

Forresta Café: Modern Green Elegance with Earthy Sophistication

T-CPET31GLA

Web Design and Development Lab

Submitted by:
Asano, Mirai F.

Submitted to:
Engineer Ron Anthony Delos Santos

Date Submitted:
12/19/2025

**De La Salle University - Dasmariñas College of Engineering,
Architecture, and Technology Computer Engineering
Department**

INTRODUCTION

In today's digital age, cafés can greatly improve their service by using online systems that simplify and speed up the ordering process. This project introduces the **Forresto Web-Based Café Ordering System**, a platform designed with a **Green and Brown Modern** aesthetic to reflect our botanical, forest-to-table identity.

The system allows the admin to make a menu, easily categorize products, and submit them online through an organic interface. By providing a user-friendly experience that reduces errors and improves management, this project applies essential web development skills to offer a practical solution that enhances convenience for both cashiers and managers, and supports smoother cafe operations.

3. SYSTEM SPECIFICATION

Role-based authentication – The system checks the user's role and redirects.

Admin role – Access to menu browsing (same with cashier) and cart functionality plus exclusive access to products management and report generation.

3.1 Image Handling

Product imagery is managed through a streamlined admin upload process. By storing relative file paths in the IMAGEPATH field, the application can dynamically inject images into the frontend menu, allowing for real-time inventory updates without manual code changes.

3.2 Technology Stack

- MSSQL for Database
- HTML, CSS, JavaScript for Frontend
- Bootstrap Libraries for styling, Google Fonts
- XAMPP with SQLSRV driver server environment

3.3 Menu Display

The menu displays product data retrieved from the database. Products are displayed with

- Product Image
- Product Name
- Description
- Category
- Price

These details can later on be edited by an administrator.

3.4 Cart Functionality

The cart is session-based and allows order modification (delete or increase/decrease of

qty).

There's also a discount functionality, allowing senior discounts to be applied.

3.5 Order Management System

Centralized Order Management

- Real-time Tracking: View all active orders, complete with customer profiles and specific fulfillment instructions.
- Detailed Breakdowns: Access itemized lists of products, quantities, and pricing for precise order assembly.
- Status Control: Streamlined workflow to mark orders as "Completed" once fulfilled.
- Historical Logs: Maintain a searchable record of past transactions with accurate timestamps for better operational oversight.

3.6 Account Management System

User & Staff Oversight

- User Directory: Access a comprehensive list of all registered customers and staff members.
- Profile Management: Modify user metadata, including usernames and account designations.
- Permission Logic: Dynamically manage staff roles to ensure users only access the features relevant to their position.
- System Security: Enforce role-based restrictions to safeguard administrative tools and data.

3.7 Menu Item Cards

Product Interface & Customization The menu is presented through a series of sleek, minimalist product cards designed to highlight the café's offerings without visual clutter. Each card features:

- Refined Imagery: High-resolution product photos that utilize subtle transitions to maintain a clean, high-end feel.
- Contemporary Card Layout: A modern design focused on clarity, utilizing generous white space and sharp typography to ensure readability.
- Essential Product Details: Concise descriptions that focus on the premium quality and ingredients of the Forresto menu.
- Instant Cart Integration: A streamlined "Add to Cart" feature powered by AJAX for a fast, refresh-free user experience.
- Fluid Responsiveness: A fully adaptive layout that preserves the minimalist aesthetic across mobile, tablet, and desktop screens.

4. UI/UX DOCUMENTATION

Design Philosophy & User Interface

The **Forresto** website adopts a minimalist, high-end aesthetic that emphasizes clarity and modern sophistication. By utilizing strategic white space and a clean layout, the interface directs the user's focus toward the cafe's premium offerings without visual clutter. Interactive elements, such as buttons that transition to deeper shades on hover, provide subtle yet effective feedback. The design prioritizes a "less is more" approach, combining a contemporary professional look with intuitive navigation, ensuring the brand feels both current and accessible.

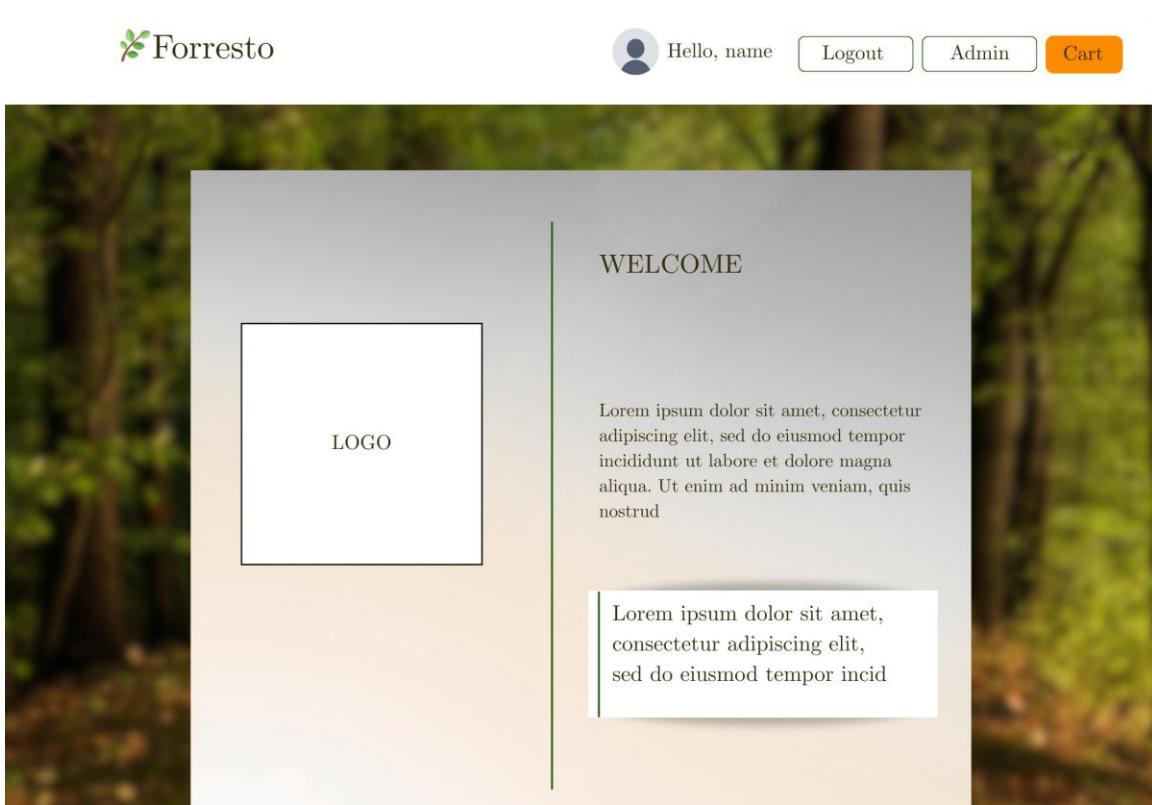
Features & Functionality

Efficiency is at the core of the user experience. Customers can navigate the menu through streamlined category tabs and customize their orders with precise quantity controls. The integration of **AJAX** allows users to add items to their cart instantly, maintaining a fast and fluid browsing experience. For internal operations, the system features a secure management suite. Administrative workflows for products, orders, and user accounts are strictly separated by privilege levels, ensuring that staff can manage the business effectively while preventing unauthorized or accidental changes.

Technical Architecture

Developed using the **XAMPP** stack, the platform utilizes **PHP** for server-side processing and **MSSQL** as the database backend to ensure reliable data persistence. The frontend is built on **Bootstrap**, providing a responsive grid system that maintains the site's modern look across all screen sizes. Custom **CSS** is applied to refine the minimalist branding and typography. By isolating specific actions into individual pages, the architecture ensures high maintainability and a clear, logical flow for the user. The result is a high-performance web application that balances modern usability with a polished, brand-aligned visual identity.

4.1 Wireframes



4.2 Final Design

The image displays two screenshots of the Forresto Admin application, showing the Account Management and Pending Orders sections.

Account Management (Top Screenshot):

- Header:** Forresto Admin, mirai, Back to Café, Logout.
- Title:** Account Management
- Description:** Manage staff accounts, assign roles, and maintain your sanctuary's team.
- Search Bar:** Search users by name or
- Dashboard Link:** Dashboard
- Table:** Shows three user entries:

User ID	Username	Full Name	Email	Role	ACTIONS
1	mirai	Mirai Asano	Not set	ADMIN	<button>Edit</button> <button>Delete</button>
2	cashier	Mirai Asano	Not set	STAFF	<button>Edit</button> <button>Delete</button>
3	cashier2	Mirai Asano	Not set	STAFF	<button>Edit</button> <button>Delete</button>

Pending Orders (Bottom Screenshot):

- Header:** Forresto Orders, mirai, Logout, Back to Dashboard.
- Title:** Pending Orders
- Description:** Monitor and manage all incoming orders waiting to be prepared.
- Order Status:** Awaiting Preparation
- Order Details:** # Order #5, 6 hours ago, ₱1,710.00
- Customer:** cashier
- Contact:** N/A
- Date & Time:** 2025-12-19 15:32:53
- Order Notes:** Senior Discount (10%) applied: -₱180.00\nService Charge (5%): ₱90.00\nSubtotal: ₱1,800.00
- Actions:** View Order Items, Mark as Completed

Forresta Admin

mirai [Logout](#) [Back to Café](#)

Sales Analytics Dashboard

Track revenue, analyze trends, and monitor the financial performance of Forresta

₱13,871 TOTAL REVENUE

6 TOTAL TRANSACTIONS

₱2,311.88 AVG ORDER VALUE

₱13,871.25 TODAY'S SALES

₱13,871 MONTHLY REVENUE

[Back to Dashboard](#)

Daily Revenue Trend (Last 30 Days)

Daily Orders (Last 30 Days)

Daily Revenue Trend (Last 30 Days)

Daily Orders (Last 30 Days)

Forresta Admin

mirai [Back](#)

Add New Product

Product Name **Category**

Price

Description

Optional product description

Product Image

Click to upload image
JPG, PNG, GIF, WebP - Max 5MB

Add Product

Forresto Admin

mirai [Logout](#) [Back to Café](#)

🍴 Product Management

Curate your Forresto menu. Manage products, update pricing, and ensure every offering is a masterpiece.

[Add New Product](#) [Back to Dashboard](#)

ID	PRODUCT	CATEGORY	DESCRIPTION	PRICE	IMAGE	ACTIONS
8	Black Tea Lemonade	DRINKS	Quench your thirst with our Forresto Black Tea Lemonade. A crisp blend of bold black tea and zesty citrus, served over ice and garnished with dried lemon wheels for a refreshing, botanical twist. The perfect forest-side pick-me-way. 🍃☀️	₱299.00		Edit Delete
9	Caffe Latte	DRINKS	Savor the simple elegance of our Forresto Caffe Latte. Expertly pulled espresso is combined with silky, steamed milk and finished with artisanal latte art. A smooth, creamy classic that captures the warmth of a sun-drenched morning. ☀️	₱399.00		Edit Delete

Admin Dashboard

Manage your sanctuary's operations, monitor performance, and ensure every moment at Forresto remains peaceful and perfect.

mirai
Administrator

TODAY'S SALES ₱13,871.00

MENU ITEMS 8

PENDING ORDERS 2

MONTH REVENUE ₱13,871.00

ACTIVE CUSTOMERS 0

Menu Management
View, add, edit, or delete menu items. Keep your sanctuary's offerings fresh and inviting.

Sales Analytics
View detailed sales reports, analyze trends, and make data-driven decisions for your sanctuary.

Order Management
Track and manage customer orders, update order status, and ensure smooth order fulfillment.

Staff Management
Manage staff accounts, assign roles, and monitor team performance to maintain sanctuary excellence.

 **Forresto**

[Logout](#) [Admin](#) [Back to Menu](#)

Your Cart

Everything you need for a peaceful moment at Forresto

1 TOTAL ITEMS **₱600.00** SUBTOTAL **1** UNIQUE ITEMS

Senior Citizen Discount 10% OFF

Apply 10% discount on your total order. Valid for senior citizens aged 60 and above.

Apply Discount

**Mocha Eggnog**
₱600.00 each
1  **Remove** **₱600.00**

Hot Toffee Nut
Indulge in our Hot Toffee Nut Latte, a Forresto favorite. Rich espresso meets velvety milk and buttery toffee nut sweetness, topped with spiced whipped cream and a hint of cocoa. The ultimate cozy escape in a cup. 

₱449.99 

Mocha Eggnog
Indulge in our Mocha Eggnog, a Forresto seasonal favorite. Rich espresso meets velvety chocolate and creamy eggnog for a festive, spiced delight. Topped with whipped cream and cocoa, it's a holiday hug in a cup. 

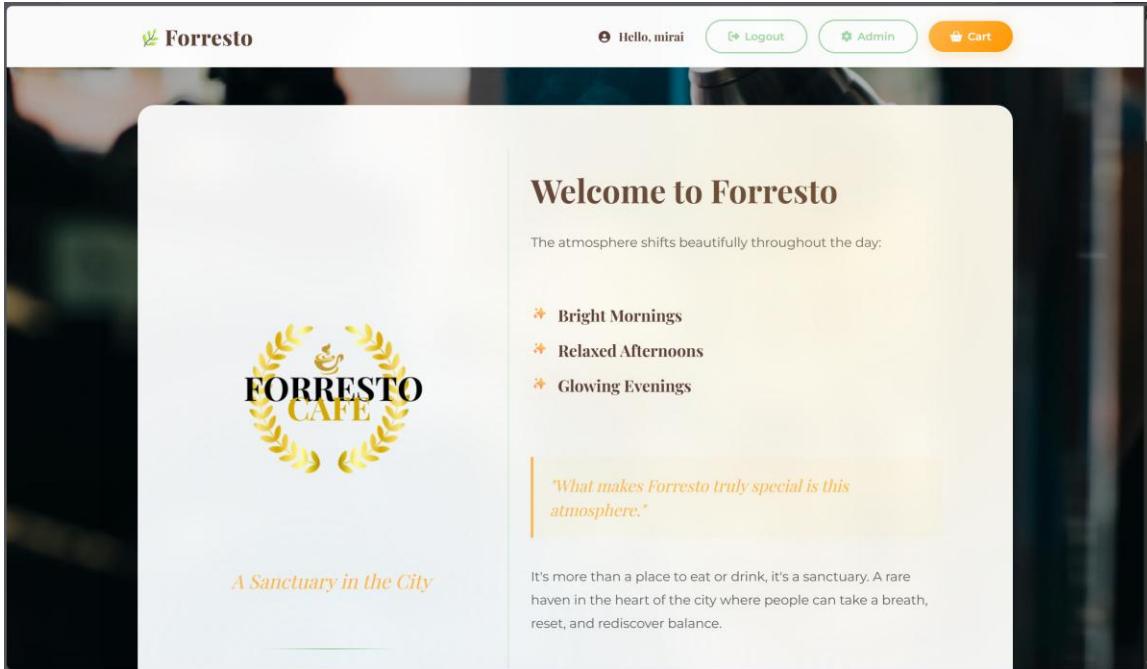
₱600.00 

Drinks

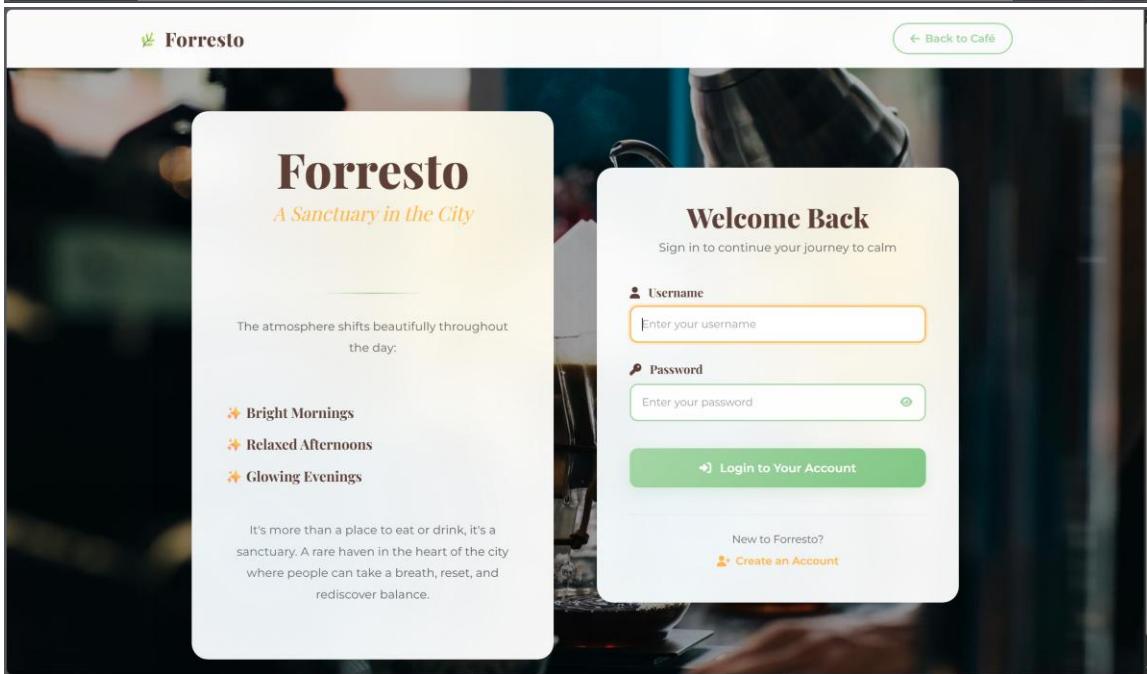
**Sea Salt Mocaccino**
Experience the perfect balance of

**Black Tea Lemonade**
Quench your thirst with our Forresto

**Caffe Latte**
Savor the simple elegance of our

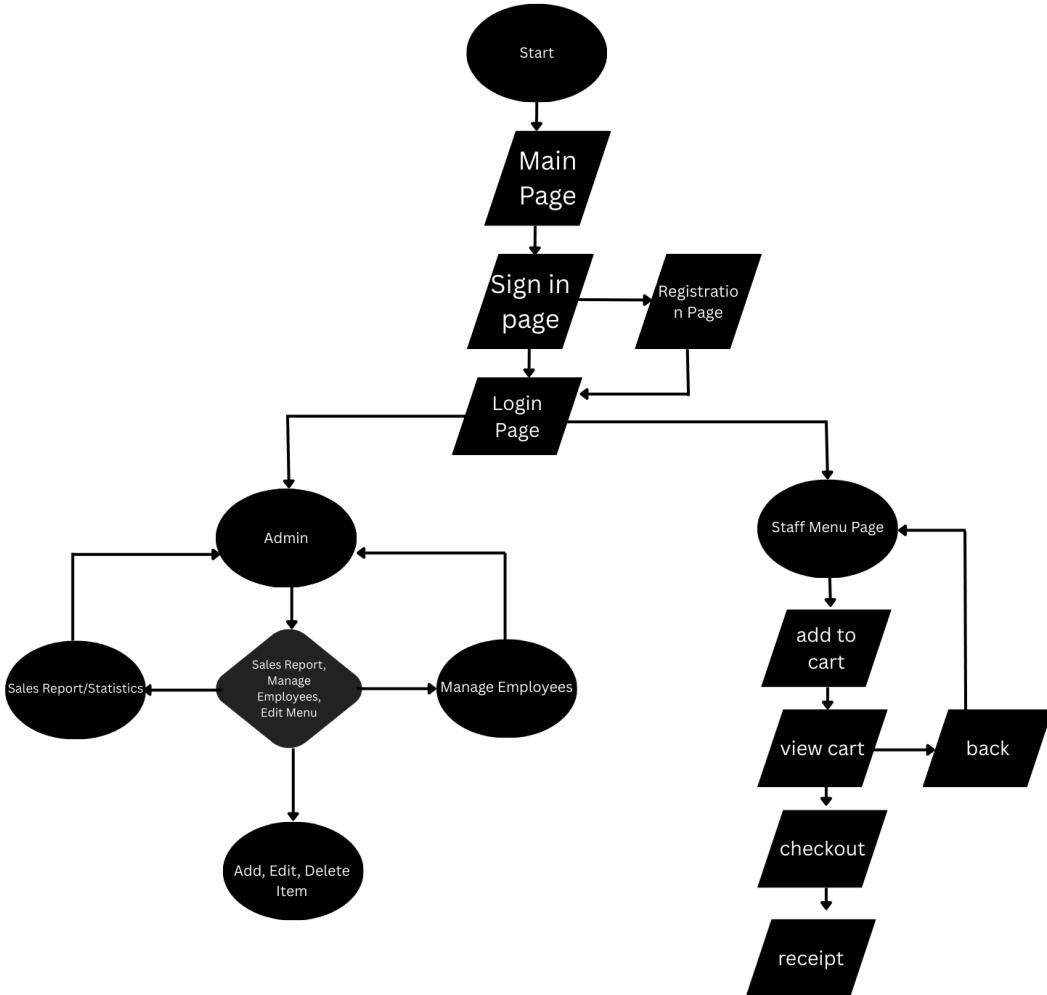


The screenshot shows the homepage of the Forresto website. At the top, there's a navigation bar with the logo "Forresto" and links for "Hello, miral", "Logout", "Admin", and "Cart". The main content area features a large image of a person's face in profile. Overlaid on this image is a white card with the title "Welcome to Forresto" and a subtitle "The atmosphere shifts beautifully throughout the day." Below this is the "FORRESTO CAFE" logo, which consists of the word "FORRESTO" in a serif font inside a circular wreath, with "CAFE" in a smaller sans-serif font below it. A quote "A Sanctuary in the City" is written in orange at the bottom left of the card. To the right of the card, there's a list of three items: "Bright Mornings", "Relaxed Afternoons", and "Glowing Evenings", each preceded by a small orange star icon. Further down, another quote "What makes Forresto truly special is this atmosphere." is shown in a box. At the bottom of the card, there's a descriptive paragraph about Forresto being more than just a place to eat or drink, but a sanctuary where people can take a breath, reset, and rediscover balance.

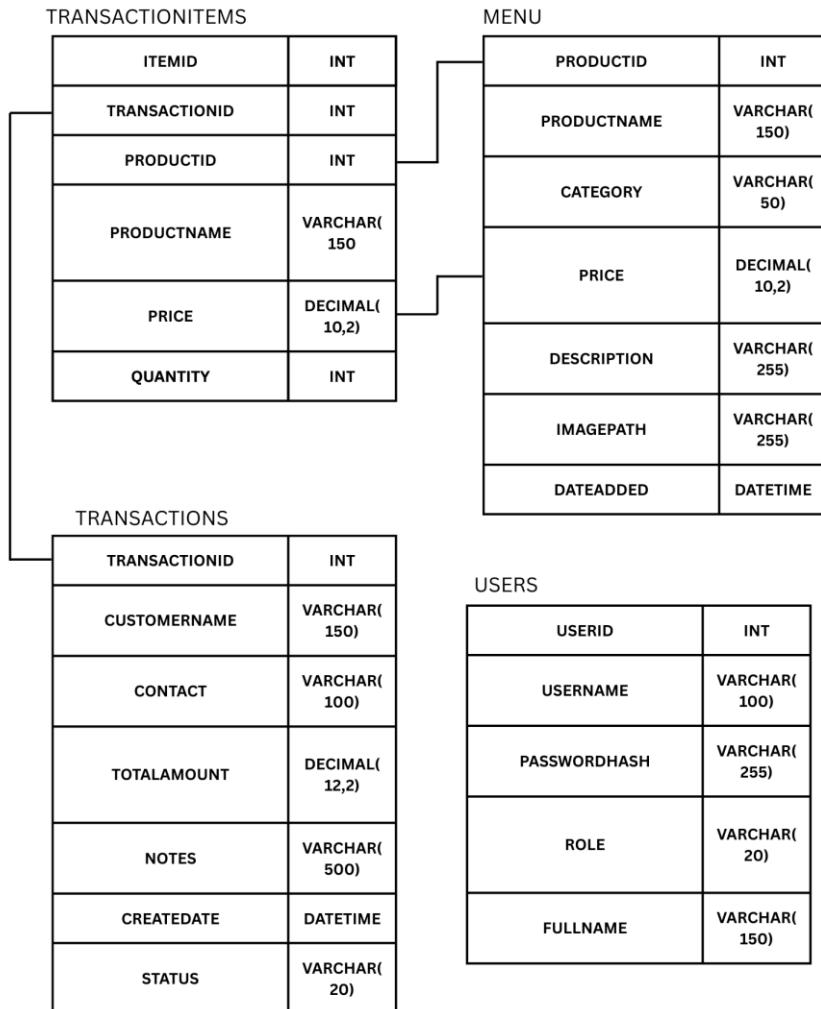


This screenshot shows the login page for the Forresto website. It features a large image of a coffee machine in the background. In the center, there's a white card with the title "Forresto" and the subtitle "A Sanctuary in the City". Below this is the same quote "The atmosphere shifts beautifully throughout the day." and the list of three items: "Bright Mornings", "Relaxed Afternoons", and "Glowing Evenings". At the bottom of this card is the same descriptive paragraph about Forresto being a sanctuary. To the right of the card, there's a "Welcome Back" section with a "Sign in to continue your journey to calm" message. It includes fields for "Username" and "Password", both with placeholder text "Enter your username" and "Enter your password". A green "Login to Your Account" button is located below these fields. At the bottom of the card, there's a link for "New to Forresto? Create an Account". Above the login card, there's a small "Back to Café" link.

4.3 User Flow Diagram



5. Database Design



Order processing is handled through a relational database model where one transaction can contain multiple line items. The **TRANSACTIONS** table stores general order data (total cost, date, and status), while the **TRANSACTIONITEMS** table captures the specific details of each product purchased. By linking these via **TRANSACTIONID**, the system maintains a clean separation of data, prevents redundancy, and ensures that a snapshot of the product's price is saved at the moment of purchase for accurate historical record-keeping.

6. CODE DETAILS

This project utilizes a PHP-based backend to handle business logic and database communication, paired with a frontend built on HTML and CSS. JavaScript is integrated to provide a more responsive user experience through dynamic UI components.

6.1 Folder Structure Explanation

Uploads Folder – Contains all images used such as the logo and the items on the menu. Upon adding products to the menu, images are saved here automatically.

accounts.php – Interface for viewing and managing all user accounts.

add_product.php – Tool for adding new items to the product menu.

add_to_cart.php – Background AJAX handler for seamless cart updates.

admin_dashboard.php – Central administrative hub for system-wide control.

cart.php – Interface for reviewing, managing, and updating cart contents.

checkout.php – Handles the final transaction and payment processing.

delete_account.php – Functionality to permanently remove user accounts.

delete_product.php – Functionality to remove items from the inventory.

edit_account.php – Interface for modifying existing user account details.

edit_product.php – Tool for updating product descriptions, prices, or info.

index.php – The main storefront featuring the product menu and shopping cart.

login.php – Secure user authentication and sign-in system.

logout.php – Terminates active sessions and logs users out securely.

orders.php – Dashboard for viewing and managing pending and past orders.

productlist.php – Master display of the current product catalog.

receipt.php – Generates order confirmations and post-purchase summaries.

register.php – System for onboarding and creating new user accounts.

6.2 GITHUB REPOSITORY

GitHub Link: [rayyy12/refactored-fiesta](https://github.com/rayyy12/refactored-fiesta)

Youtube Link: <https://youtu.be/VkrBCyf0EzM>