Object Oriented Programming 2

# Group Project

Precious Online clothing store

Prepared by group 6

### Introduction

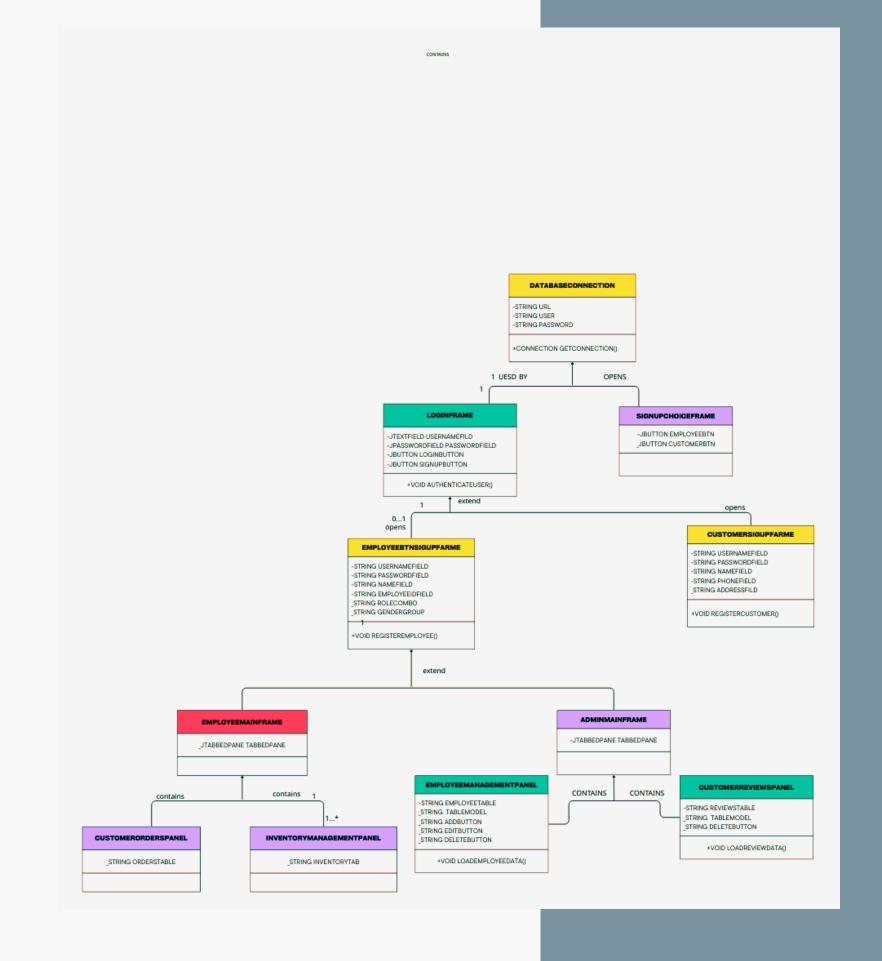


Our project is an online clothing store that allows users to shop, and manage products and orders with ease. The system provides different interfaces for Managers, Employees, and Customers, ensuring a smooth and efficient experience for all types of users.



## Class hierarchy

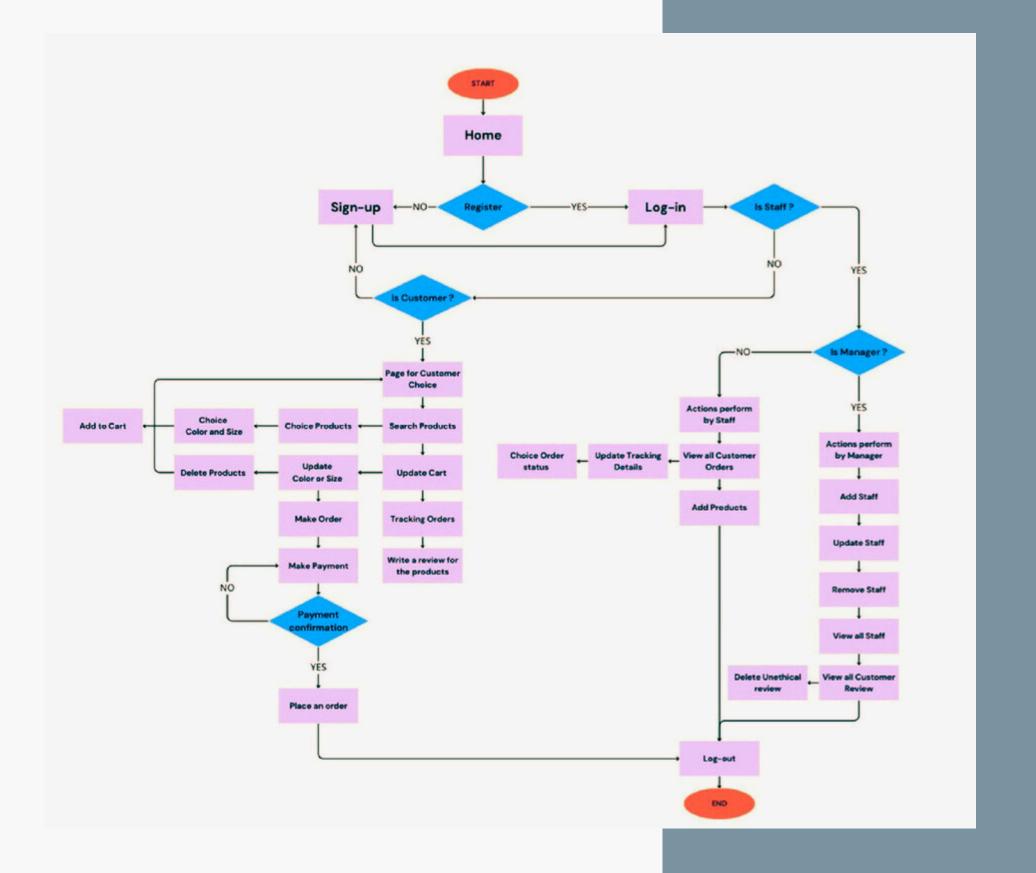
- •Includes classes: User, Customer, Employee, Manager, Product, Order.
- •Each class has attributes and methods related to its role in the system.





## Application flow

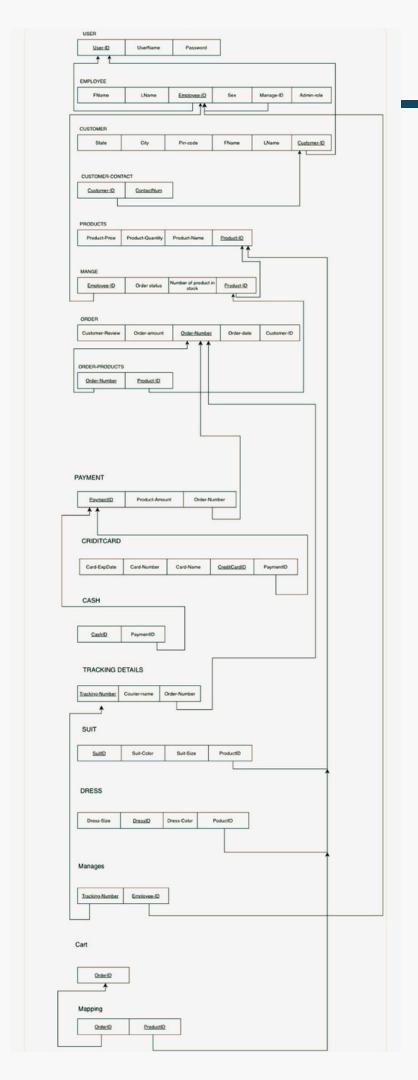
- •1. Login / Sign up.
- •2. Select user type.
- •3. Perform tasks based on role (view, add, edit, manage orders).





## Database schema

- Database includes tables like: Users, Employee, Customer, Products, Orders.
- Relationships are illustrated using ER Diagram.



## Difficulties and solutions

.Challenge: Establishing a reliable connection to the MySQL database on all team members' machines.

.Resolution: Ensured the correct JDBC driver (mysql-connector-java) was installed and verified open and accessible

.Challenge: Coordinating task distribution and merging work among team members

Divided responsibilities clearly from the beginning based on each member's strengths, and used version-controlled folders to manage updates and .integrate each part smoothly into the final project

.Challenge: Structuring a complete and normalized database schema for the application

Resolution: Designed a comprehensive Entity-Relationship (ER) diagram before implementation to clearly define entities, attributes, and relationships, ensuring consistency and efficiency in the database design

.Challenge: Setting up a local development environment with integrated database services

- :Resolution
- .Used XAMPP to create a local environment that includes Apache and MySQL services
- .Activated both Apache (for web server functionality) and MySQL (for database management)
- .Created the database and tables using phpMyAdmin
- .Used NetBeans for project development, taking advantage of its built-in MySQL connector
- .Configured the database connection in the Java code using JDBC
- .Successfully tested the connection to ensure smooth integration

#### Work distribution

• Shahad: Developed the login and signup pages for the manager and customer roles.

• Maryam: Developed the product pages, contributed to the UML diagram, and assisted with the SQL code.

• Khawla: Wrote the SQL code, created the UML and EER diagrams, and implemented the cart page functionalities.

• Reema: Implemented order tracking functionality and designed both the manager and employee interfaces.

• Norah: Designed the database schema, implemented the payment pages, and prepared the project presentation.



# Thank you

#### Group members

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