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.
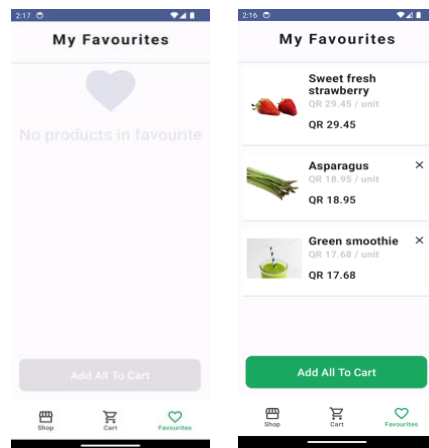

Figure 1 : Favorites Screen

Your task is to
    a. Introduce an additional product details screen shown in figure 2
    b. implement navigation components to replace the current toggling mechanism that lacks proper navigation.
    c. Replace the Composable states variables with ViewModel States

Important : Any missing code should be added by you. The current base code provided is merely a starting point for this assignment, and it is your responsibility to add any missing components, code, design and ensure the application functions as intended.

Implementation Instructions

1. Move all the states from the composable to their respective ViewModel class, and add any of the necessary methods required, such as addCartItem, updateCartItem etc…

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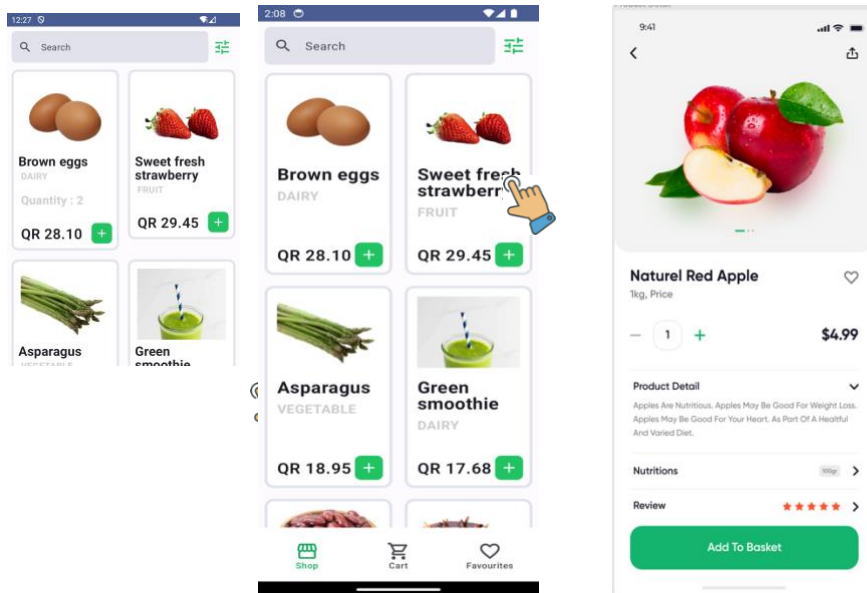

Figure 2 Details Screen

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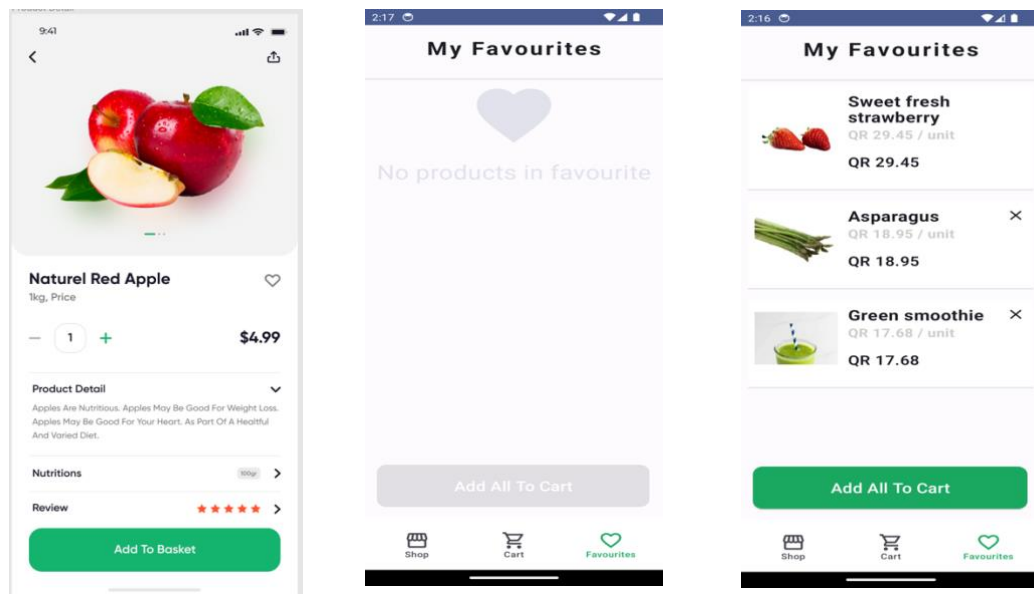

Figure 3 : Favoriting a product

4. Implement the Navigation Component between the different screens