

Project Report

Software Construction and Development



Cuisine Courier

Group Members

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Objectives and Scope:

Our Cuisine Courier Website project aims to create an e-commerce platform for selling food items. The system is designed to provide users with a seamless and secure buying experience, where they can scroll and observe several Restaurants and buy items and order any amount they want. Key objectives include items listing, user authentication, shopping cart management, order processing, and session validation to ensure secure user interactions.

Methodology:

Problem Statement:

Traditional Food delivery System involves Calling them, limiting accessibility and convenience. Our online clothing website provides a solution, but security concerns and a lack of user-friendly features can hinder the experience.

Problem Solution:

To address the challenges faced by traditional food delivery and enhance the online shopping experience, we propose the development of a Food Delivery System named as "Cuisine Courier". This platform will incorporate Java Spring Boot, Java Swing, JDBC, Servlets and session validation to create a secure, efficient, and user-friendly e-commerce solution.

Functions:

Admin Privileges:

- Function to manage add Restaurant & Items
- Manage all user databases.

User Authentication:

- Function to register new users and authenticate existing ones.
- Secure password storage using encryption techniques.
- Session validation to ensure secure user interactions.

Product Listing:

- Display a comprehensive list of Restaurants.
- Categorize Items for easy navigation.
- Utilize Java Collections and Lists for efficient data management.

Shopping Cart Management:

- Allow users to add/remove items from their Items cart.
- Calculate the total price dynamically based on the items in the cart.

Technologies Used:

- Java Spring Boot for server-side processing.
- Java core backend.
- Java Swing
- Session validation for secure user interactions.
- HTML, CSS, and JavaScript for the front-end.
- PostgreSQL for back-end database.

Expected Outcome:

The Cuisine Courier Website is expected to provide a secure and user-friendly platform for users to browse, select, and purchase items. The implementation of Java Spring Boot, Collections, and Lists ensures efficient data processing and management.

Design:

The system follows a three-tier architecture with Java Spring Boot for server-side processing, HTML/CSS/JavaScript/Swing for the user interface, and PostgreSQL database for data storage. Object-oriented principles are employed to enhance maintainability and scalability.

Results:

The Cuisine Courier Website successfully achieved its objectives with the following key results:

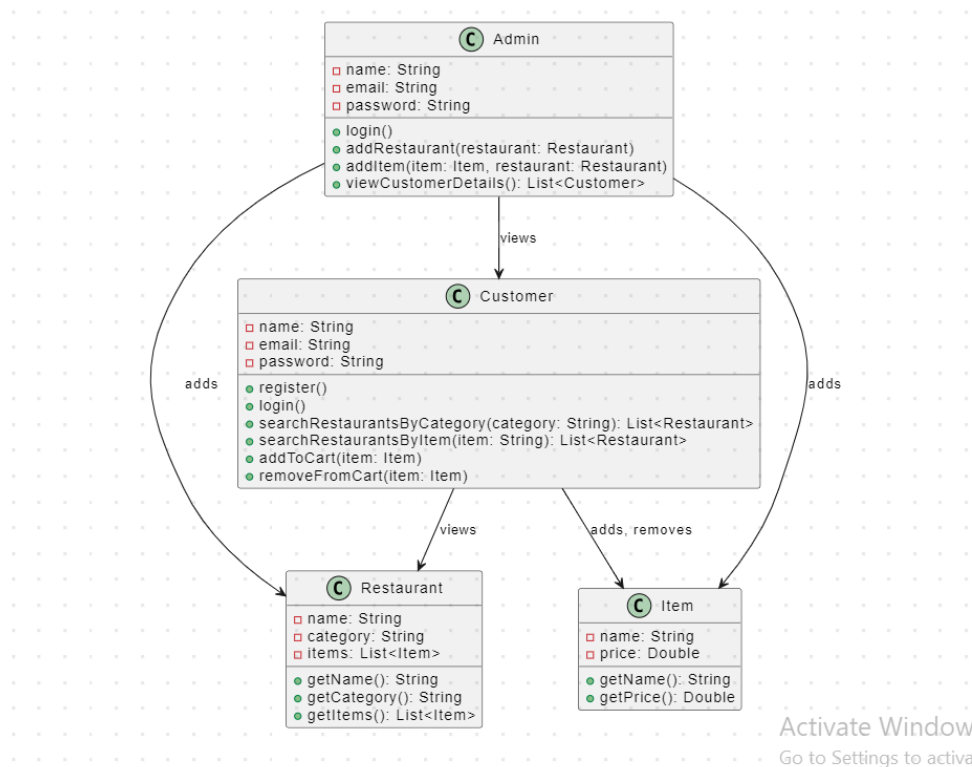
- Secure User Authentication: Users can register securely and log in with encrypted passwords.
- Efficient Product Listing: Java Collections and Lists are utilized for effective data management.
- Seamless Shopping Cart Management: Users can easily add/remove items, and the total price is calculated dynamically.

Testing Use Cases:

Testing involved various use cases to ensure the system's functionality, including:

- User Registration and Login: Verifying secure registration and login processes.
- Product Listing and Navigation: Testing the display and categorization of clothing items.
- Shopping Cart Management: Ensuring the correct addition/removal of items and dynamic price calculation.

CLASS DIAGRAM



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