Flutter Mobile Shop App

CS5450 Mobile Programming
Lakehead University

Overview

This project is a mobile shop application developed for the CS5450 Mobile Programming course at Lakehead University. The application allows users to browse shoe products, add them to a cart, and view their cart with the total purchase amount.

Features

- Browse products from a pre-defined list

- Add products to a shopping cart

- View products in the shopping cart

- Remove products from the shopping cart

- Display the total purchase amount

Project Structure

```
flutter_shoe_shop/
        lib/
                models/
                        product.dart
                screens/
                        home_screen.dart
                        cart_screen.dart
                widgets/
                        product_card.dart
                        cart_item.dart
                        welcome_banner.dart
                main.dart
        assets/
                images/
                fonts/
        pubspec.yaml
```

Setup and Configuration

Prerequisites

- Flutter SDK (version 2.17.0 or later)

- Dart SDK (version 2.17.0 or later)

- Android Studio / VS Code with Flutter plugins

Installation

1. Clone the repository:

   git clone https://github.com/your-username/flutter_shoe_shop.git

2. Navigate to the project directory:

   cd flutter_shoe_shop

3. Install dependencies:

   flutter pub get

4. Run the application:

   flutter run

App Screenshots

Implementation Details

Data Management

Products are stored in a list defined in the `product.dart` model file.

UI Components

- **Home Screen**: Displays a welcome banner and a grid of product cards

- **Cart Screen**: Shows a list of items in the cart with the total price

- **Product Card**: Reusable widget for displaying product info

- **Cart Item**: Dismissible card for cart items with remove option

- **Welcome Banner**: Attractive banner with CTA button

Navigation

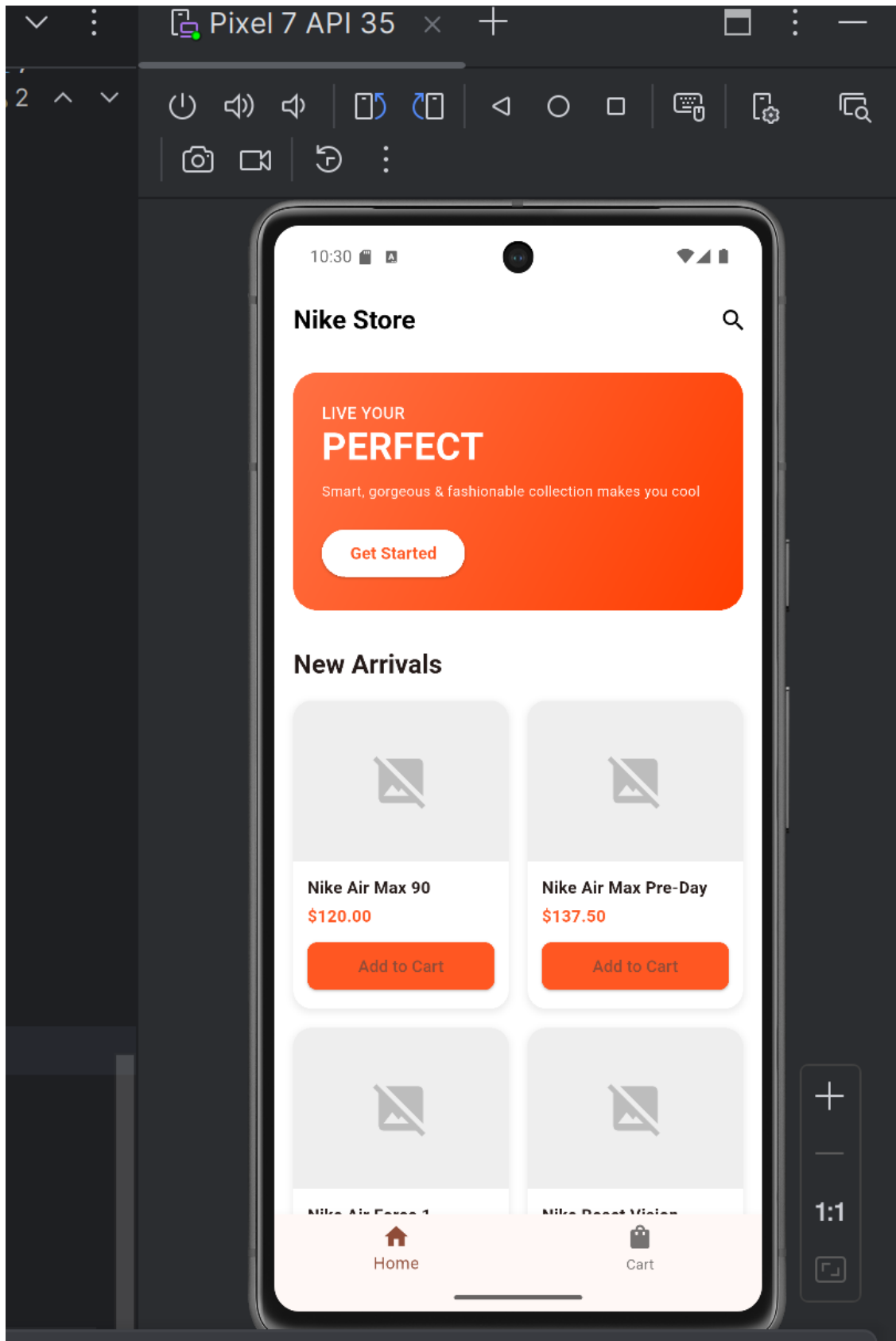The app uses a bottom navigation bar to switch between the Home and Cart screens.
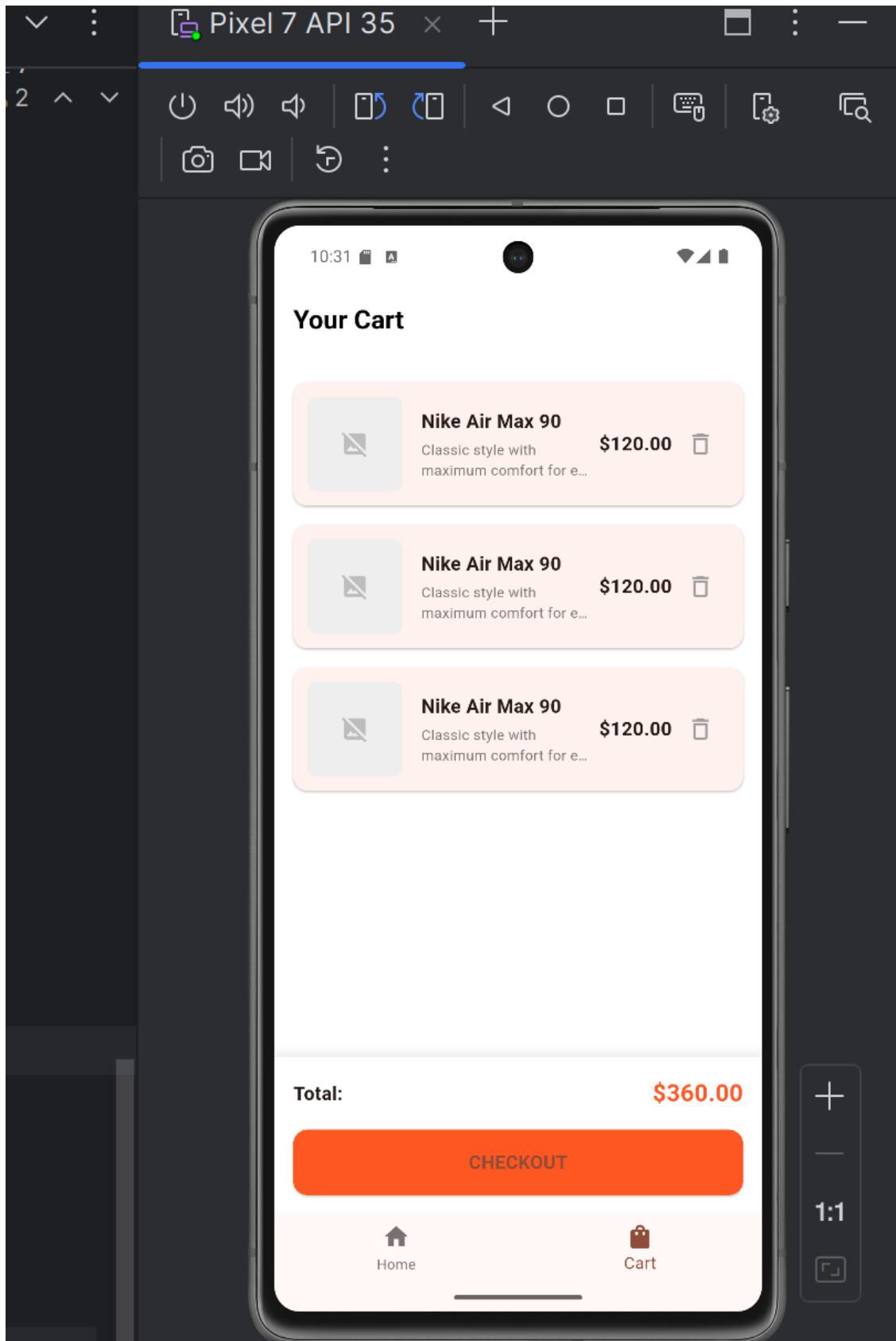
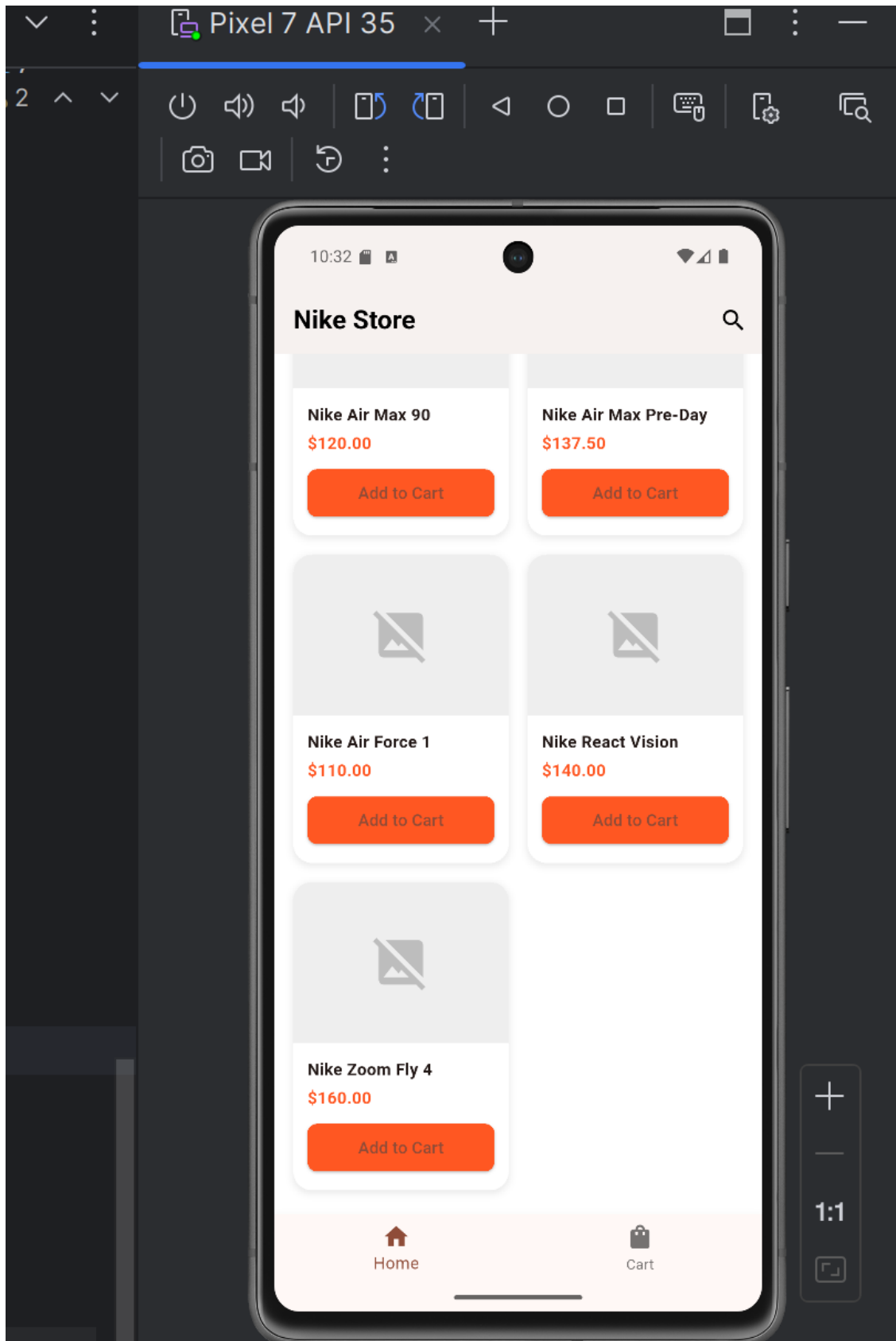Figure 1: Home Screen

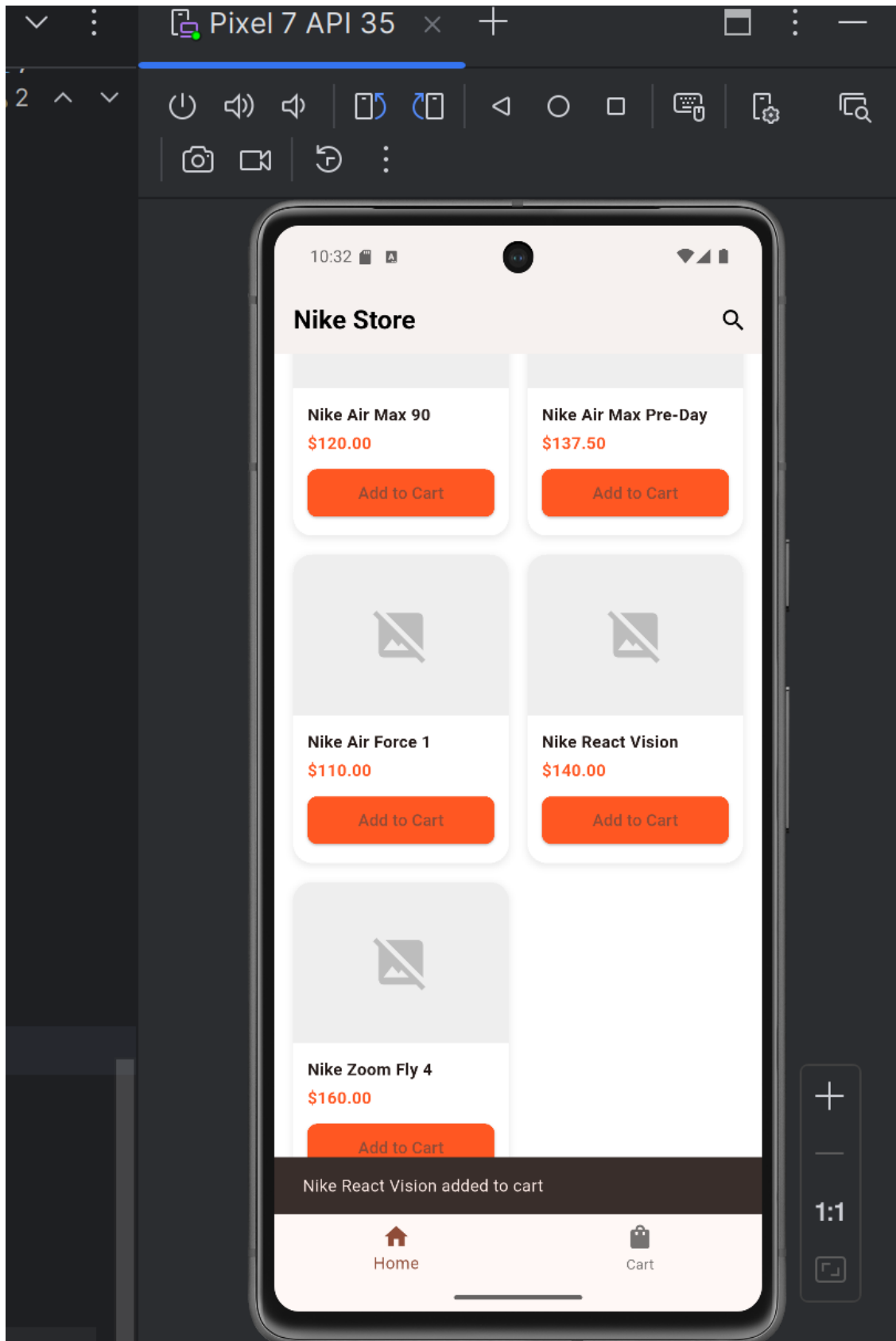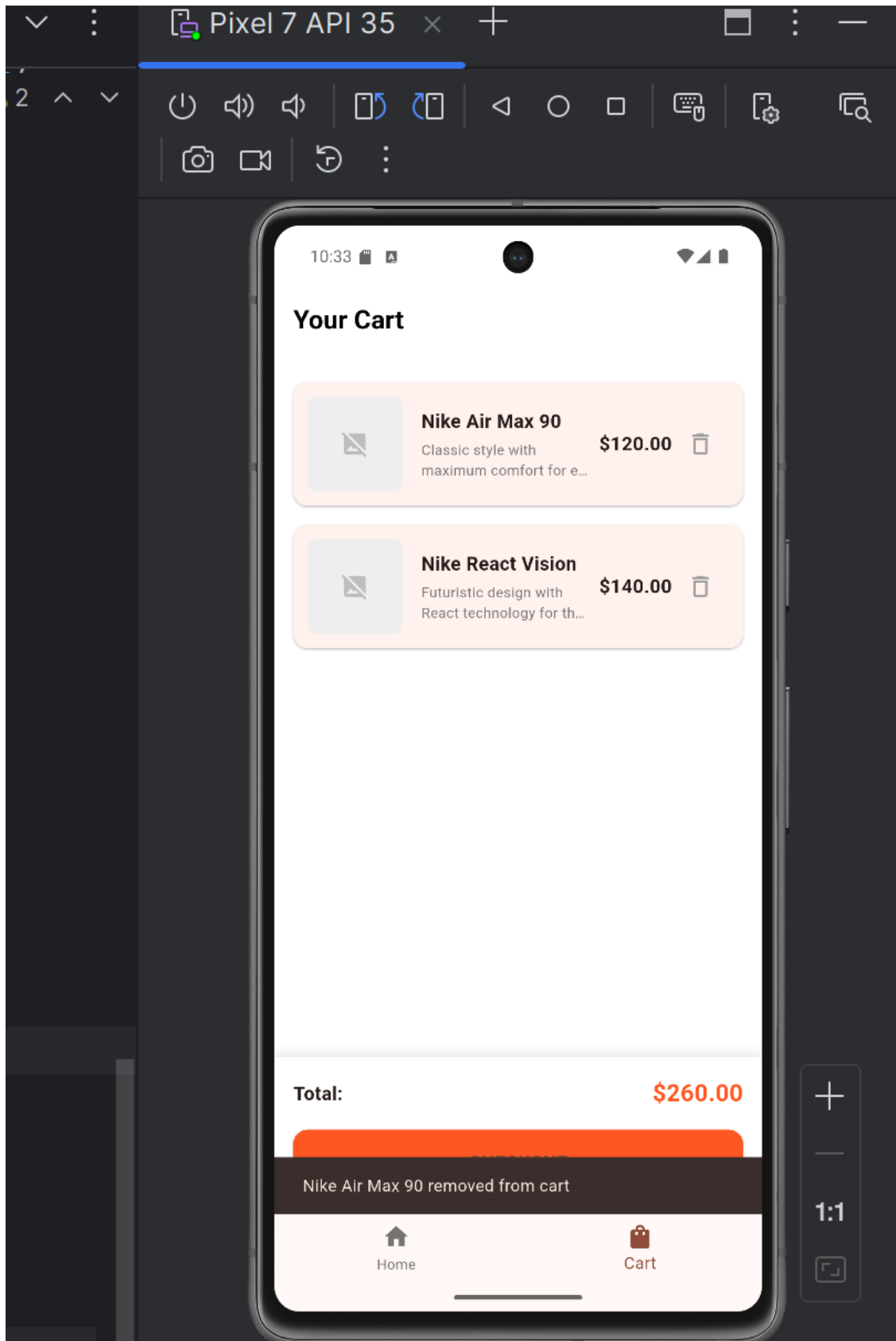Figure 2: Product Details

Figure 3: Shopping Cart
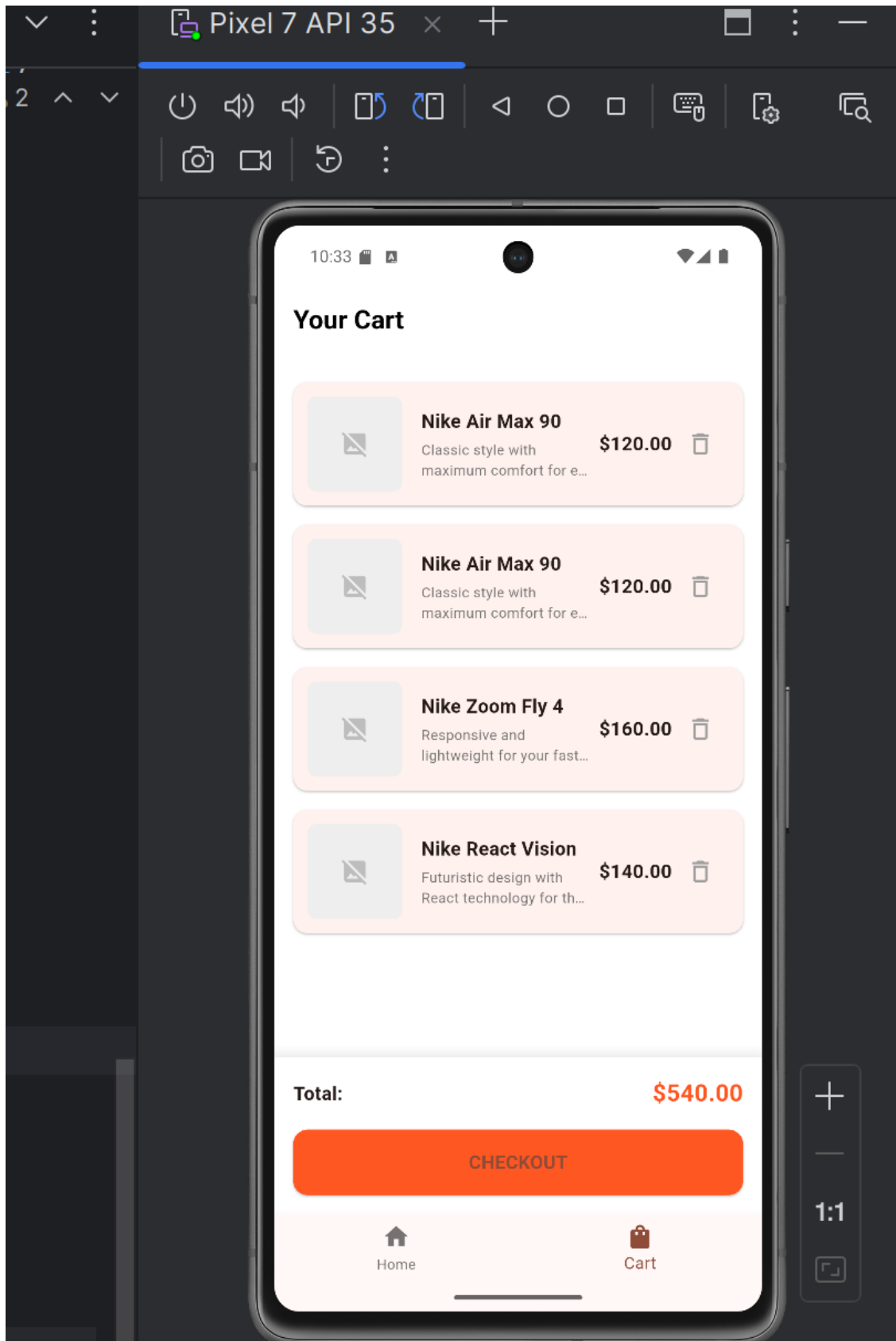
Figure 4: Shopping Cart

Figure 5: Shopping Cart

Figure 6: Shopping Cart