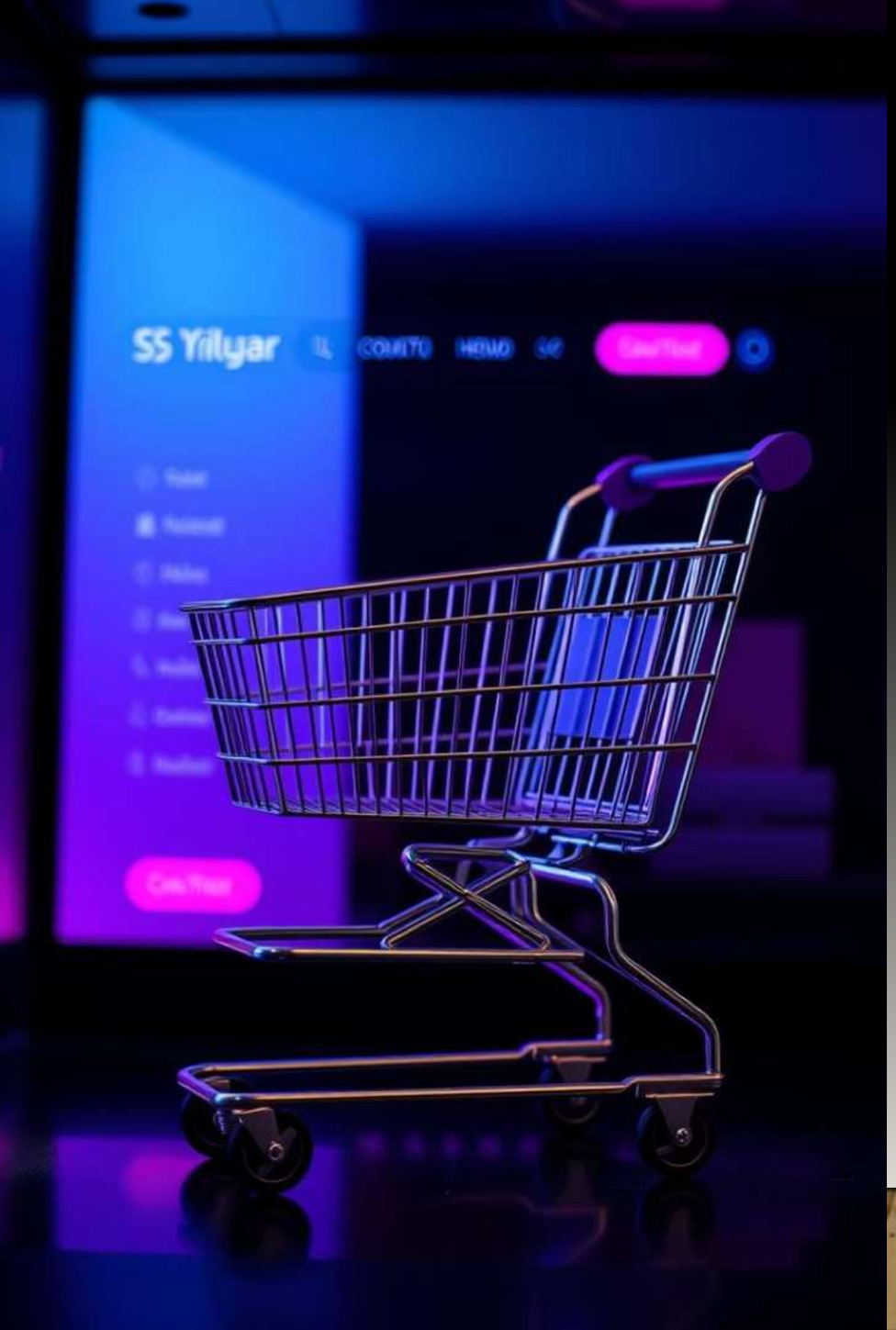


Shopping Cart Project: Design & Implementation

This presentation covers the project structure, database design, and user interface details.

Project Structure: Modular Design

Model

Represents data objects like Product and CartItem classes.

Controller

Manages user input and updates both Model and View.

View

User interface, can be GUI or web-based for interaction.

Database Design: Simulating Data Storage

Product ArrayList

- Stores productID, name, description
- Includes price and image URL for each product

CartItem ArrayList

- Tracks productID and quantity selected
- Enables dynamic cart updates

Database Connectivity: Mock Implementation

ArrayList Based Storage

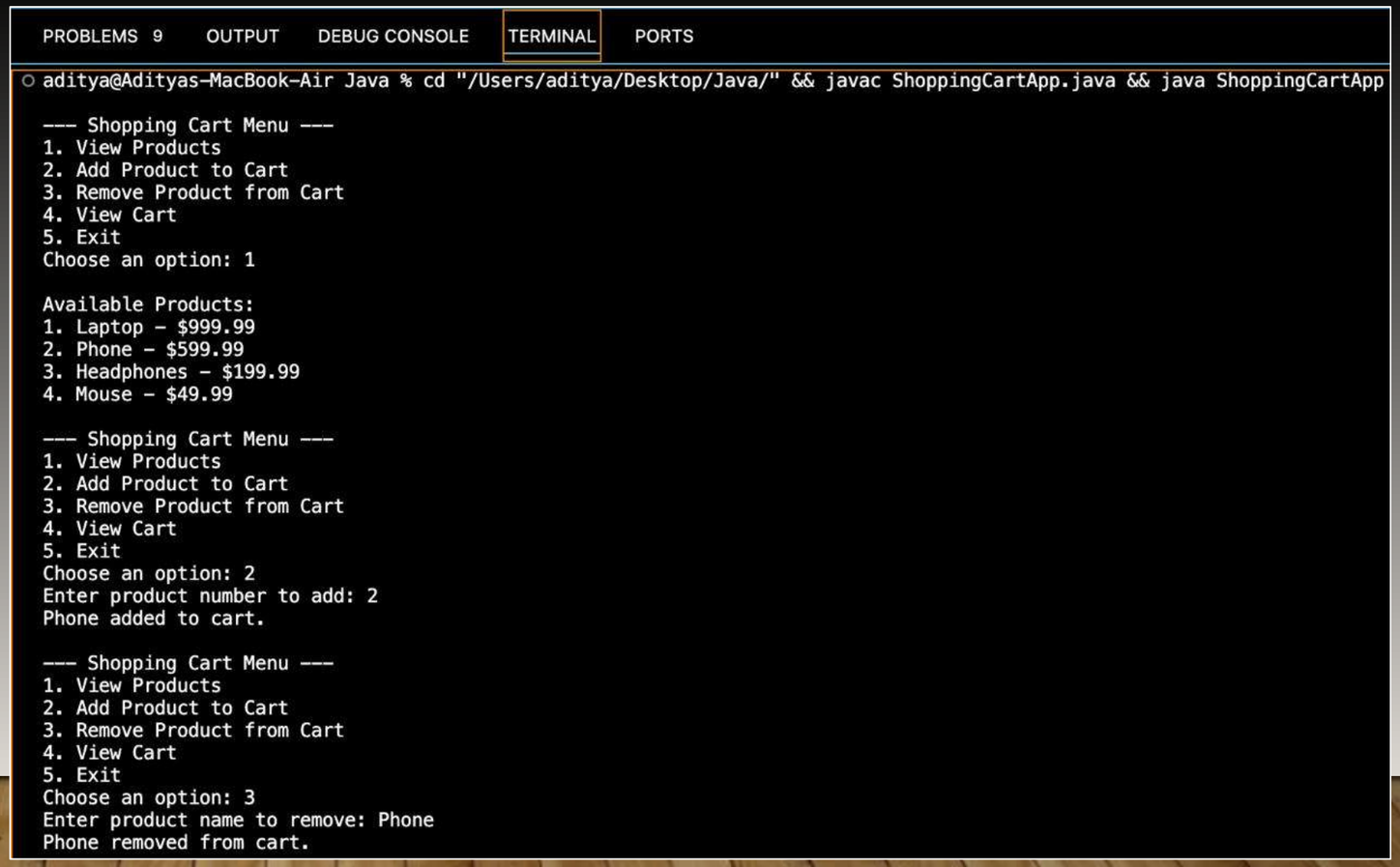
No actual database, uses in-memory lists to simulate data.

Persistence Simulation

Data saved to and loaded from files like CSV or JSON.

Key Methods

Supports add, remove, and update products dynamically.



User Interface: GUI or Web-Based

Desktop UI

Built with Swing or JavaFX for interactive desktop use.

Web UI

Uses HTML, CSS, JavaScript and modern frameworks for the web.

Aesthetics: Visual Appeal & Branding

Consistent Design

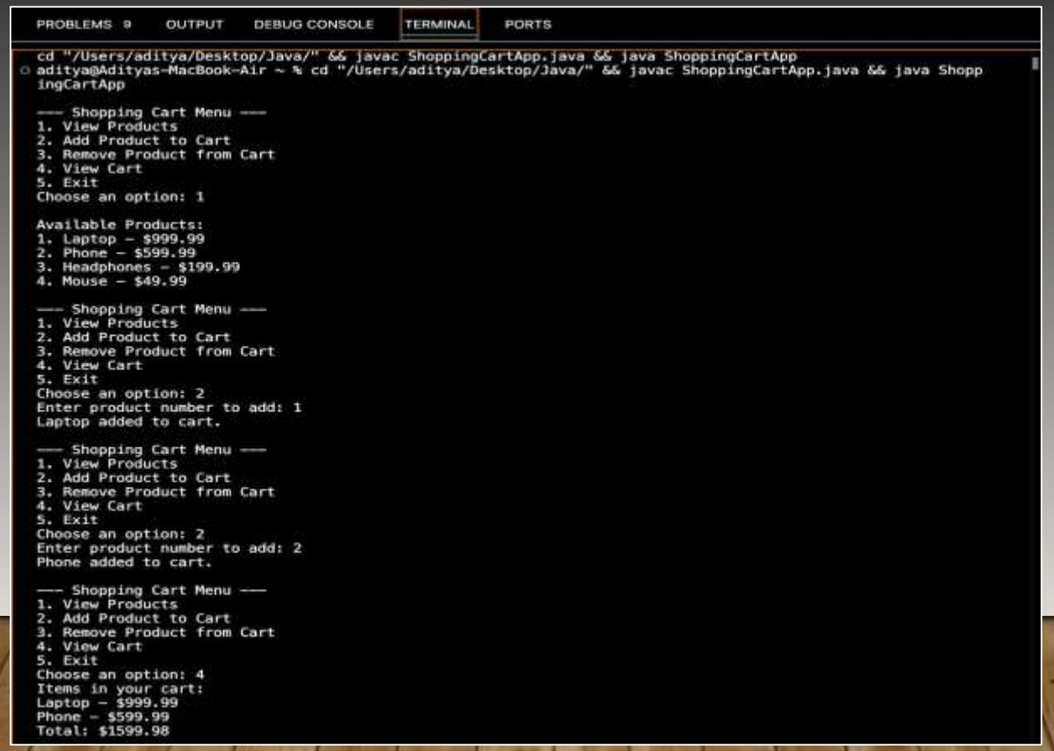
Uniform colors, fonts, and images create a strong brand identity.

Ease of Use

Simple navigation ensures user comfort and task efficiency.

Professional Feel

Clean layouts and polished visuals enhance credibility.



Responsiveness: Adaptable Design

Responsive Layout

Design adjusts to desktops, tablets, and mobile devices.

CSS Media Queries

Used for adapting styles based on screen size.

User Testing

Multiple devices tested to ensure smooth usability.

Conclusion: Project Summary & Next Steps

1

Design Recap

Emphasized modularity, in-memory database, and clean UI.

2

Scalability

System built for easy expansion and maintenance.

3

Future Plans

Add real database and integrate payment processing.

4

Feedback

Open for questions and client input.