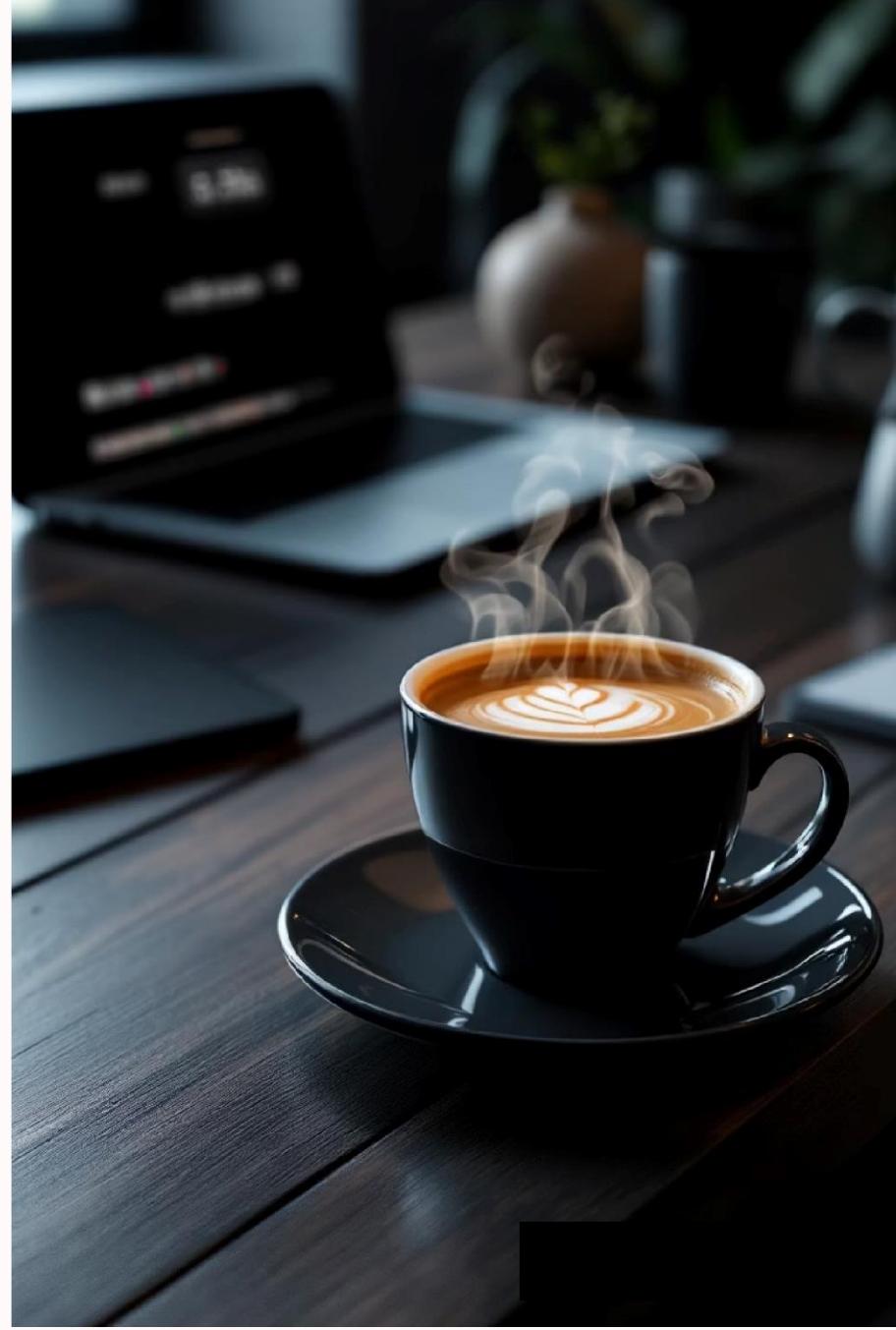


Coffee Management System

This web development project uses Java technology to build an efficient coffee management system based on JSP, Servlets, and MySQL.



Group Members



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Project Overview

The Coffee Management System is designed to streamline the operations of a coffee shop, providing a user-friendly interface for both customers and administrators. The objective is to create a robust, secure, and easy-to-use web platform.

System Objectives

- Manage coffee products and orders.
- Provide an online shopping experience for customers.
- Support administrators in monitoring and operating the system.



System Architecture: MVC

The system is built upon the Model-View-Controller (MVC) architecture to ensure modularity, ease of maintenance, and scalability.

Model

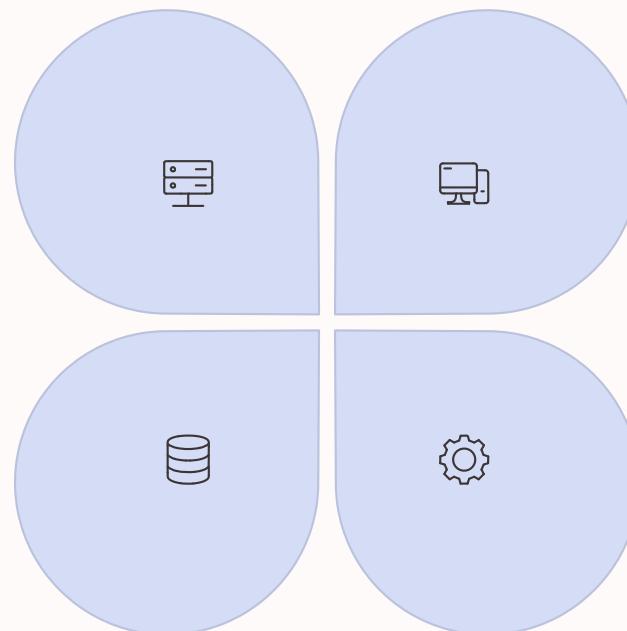
Manages data and business logic.
Interacts with the database.

View (JSP)

User interface. Displays data provided by the Controller.

DAO

Data Access Object (DAO) layer
abstracts data access, separating
business logic from data access logic.



Controller (Servlets)

Processes user requests, interacts with the Model, and selects the appropriate View.

Additionally, the system also uses Filters to control access based on roles, enhancing security.

User Roles



Guest

Unregistered users can view products and general information.



Customer

Registered users can log in, place orders, and view order history.



Administrator

Has full authority to manage products, orders, users, and system settings.

Customer Features



View Products

Browse the coffee product catalog with detailed descriptions.



Register / Log In

Create a new account or log in to an existing account.



Add to Cart

Select products and add them to your personal shopping cart.



Checkout

Complete the secure and convenient purchasing process.



View Orders

Track the status and history of placed orders.

Admin Dashboard



Admin Login

Secure access with administrator-specific credentials.



Dashboard Overview

Provides a comprehensive view of system performance, new orders, and best-selling products.



Product Management

Manage product listings and inventory.



Order Management

Oversee customer orders and fulfillment.



User Management

Administer user accounts and permissions.

Product Management (Admin)

Administrators can efficiently manage products through detailed functionalities.



View & Search

Display all products, with advanced search and filtering capabilities.



Add & Edit

Add new products or update existing product information.



Enable / Disable

Activate or deactivate products without permanently deleting them.



Delete Product

Remove products from the system when no longer needed.



Pagination

Display products by page for easy management of large quantities.

Order Management (Admin)

→ **View All Orders**

Access and view details of all placed orders.

→ **View Order Details**

Display full information for each order, including products and customer details.

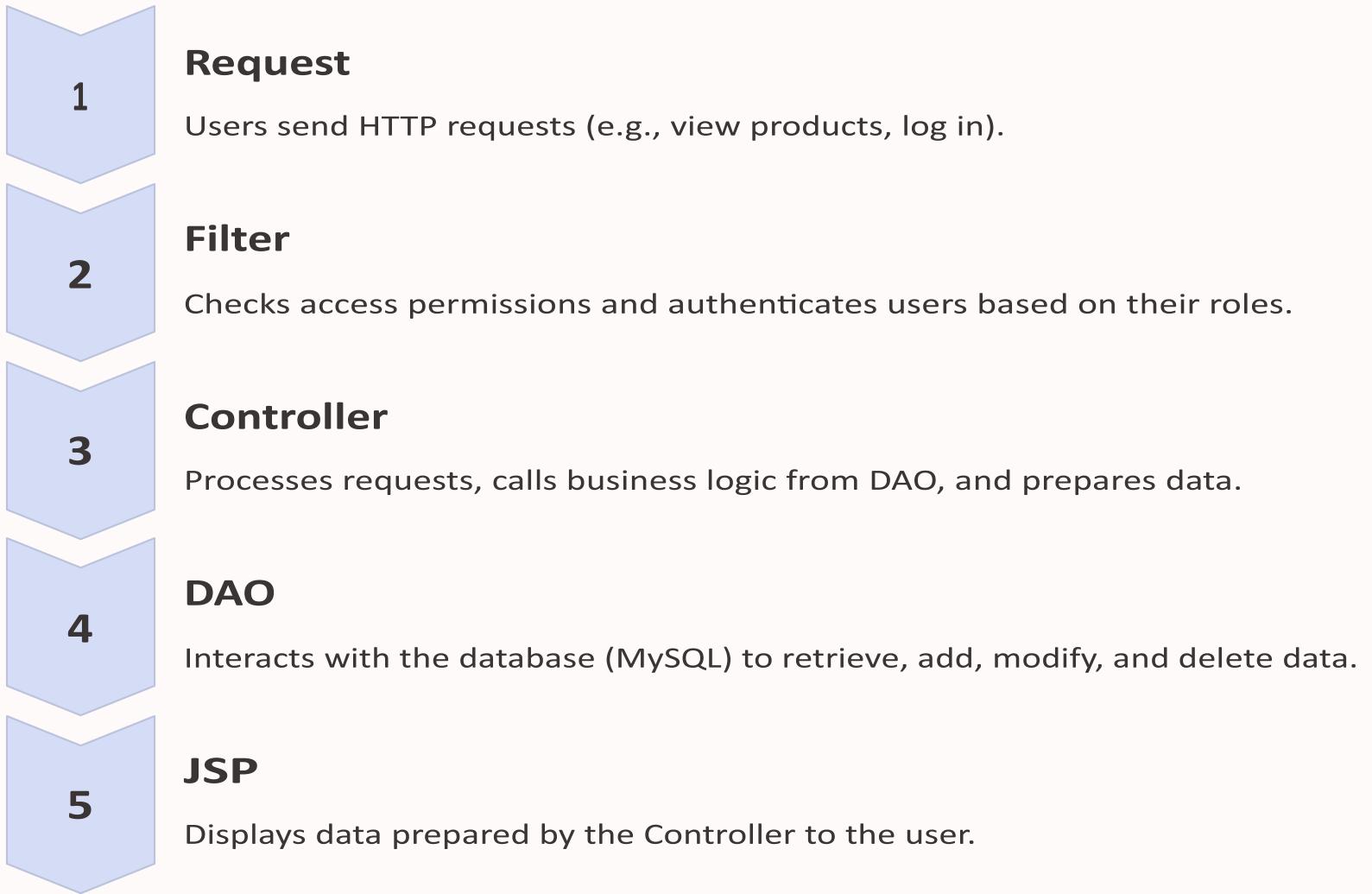
→ **Filter & Sort**

Customize order display by status, date, or customer.

→ **Update Status**

Change order status (e.g., pending, shipped, delivered).

Main Code Flow



This flow ensures a clear separation of concerns, making the system organized and easy to maintain.

Coffee Management System: Demonstration

Matcha Coffee ☕

26°C • Clouds | How do you feel today, Mary Joe ?

Mary Joe 🛍

Fresh Matcha • Fresh Coffee

Experience the calming taste of matcha and the aroma of fresh brew — all in one place

Explore Menu

Matcha & Coffee Menu

Browse all drinks and items

Cart System

Add drinks, customize orders,

Your Profile

Edit your info, address, and

Order History

Track all your previous and

Conclusion and Future Improvements

Project Conclusion

The Coffee Management System has been completed, meeting initial requirements and providing an efficient and secure management platform.

- Clear structure following the MVC model.
- Secure design with role-based authentication.
- Easily scalable and maintainable.

Future Improvements

- Upgrade user interface and experience (UI/UX) for better friendliness.
- Integrate online payment gateways (e.g., PayPal, Stripe).
- Develop more in-depth reporting and analytics features.
- Transition to Spring Boot to leverage modern frameworks.

Thank You and Q&A