

# Exercise 1

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**Course Number:** CS5450

**Course Name:** Mobile Programming

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# Flutter Mobile Shop

## Overview:

This project is developed as part of the Mobile Programming course. The objective was to design and implement a fully functional cross-platform mobile shop application using Flutter and Dart. The app is structured to follow proper UI/UX principles while showcasing key functionalities such as multi-category browsing, cart operations, and checkout workflow. All tasks were completed individually while ensuring responsiveness across both web and Android platforms.

## What the App Does:

- Displays a list of product categories (Shoes, Clothes, Accessories)
- Allows users to browse products inside each category
- Shows products with real images, price, and an Add to Cart button
- Let's users view their cart, remove products, and see the total price
- Includes a "Proceed to Checkout" button to simulate an order confirmation
- Responsive layout: adjusts automatically for Android and Web view

## How to Run the Project in IntelliJ IDEA:

Follow these steps to run the app in both Android and Web mode:

- **Set Up Environment:**

- Install Flutter SDK and set environment path (flutter doctor should be clean)
- Install IntelliJ IDEA (Community Edition is fine)
- Add Flutter and Dart plugins via Settings > Plugins

- **Create or Open the Project:**

- Open IntelliJ → Click on “Open” → Select the project folder
- Make sure your structure includes:
  - lib/ folder with all Dart files
  - assets/images/ folder with images
  - pubspec.yaml configured properly

- **Run Dependencies:** Open Terminal at bottom of IntelliJ

- Type: flutter pub get

- **To Run on Web:**

- Click the Chrome device in the top bar dropdown and Run

- **To Run on Android Emulator:**

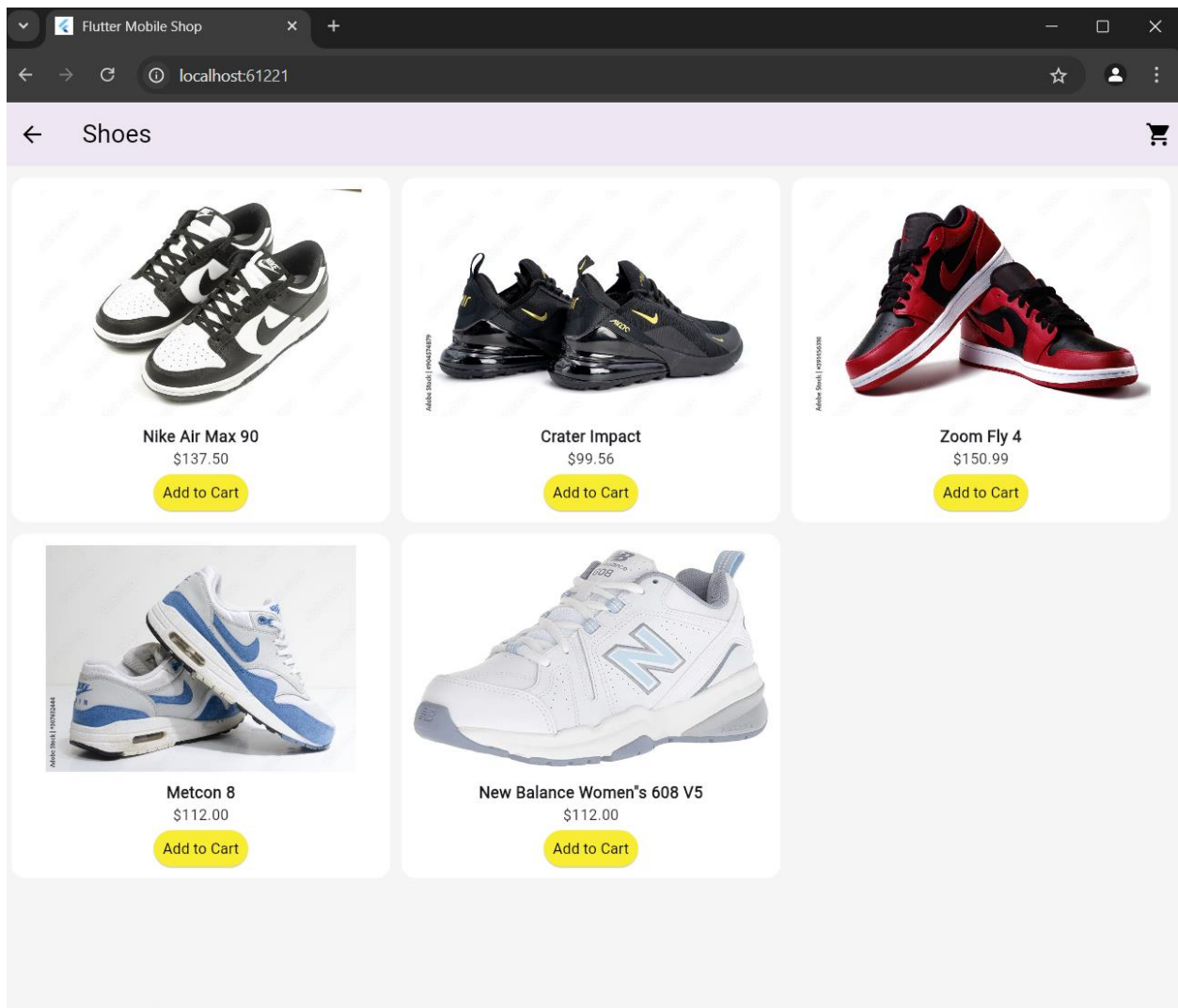
- Set up a virtual device in AVD Manager
- Choose the emulator from the device dropdown and run

## Screenshots:

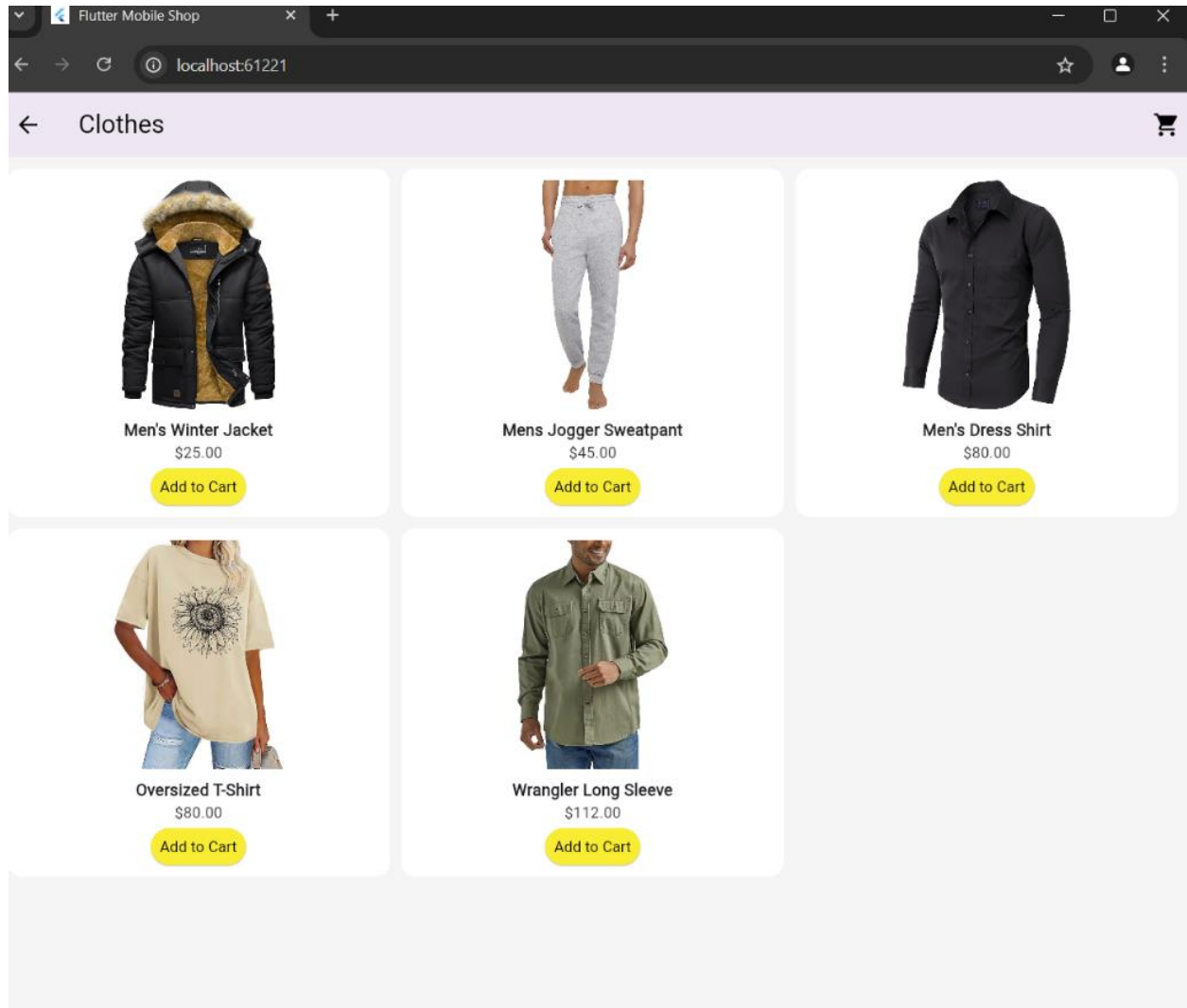
**Home Screen [Displays categories (Shoes, Clothes, Accessories)]**



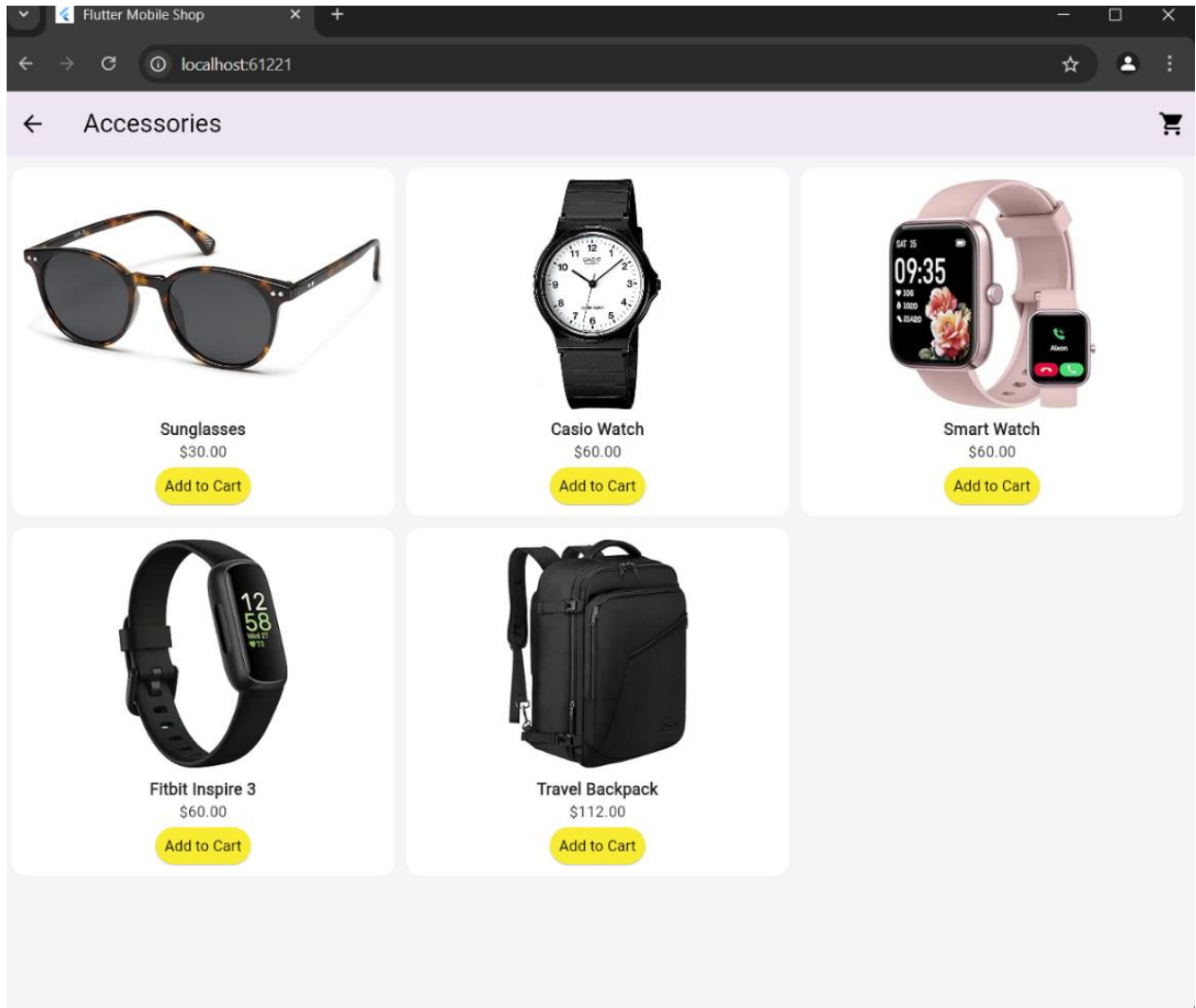
## Shoes Product Listing (Grid layout with image, name, price, add-to-cart):



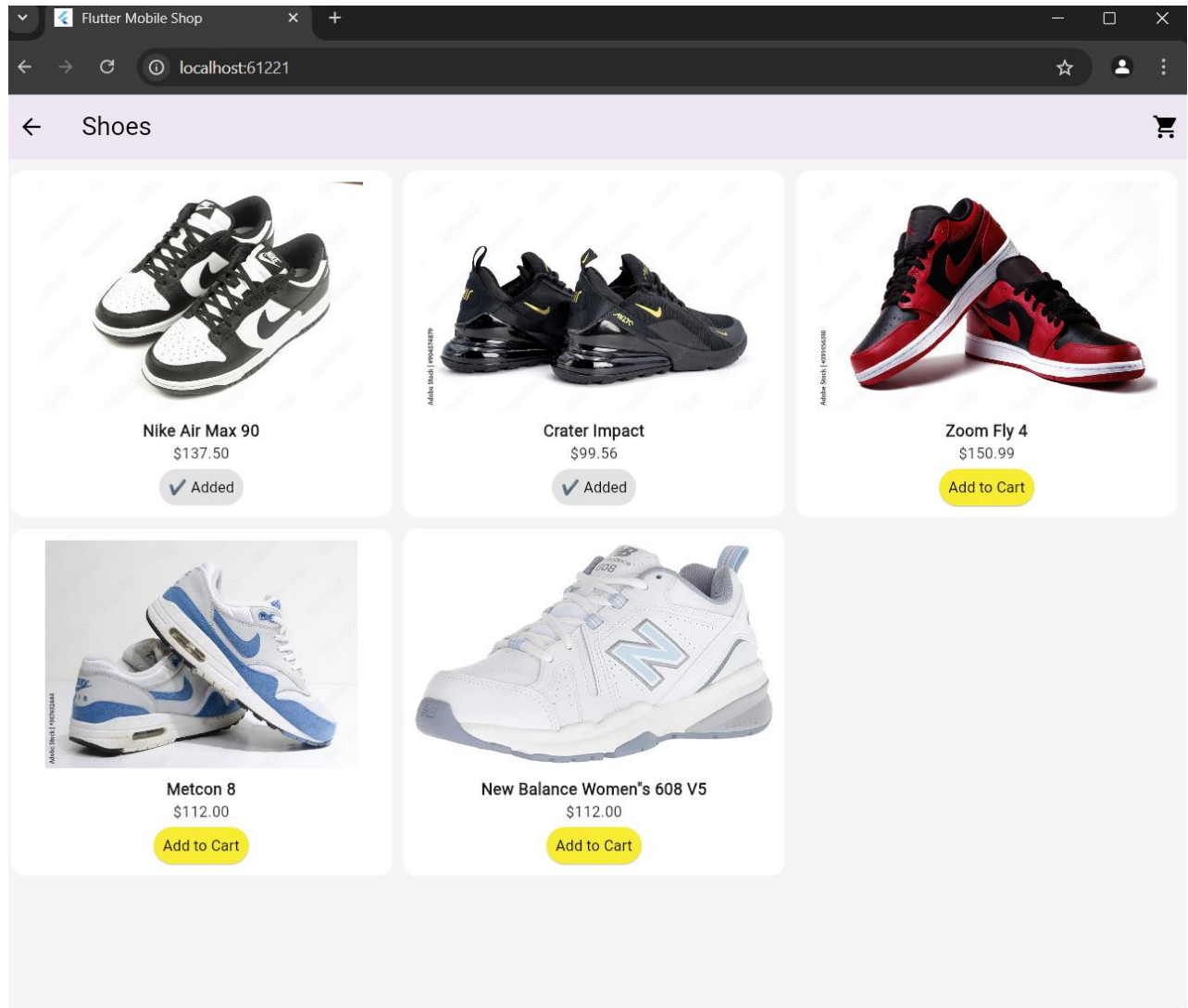
## Product Listing (Clothes):



## Product Listing (Accessories):

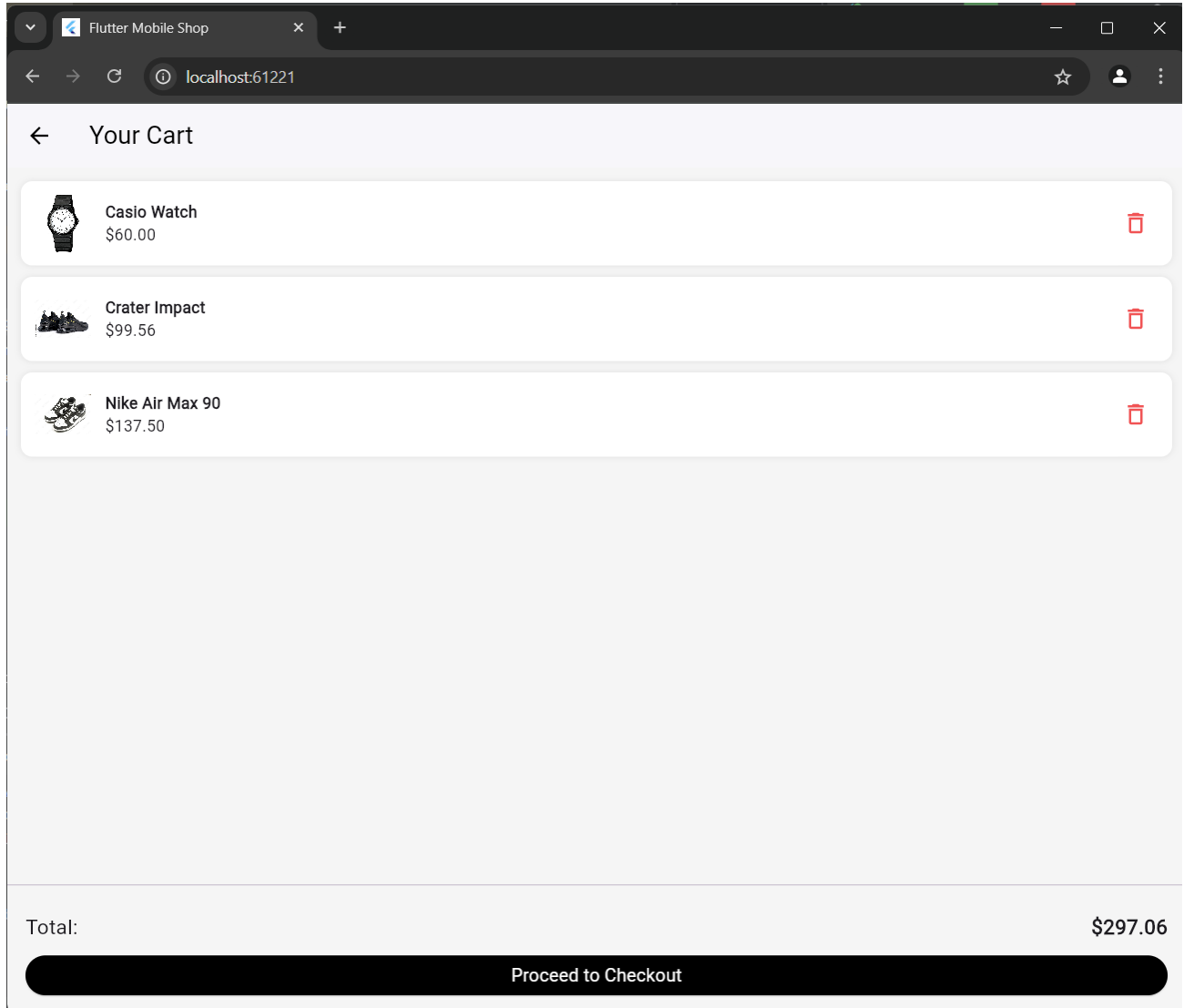


## Add to Cart:

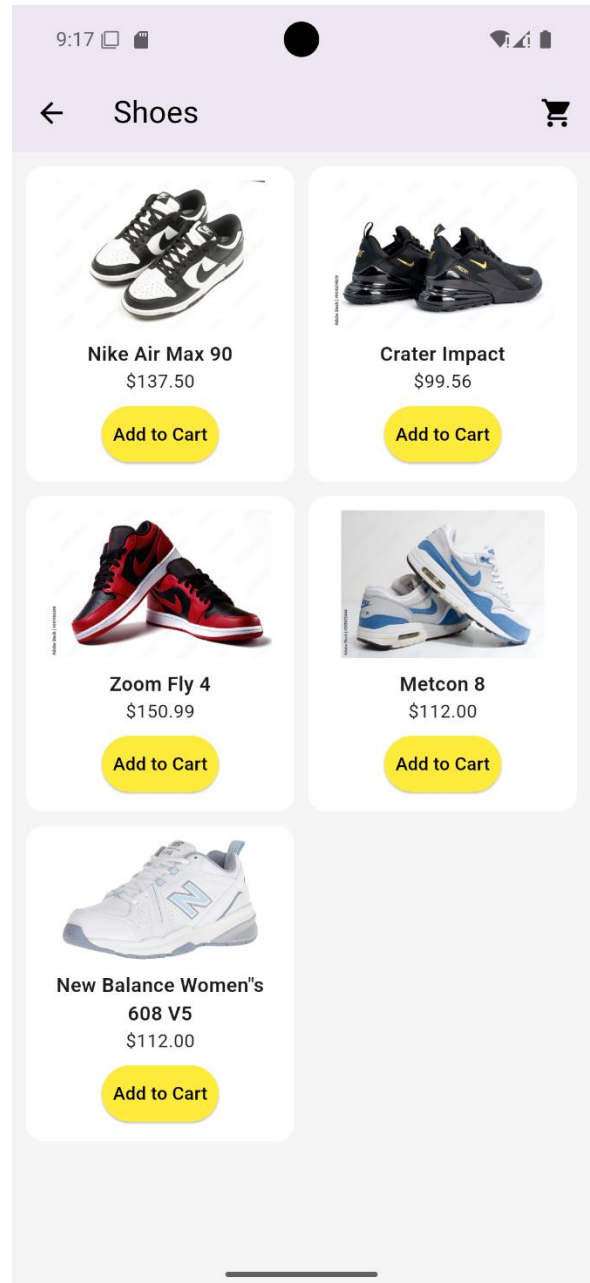
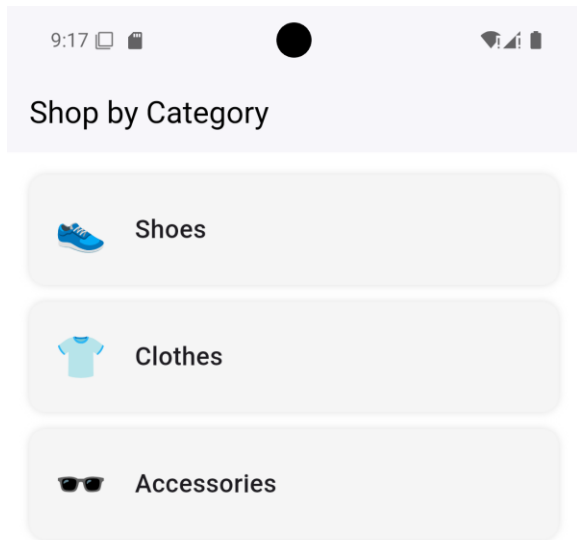


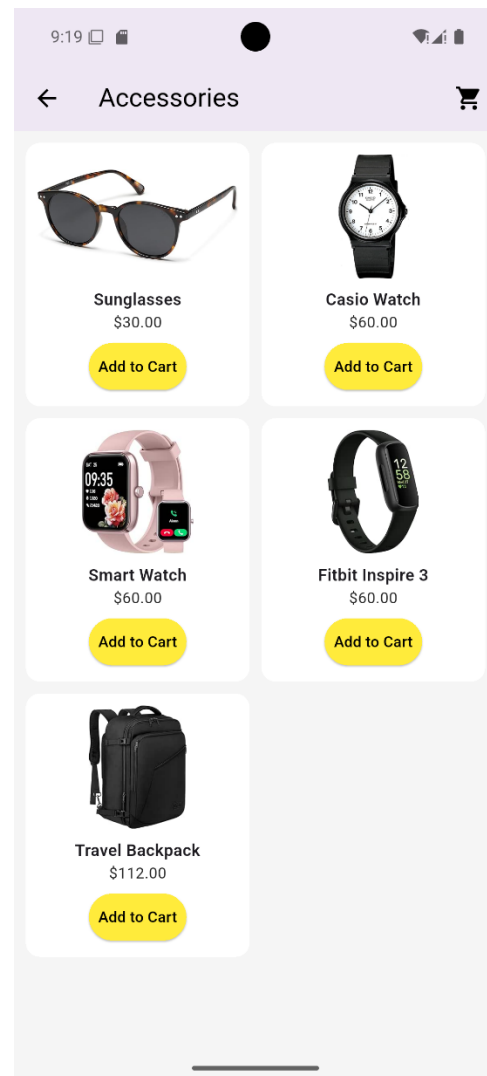
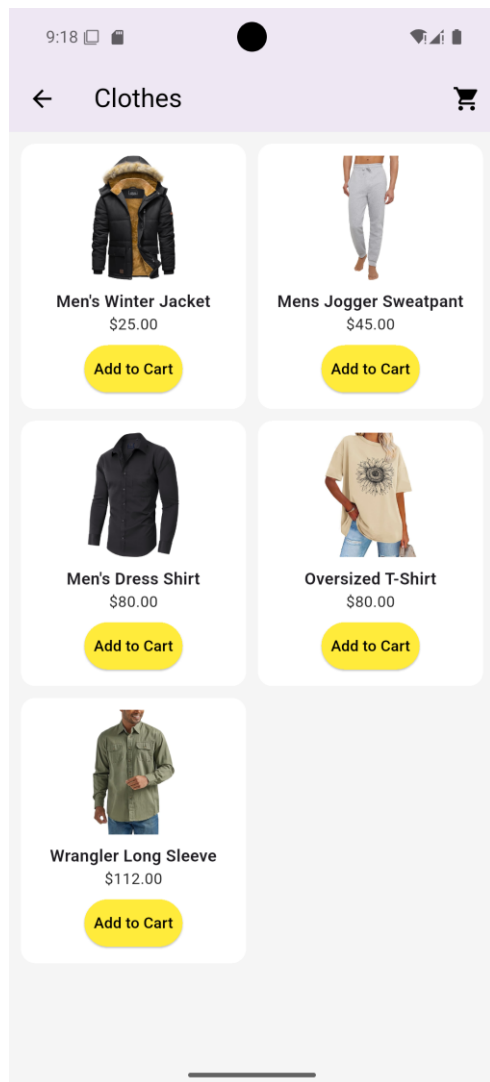


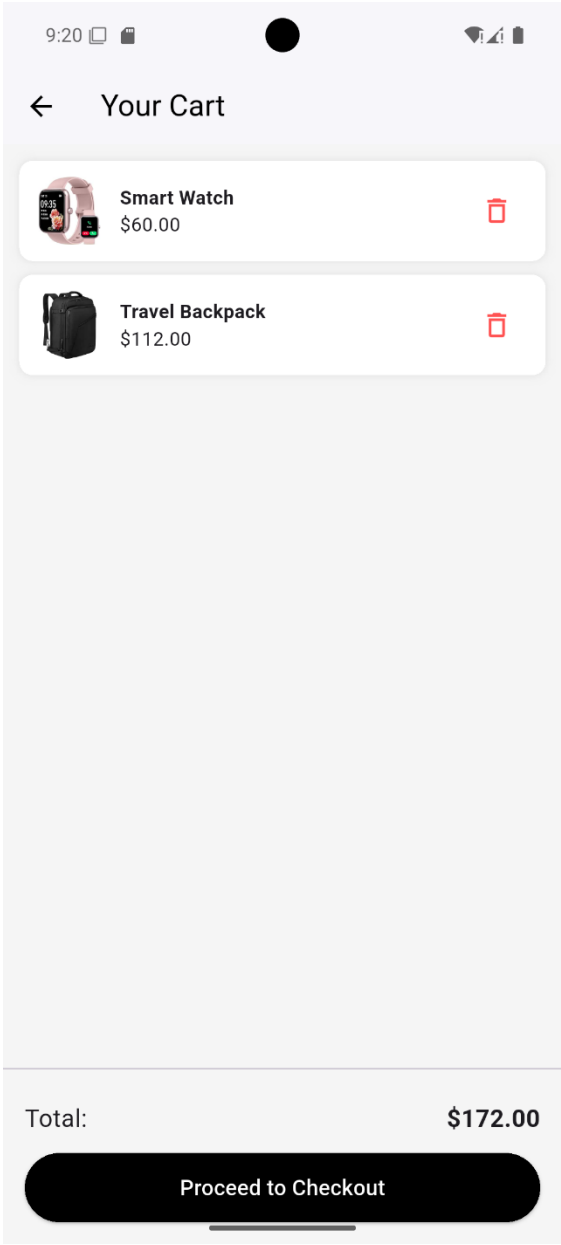
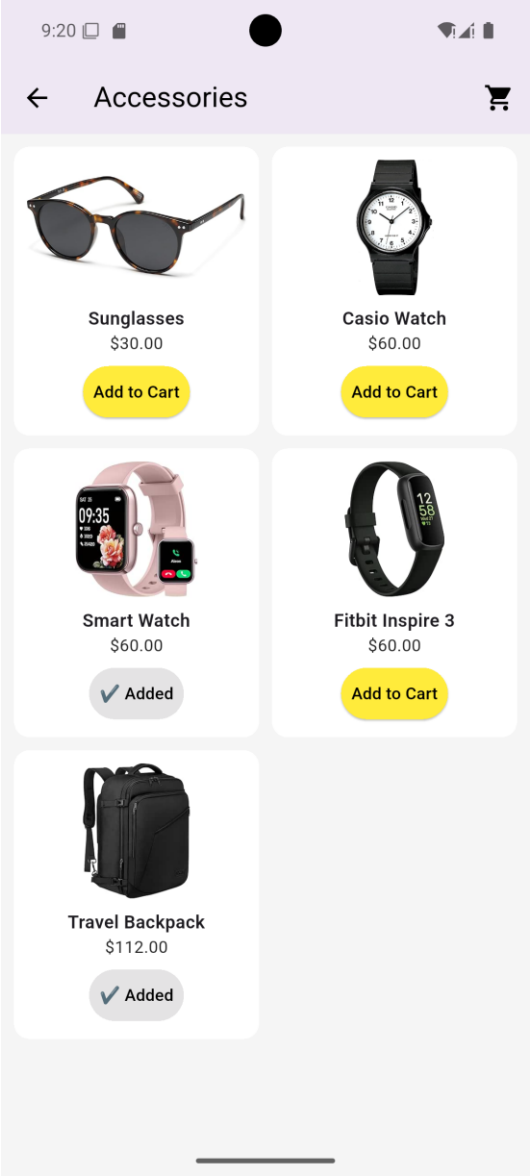
## Cart Page (Displays selected items, total, and delete icons):



## Android:







## **Conclusion**

In this exercise, I designed and developed a basic mobile shopping application using Flutter and Dart. The app allows users to browse products by category, view product details with images and pricing, and manage a shopping cart with real-time updates. I implemented core features like category filtering, add-to-cart, cart total calculation, and a checkout simulation. The app runs smoothly on both Android and web, with a responsive design that adjusts to different screen sizes. This project helped me apply the concepts of cross-platform development and user interface design in a practical way.

## **GitHub Repository:**

You can view the full source code and project files on GitHub:

[https://github.com/PritPatel450/flutter\\_mobile\\_shop](https://github.com/PritPatel450/flutter_mobile_shop)