

CMPS 312 Mobile App Development

QuickMart App - MVVM

Assignment 3

Deadline - Wednesday October 15, 2023

Objective

The objective of this assignment is to gain hands-on experience in developing MVVM Android apps, focusing on utilizing key components such as the Navigation, View Models, and State variables. In the assignment, you will build upon the design and implementation created in Assignment 2 QuickMart App.

Overview

You are given a base solution from Assignment 2, including an already implemented favorites screen as shown in figure 1.

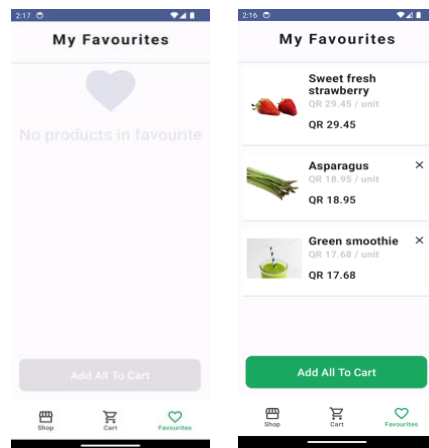


Figure 1 : Favorites Screen

Your task is to

- Add product details screen shown in figure 2.
- Implement navigation components to replace the current toggling mechanism.
- Replace the Composable states variables with ViewModel States

Important : The current base code provided is merely a starting point for this assignment, and it is your responsibility to add any missing code to ensure the application functions as intended.

Implementation Instructions

1. Move all the state variables from the composable to their respective ViewModel class then add the necessary ViewModel methods such as addCartItem, updateCartItem etc...

2. Design and implement the **ProductDetails Screen** as illustrated in Figure 2. This screen should be displayed when clicking a specific product from the product list.

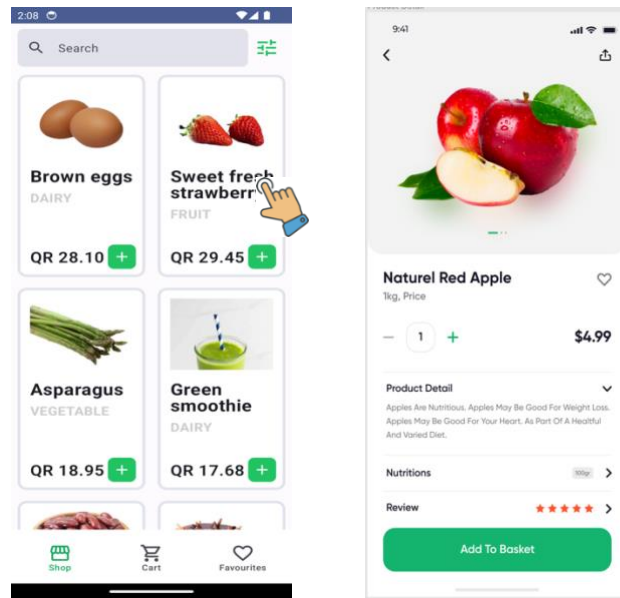


Figure 2 Details Screen

3. When a user clicks the favorite heart icon shown in figure 3, the selected product should be added to the favorites list in the repository via the VieModel.

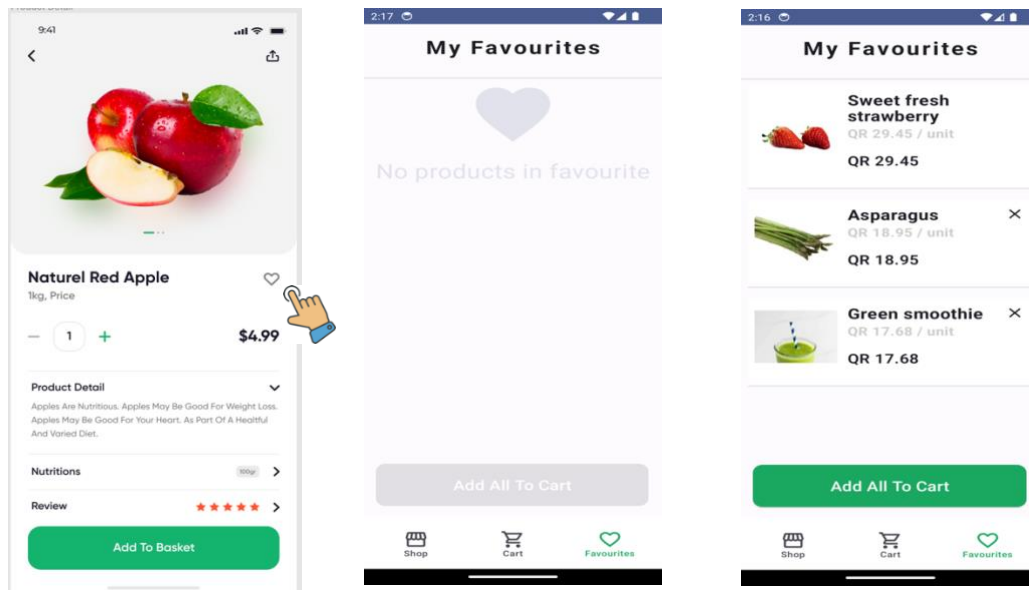


Figure 3 : Favoriting a product

4. Implement navigation between the app screens using Android Navigation component.