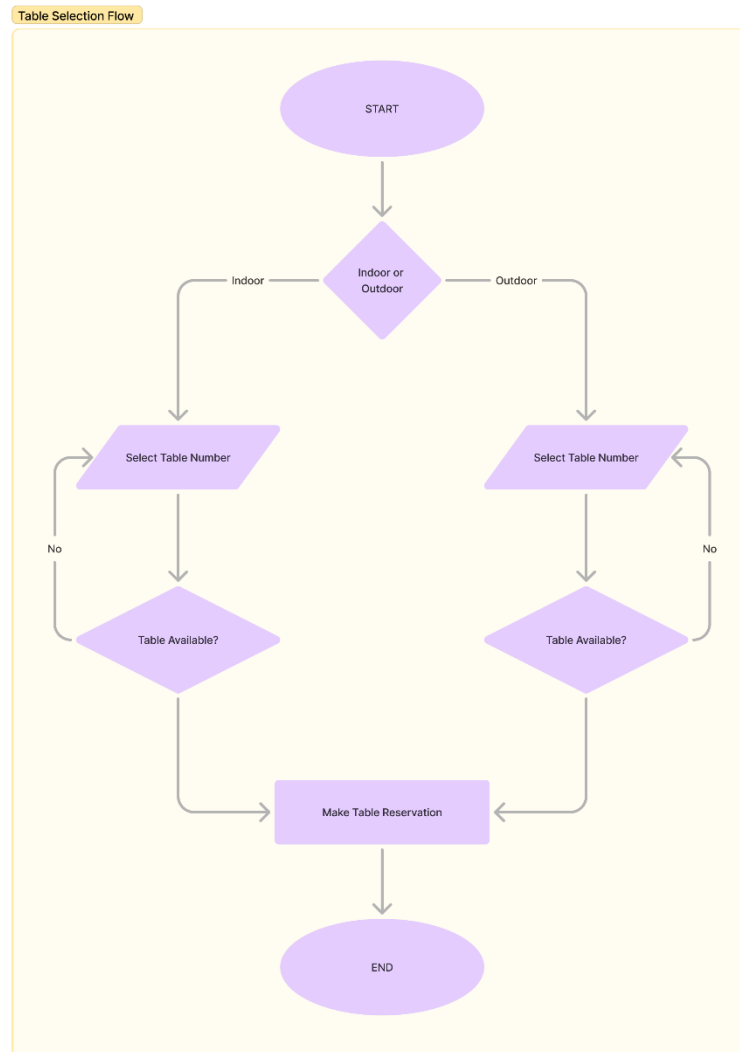


Figure 5. *Table Selelection Flow Diagram*

This flowchart represents the indoor or outdoor table selection and reservation. The user chooses whether they wish to eat indoors or out. After making their selection, they then click on the number of their preferred table. The system then checks if the selected table is available or not. If the table selected is not available, then the system requests the user to choose another table. If a table is available, then the class makes the reservation successfully and terminates. This flow chart ensures that a user has the privilege to choose his or her preferred seating and to confirm availability before making any reservation.



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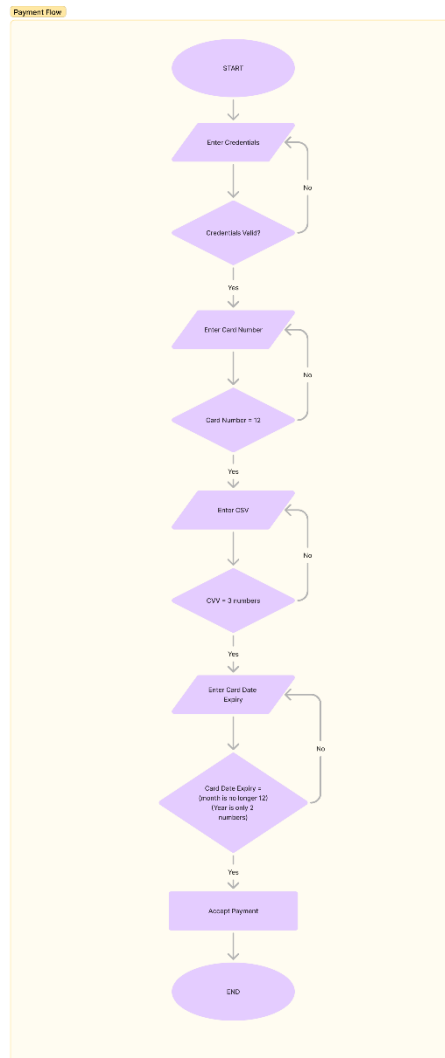


Figure 6. Payment Flow Diagram

This flowchart depicts a transaction payment process. It begins by taking input, which is the user's credential like login to be verified. After one has verified the input matching a valid credential, it pushes one to insert card information such as the number on the card; this should have 12 digits followed by the CVV, which should be a 3-digit number. Then, the card expiration date is entered so that it should be valid. If all the information provided and validated are correct, then the payment gets accepted and the whole thing is over. Any error at any step makes the user retry inputting the details. This flowchart further ensures that the payment details are entered properly before processing the transaction.



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c. Data Structure

- Entities and Relationships:

1. users: Stores information about users.

Field Name	Datatype	Description
user_id	int(11)	Unique identifier for each user
first_name	varchar(50)	User's first name
middle_initial	char(1)	User's middle initial (optional)
last_name	varchar(50)	User's last name
suffix	varchar(10)	User's suffix (e.g., Jr., Sr.) (optional)
contact_number	varchar(15)	User's contact number (optional)
email	varchar(191)	User's email address
address	varchar(255)	User's address (optional)
zip_code	char(5)	User's zip code (optional)
username	varchar(50)	User's login username
password_hash	varchar(255)	Hashed password for security

2. tables: Stores information about the physical tables in the restaurant.

Field Name	Datatype	Description
table_id	int(11)	Unique identifier for each table
table_number	int(11)	Table number for easy identification
seating_capacity	int(11)	Number of people the table can seat



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is_available	tinyint(1)	Indicates if the table is currently available (1 = yes, 0 = no)
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3. reservations: Stores reservation details.

Field Name	Datatype	Description
reservation_id	int(11)	Unique identifier for each reservation
user_id	int(11)	ID of the user who made the reservation
table_id	int(11)	ID of the table reserved
reservation_date	date	Date of the reservation
reservation_time	time	Time of the reservation
status	enum('Pending', 'Confirmed', 'Canceled', 'Rescheduled')	Current status of the reservation
custom_note	varchar(255)	Any special requests or notes for the reservation (optional)
feedback	text	Feedback provided for this reservation (optional)
created_at	timestamp	Timestamp of reservation creation
updated_at	timestamp	Timestamp of last reservation update

4. reservation_reschedule: Tracks reservation rescheduling.



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Field Name	Datatype	Description
reschedule_id	int(11)	Unique identifier for each reschedule event
reservation_id	int(11)	ID of the reservation that was rescheduled
old_reservation_time	datetime	Original reservation date and time
new_reservation_time	datetime	New reservation date and time
reason	text	Reason for rescheduling (optional)
created_at	timestamp	Timestamp of the reschedule event

5. product_items: Stores information about menu items.

Field Name	Datatype	Description
product_id	int(11)	Unique identifier for each product
product_name	varchar(255)	Name of the product
category	enum('Drink', 'Meal', 'Dessert', 'Add-on')	Category of the product
price	decimal(10,2)	Price of the product
special_instructions	text	Any special instructions for preparing the product (optional)



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product_image	varchar(500)	URL or path to an image of the product (optional)
created_at	timestamp	Timestamp of product creation
updated_at	timestamp	Timestamp of last product update
quantity	int(11)	Available quantity of the product

6. orders: Stores information about customer orders.

Field Name	Datatype	Description
order_id	int(11)	Unique identifier for each order
user_id	int(11)	ID of the user who placed the order
reservation_id	int(11)	ID of the reservation associated with the order (optional)
order_details	text	Details of the order (optional)
total_amount	decimal(10,2)	Total amount of the order
order_time	datetime	Timestamp of when the order was placed
status	enum('Pending', 'In-Progress', 'Completed', 'Canceled')	Current status of the order
feedback	text	Feedback provided for this order (optional)



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created_at	timestamp	Timestamp of order creation
updated_at	timestamp	Timestamp of last order update
payment_method	varchar(50)	Payment method used for the order

7. order_items: Stores individual items within an order.

Field Name	Datatype	Description
order_item_id	int(11)	Unique identifier for each order item
order_id	int(11)	ID of the order this item belongs to
product_id	int(11)	ID of the product ordered
quantity	int(11)	Quantity of the product ordered
price	decimal(10,2)	Price of the product at the time of ordering

8. order_cancellations: Tracks order cancellations.

Field Name	Datatype	Description
cancellation_id	int(11)	Unique identifier for each cancellation event
order_id	int(11)	ID of the order that was canceled
cancellation_reason	text	Reason for cancellation (optional)
canceled_at	timestamp	Timestamp of the cancellation event



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9. feedback: Stores feedback from users.

Field Name	Datatype	Description
feedback_id	int(11)	Unique identifier for each feedback entry
user_id	int(11)	ID of the user who provided the feedback
reservation_id	int(11)	ID of the reservation the feedback relates to (optional)
order_id	int(11)	ID of the order the feedback relates to (optional)
feedback_text	text	The feedback text
rating	int(11)	A numerical rating (optional)
created_at	timestamp	Timestamp of feedback creation

10. activity_logs: Logs user actions and system events.

Field Name	Datatype	Description
log_id	int(11)	Unique identifier for each log entry
action_by	int(11)	ID of the user who performed the action (optional)
action_type	enum('Login','Logout',...)	Type of action performed
action_details	text	Details of the action (optional)



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created_at	timestamp	Timestamp of the log entry
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11. sessions: Manages user login sessions.

Field Name	Datatype	Description
session_id	int(11)	Unique identifier for each session
user_id	int(11)	ID of the user logged in
session_token	varchar(255)	A unique token for this session
created_at	timestamp	Timestamp of session creation
expires_at	datetime	When the session expires

12. error_logs: Logs system errors

Field Name	Datatype	Description
log_id	int(11)	Unique identifier for each error log entry
error_message	text	Log message for the error.

d. Relationships

- **Users and Reservations:**

- The table of reservations holds each booking, tied to the users table via the user_id column. This allows the system to follow all the reservations made by any given user, to see her reservation history as well as to control her bookings appropriately.
- **Relationship:** One-to-many. One user may have multiple reservations over time.

- **Reservations and Tables:**



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- The table 'reservations' makes use of the column 'table_id' for pointing to table 'tables'. It thus identifies which table any reservation is made for. It therefore takes care of table availability and double booking.
- **Relationship:** Many-to-one. Many reservations can be associated with a single table only if this is done at different points in time.

- **Orders and Order Items:**
 - The order_items table breaks down each order to line items. The order_id field links each item to its own corresponding order in the orders table. This way, it is possible to track in detail what was ordered, calculate the total bill, and manage the inventory.
 - **Relationship:** One to many. An order may have many items.

- **Order Items and Product Items:**
 - The product_id in order_items creates the relationship to the product_items table. This relationship explains what product is ordered, retrieves its price and description, and replenishes the inventory.
 - **Relationship:** Many-to-one. Many order items may refer to the same product item-for instance, multiple orders of the same dish.

- **Users and Feedback:**
 - The feedback table can be linked to both reservations and orders through reservation_id and order_id, respectively. It thus enables users to offer their comment about specific dining experiences or orders to the restaurant while allowing the restaurant to understand customer satisfaction and improvement aspects.
 - **Relationship:** One-to-Many. A user may have given feedback on several reservations or orders.

- **Users and Activity Logs:**
 - The activity_logs table captures the users' actions, including login/logout, reservation or order creation/update/cancel. The action_by field links the activities together to the users table, providing an audit trail for the activities of users within the system.
 - **Relationship:** One-to-many. A user can produce many activity logs.



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The National Engineering University
Lipa Campus

A. Tanco Drive, Brgy. Marawoy, Lipa, Batangas, Philippines 4217

Tel Nos.: (+63 43) 980-0385; 980-0387; 980-0392 to 94 loc. 3130

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e. Wireframe

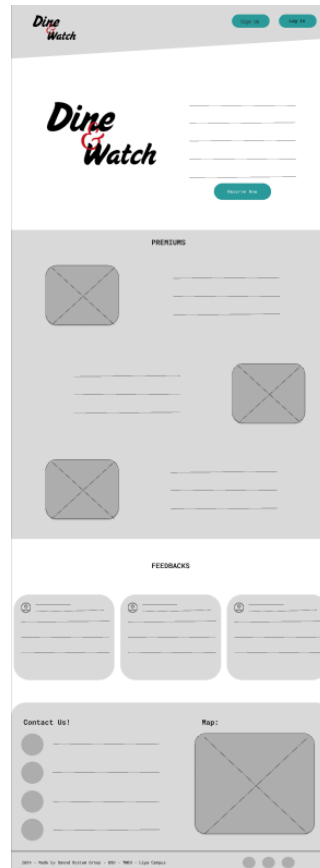


Figure 7. Landing Page

With the Dine & Watch landing page, access is quick: users can log in, sign up for an account or make a reservation at the table. Other active features include customer feedback, contact numbers and location.



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The image shows a web page for "Dine & Watch" with a "Sign Up" form. The header has the "Dine & Watch" logo and a hamburger menu icon. The form is titled "Sign Up" and contains the following fields: Email, Password (with an eye icon for visibility), First Name, Last Name, Middle Initial, Suffix(Optional), Address, Phone Number, and Zip Code. A green "Sign Up" button is at the bottom of the form. The footer contains the text "2024 - Made by Sound System Group - BSU - TNEU - Lipa Campus" and three circular icons.

Figure 8. Sign Up Page

Just enter your email and password to access any feature such as ordering or reservation.

The image shows a web page for "Dine & Watch" with a "Log In" form. The header has the "Dine & Watch" logo and a hamburger menu icon. The form is titled "Log In" and contains the following fields: Email (with an envelope icon) and Password (with an eye icon for visibility). A link "Forgot Password?" is located below the password field. A green "Log In" button is at the bottom of the form. The footer contains the text "2024 - Made by Sound System Group - BSU - TNEU - Lipa Campus" and three circular icons.

Figure 9. Log In Page

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This is where you enroll to unlock a world of fantastic dining benefits. Just fill in the details like your email, a password, and basic information-and you're in.

Figure 10. *Forgot Password Page*

To reset your web app password, if you don't remember it, move to the "Forgot your Password?" page and enter the email that you use to create an account. We send you an email from there with a link you can use to reset the password. Click on that link, create a new safe password.



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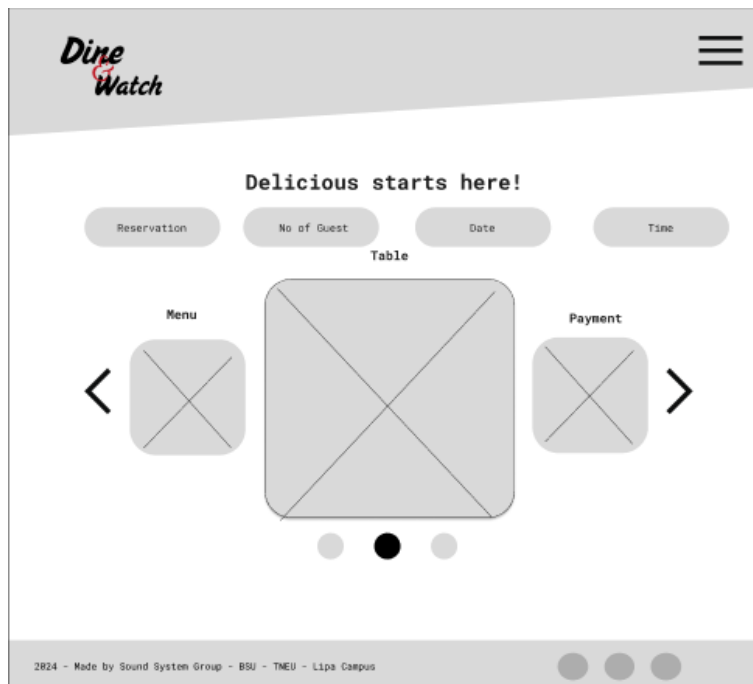


Figure 11. Ordering Page

Start by adding the date, time, and number of guests, then add a reservation if you have one.

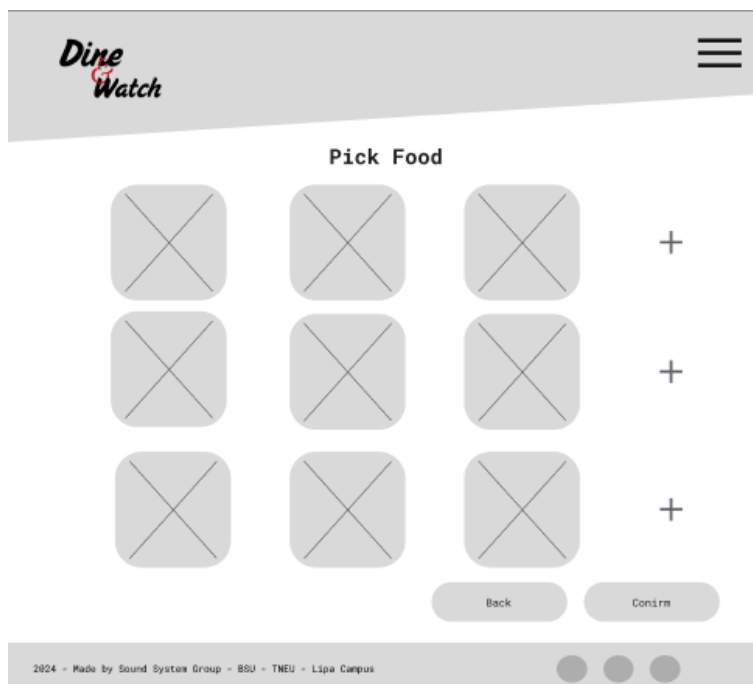


Figure 12. Pick Food Page



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Our menu is easy to peruse and select a dish you wish. Each box is a selection; all you have to do is click the "+". Once you are finished making your selection, there will be a button to click for "Continue" to continue on and "Back" if you want to change it.

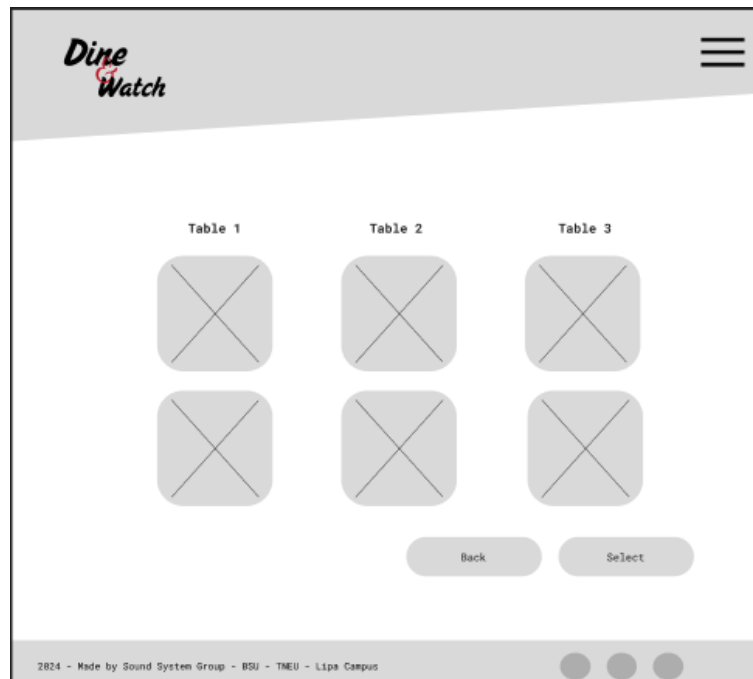


Figure 13. *Pick Tables Page*

You can even choose your favorite table according to your view preference! Each box is for a different table view. Just click on "Select" if you like it, or "Back" to visit other ones.



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A screenshot of a web application titled "Dine & Watch". The page is a payment form with a light gray background. At the top left is the "Dine & Watch" logo, and at the top right is a hamburger menu icon. The form is titled "Payment" and contains several input fields: "First Name", "Last Name", "Middle Initial", "Suffix(Optional)", "Age", and "Sex". Below these are two masked input fields for credit card details, each preceded by a horizontal line. At the bottom of the form are two buttons: "Next" and "Go Back". The footer of the page contains the text "2024 - Made by Sound System Group - BSU - TNEU - Lipa Campus" and three small gray circles.

Figure 14. Payment Page

An order is available to be completed on a secure payment page. You would have to input personal details like name and age, and for the sake of security, masked fields like credit card details are required to be filled in. Proceed to click "Next" and review your order while confirming the payment, or "Go Back" if you need to make modifications.



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Dine Watch

Order Cancelling

First Name

Last Name

Middle Initial Suffix(Optional)

Age Sex

Order Number:

Reason:

Cancel Order

Go Back

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Figure 15. Cancel Order Page

Cancel order page. Here to help if you wish to cancel an order. Just complete your name, age and sex, if relevant, and order number. Then choose why you want to cancel. When you fill in all of the above fields, click "Cancel Order" and you will submit that request. If you change your mind or want to check on your order, please click "Go Back".

Dine Watch

Reservation Cancelling

First Name

Last Name

Middle Initial Suffix(Optional)

Age Sex

Order Number:

Reason:

Cancel Reservation

Go Back

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Figure 16. Cancel Reservation Page

You can cancel your reservation for free by filling up an online form requesting cancellation, giving the name, age, sex (if desired), order number linked with the reservation, and cancellation reason. Once you fill in all the details above click on "Cancel Reservation".

Figure 17. Payment Receipt Page

Click on the order number to view your order details. This contains a summary of your order details and payment information. Once you've reviewed your receipt, you can either click "Done" to complete or "Add Order" to make another order. It will then be your transaction record.



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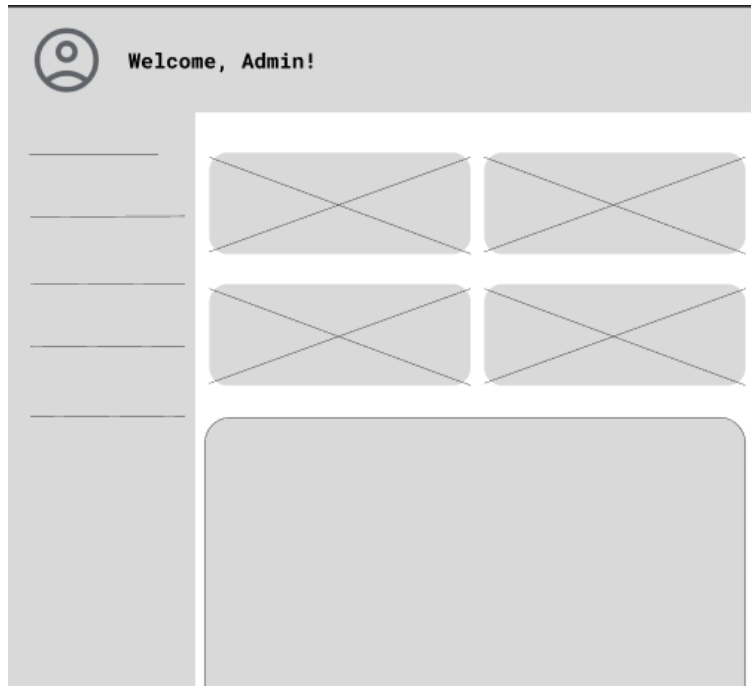


Figure 18. Admin Dashboard Page

Admin Dashboard is for managing the entire platform. It provides a personalized greeting and displays key metrics such as total orders and revenue so that you can quickly get a sense of what performance is like. The dashboard gives access to administrative functionality in general to include product management, order and reservation management, user management, and analytics.

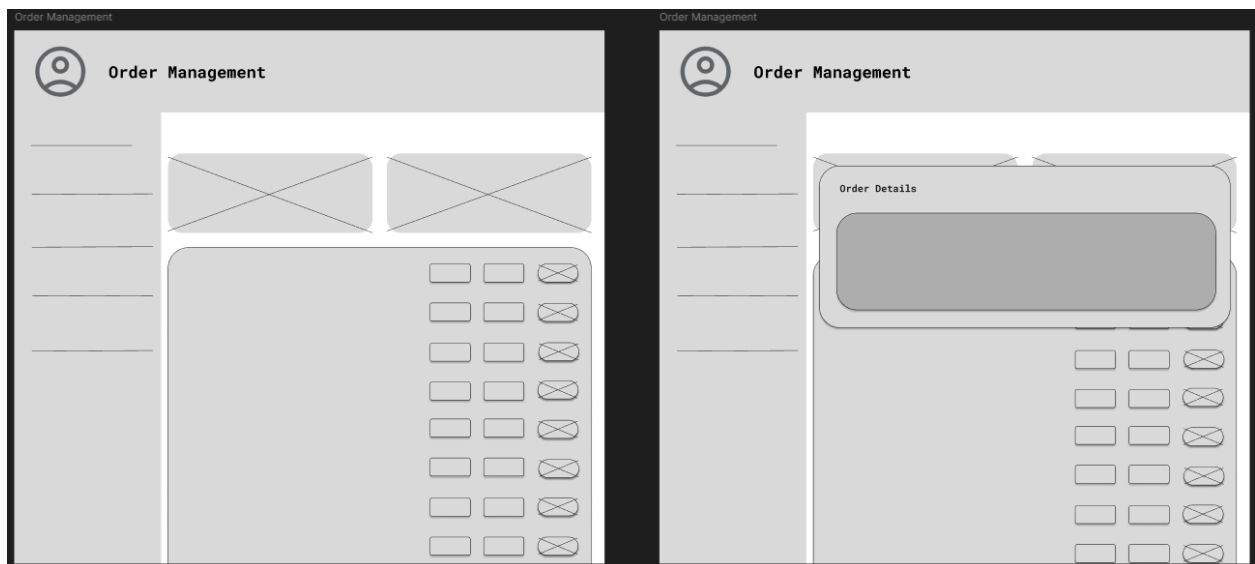


Figure 19. Admin-Order Management Page



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It shows a list of orders ordered by date, status, or customer's name, and it also avails tools for filtering and searching. Additionally, it avails detailed information regarding every order on its contents and the customer's particulars.

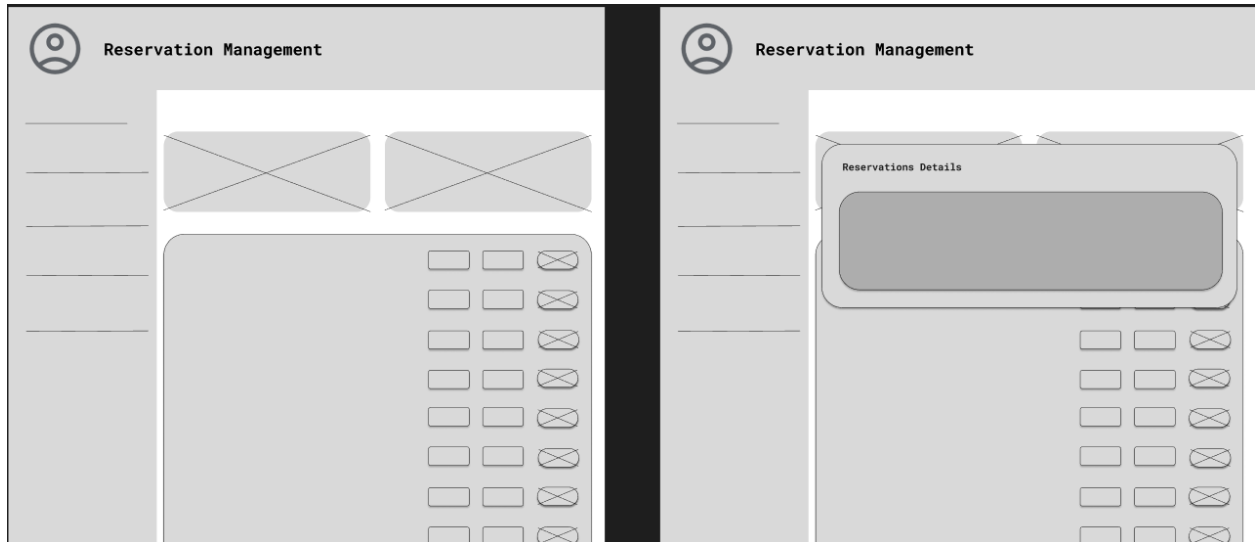


Figure 20. Admin-Reservation Management Page

This page provides information and manages all the reservations completely. It likely displays a list or calendar view of all bookings, telling us the upcoming reservations with customer details and contact information. We would probably filter and sort reservations on various criteria, and should be able to access a lot of detail on each booking, such as numbers of guests and special requests.

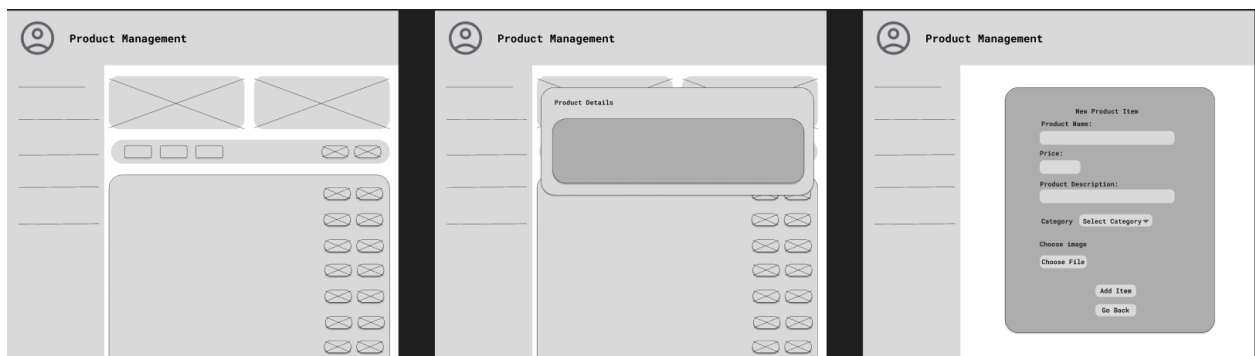


Figure 21. Admin-Product Management Page

This is the page where we manage our menu. It displays the list of all menu items along with their names, descriptions, and prices. We can filter and sort them by category, popularity, or price.



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Figure 22. Admin-User Management Page

This page gives us the required management of all the registered users on the platform. It probably displays a user list along with details on names, contacts, and history of orders of the users. Let's filter and sort our users according to whatever criteria we have, as well as look into detailed information about a specific user within a "User Details" box. It is our past orders, reservations, and preferences-this page will probably even enable us to account for the management of such user accounts: edit their information, reset passwords, or delete accounts completely.



Figure 23. Admin-Activity Logs Page

This page has a full record of all actions and events happening on the platform. This page probably signifies an event log, giving chronological logs for activities such as user login, orders, reservations, and menu. We would probably be able to filter these logs by date, user, and type of action, with the detailed view showing timestamps, user IDs, etc. This log will act



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as an audit trail that will assist us in monitoring the activity of the platform, tracking user behavior and understanding potential problems that may crop up and platform security accountability.

V. PROCEDURE

1. Install XAMPP.
2. Install Visual Studio Code.
3. Open Local Disk (C:) on your PC/Laptop.
4. Open the XAMPP folder.
5. Open the htdocs folder.
6. Create your own folder named DineAndWatch.
7. Download Bootstrap 5.3 and extract the files (cdn) or you can link it to your Visual Studio Code.
8. Open Visual Studio Code.
9. Hit Ctrl + K Ctrl + O to open a folder or click the "Open folder" button.
10. Navigate to find the DineAndWatch folder in Local Disk(C:)/xampp/htdocs.
11. Create a file named index.html which will serve as the landing page.
12. Add the code for the landing page in index.html.
13. Create a folder named assets.
14. Inside the php folder, create a file named process_log-in.php for handling logins and config.php for database configuration.

- Add code to config.php to establish a connection to the database.

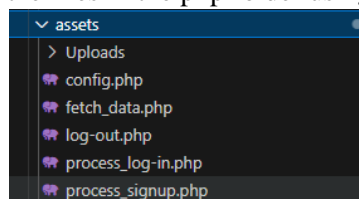
```
<?php

$host = 'localhost';
$dbname = 'restaurant_management';
$username = 'root';
$password = '';

$conn = new mysqli($host, $username, $password, $dbname);

if ($conn->connect_error) {
    die("Connection failed: " . $conn->connect_error);
}
```

15. Link index.html to the files in the php folder using href="assets/php_file".



16. Create a file named sign-in.php.
17. On process_log-in.php, link to the respective sign-in.php files for Admin and General User logins.
18. Link sign-in.php for admin and General User to the database using require once



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'./assets/config.php';

19. In XAMPP, click the "Admin" button on the Actions button of the MySQL Module to visit phpMyAdmin.

20. Create a database called restaurant_management and create all relevant tables.

```
CREATE DATABASE restaurant_management;

USE restaurant_management;

CREATE TABLE `activity_logs` (
  `log_id` int(11) NOT NULL,
  `action_by` int(11) DEFAULT NULL,
  `action_type` enum('Login','Logout','Create Reservation','Update Reservation','Cancel Reservation','Order Placed','Order Updated','Order Canceled','Add Product','Update Product','Delete Product') DEFAULT NULL,
  `action_details` text DEFAULT NULL,
  `created_at` timestamp NOT NULL DEFAULT current_timestamp()
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_general_ci;

CREATE TABLE `error_logs` (
  `log_id` int(11) NOT NULL,
  `error_message` text DEFAULT NULL,
  `error_type` varchar(100) DEFAULT NULL,
  `occurred_at` timestamp NOT NULL DEFAULT current_timestamp()
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_general_ci;

CREATE TABLE `feedback` (
  `feedback_id` int(11) NOT NULL,
  `user_id` int(11) DEFAULT NULL,
  `reservation_id` int(11) DEFAULT NULL,
  `order_id` int(11) DEFAULT NULL,
  `feedback_text` text DEFAULT NULL,
  `rating` int(11) DEFAULT NULL,
  `created_at` timestamp NOT NULL DEFAULT current_timestamp()
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_general_ci;

CREATE TABLE `orders` (
  `order_id` int(11) NOT NULL,
  `user_id` int(11) NOT NULL,
  `reservation_id` int(11) DEFAULT NULL,
  `order_details` text DEFAULT NULL,
```

21. Add the authentication of the credentials submitted in sign-in.php
22. When the credentials are correct (in admin login), redirect to admin-dashboard.php.
23. Create all the dashboards needed in admin-dashboard.php to handle reservations, orders, and customers.
24. Ensure you give an Admin logout button from admin-dashboard.php that leads you back to sign-in.php.
25. Let's create a new file labeled as 'sign-up.php' where you can have a General User registering.
26. Write the registration logic inside process_signup.php, such that it connects to the database.



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```
process_signup.php X
Dine@watch - php - 2 - Copy (2) > assets > process_signup.php > ...
25 $checkUsernameQuery = "SELECT COUNT(*) AS count FROM users WHERE username LIKE ?";
26 $stmt = $conn->prepare($checkUsernameQuery);
27 $usernamePattern = $username . '%';
28 $stmt->bind_param("s", $usernamePattern);
29 $stmt->execute();
30 $result = $stmt->get_result();
31 $row = $result->fetch_assoc();
32 $count = $row['count'];
33
34 // If a matching username is found, append a number
35 if ($count > 0) {
36     $username .= $count + 1; // e.g., if 'mas' exists, use 'mas1'
37 }
38
39 // Hash the password for security
40 $passwordHash = password_hash($password, $algo: PASSWORD_BCRYPT);
41
42 // Check if the email already exists in the database
43 $checkQuery = "SELECT * FROM users WHERE email = ?";
44 $stmt = $conn->prepare($checkQuery);
45 $stmt->bind_param("s", $email);
46 $stmt->execute();
47 $result = $stmt->get_result();
48
49 if ($result->num_rows > 0) {
50     // If a match is found, the email already exists
51     $error = "An account with this email already exists. Please try a different email.";
52 } else {
53     // No existing account, proceed with inserting the new user
54     $sql = "INSERT INTO users (first_name, middle_initial, last_name, suffix, address, contact_number, email, zip_code, username, password_hash, role)
55     VALUES (?, ?, ?, ?, ?, ?, ?, ?, ?, ?, ?)";
56     $stmt = $conn->prepare($sql);
57     $stmt->bind_param("ssssssss", $firstName, $middleInitial, $lastName, $suffix, $address, $phone, $email, $zipCode, $username, $passwordHash);
58
59     if ($stmt->execute()) {
60         // Redirect with a success message
61         header("Location: index.php/signup-success");
62         exit; // Ensure no further code is executed
63     } else {
64         $error = "Error executing query: " . $stmt->error;
65     }
66 }
67
68 // Close the statement
69 $stmt->close();
70 }
```

27. As well come up with 'forgot_password.php' for the user's password reset.
28. Write the following code snippet to link the User register and forgot password files using an <a> tag in sign-in.php.

```
<div class="forgot-password">
|   <a href="forgot_password.php">Forgot your password?</a>
</div>
<button type="submit">Sign In</button>
```

29. Make sure that the registration process for the User requires verification with the admin before allowing them to sign in.
30. Then implement the form submission logic within sign-in.php to connect to the database and authenticate the credentials.



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- **CREATE.** This is when the User registers

```
$sql = "INSERT INTO users (first_name, middle_initial, last_name, suffix, address, contact_number, email, zip_code, username, password_hash, role)
VALUES (?, ?, ?, ?, ?, ?, ?, ?, ?, 'General User')";
$stmt = $conn->prepare($sql);
$stmt->bind_param("sssssssss", $firstName, $middleInitial, $lastName, $suffix, $address, $phone, $email, $zipCode, $username, $passwordHash);
```

- **READ.** This is when the admin fetch the clients.

```
<?php
include_once "../config/dbconnect.php";
$sql="SELECT * from users where isAdmin=0";
$result=$conn-> query($sql);
$count=1;
if ($result-> num_rows > 0){
    while ($row=$result-> fetch_assoc()) {
        // ...
    }
}
```

- **UPDATE.** This is when the admin wants to update the order status.

```
if($row["order_status"]==0){
    $update = mysqli_query($conn,"UPDATE orders SET order_status=1 where order_id='$order_id'");
}
else if($row["order_status"]==1){
    $update = mysqli_query($conn,"UPDATE orders SET order_status=0 where order_id='$order_id'");
}
```

- **DELETE.** This is when the admin wants to delete an order.

```
$p_id=$_POST['record'];
$query="DELETE FROM product where product_id='$p_id'";

$data=mysqli_query($conn,$query);

if($data){
    echo"Product Item Deleted";
}
else{
    echo"Not able to delete";
}
```