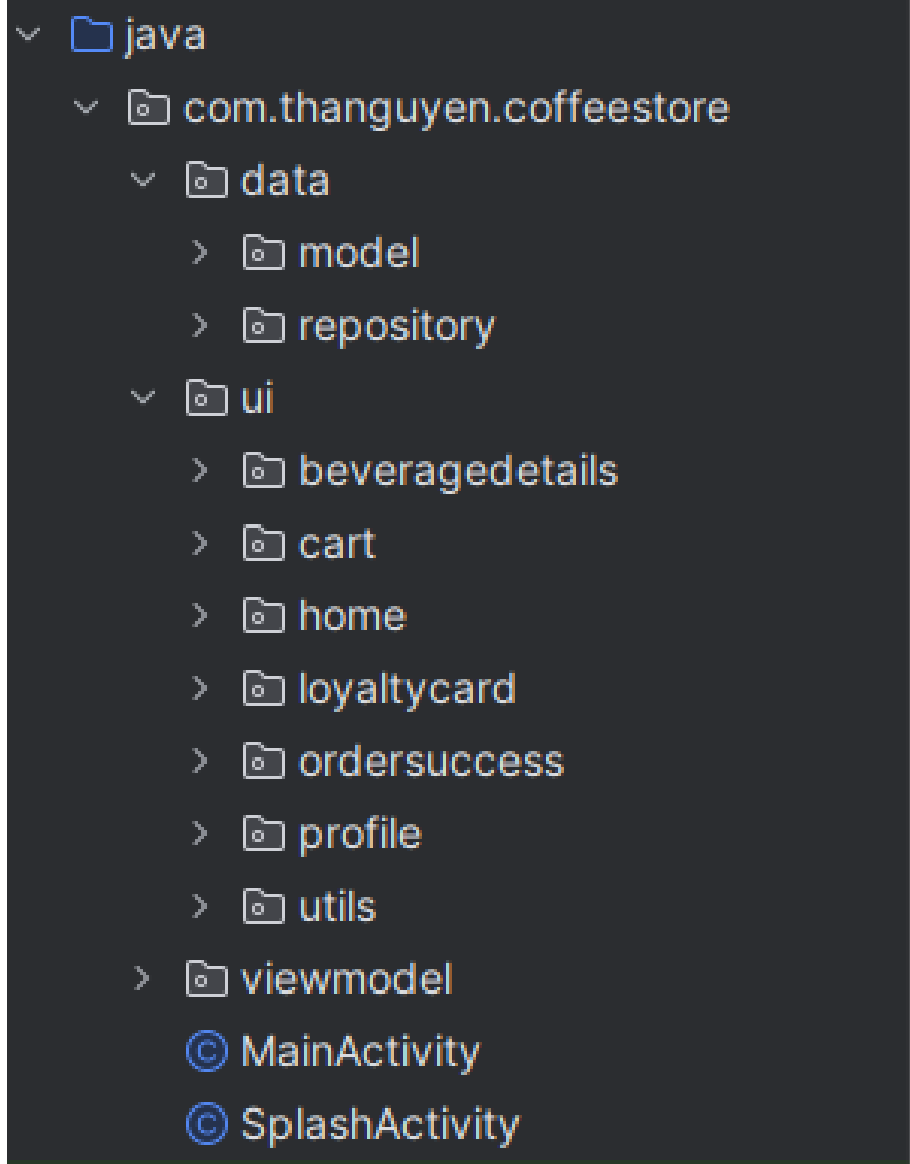


Source Code Organization and Project Structure

Coffee Store app

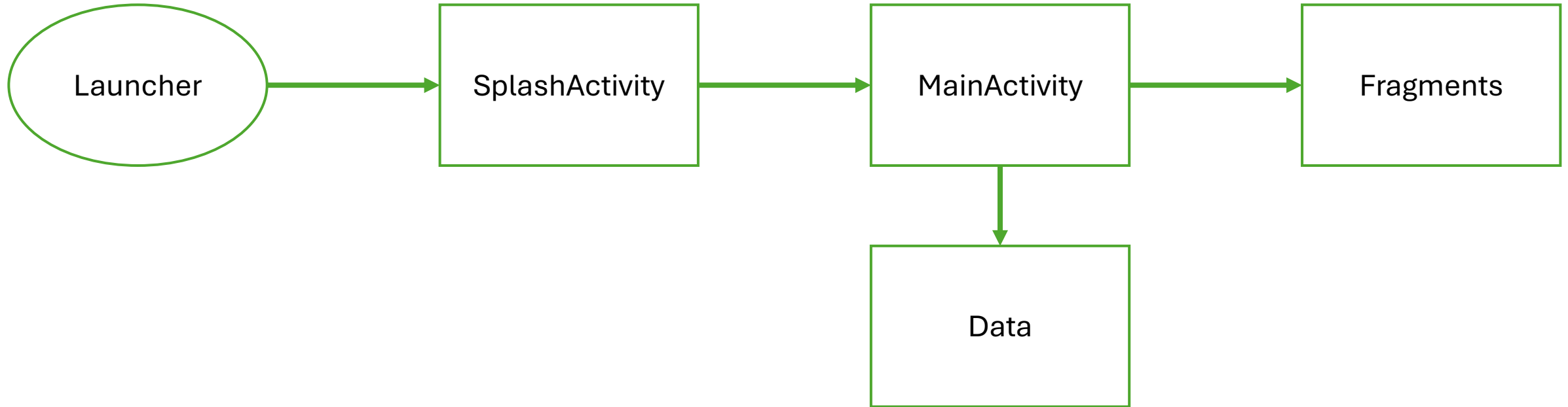
Source Code Organization



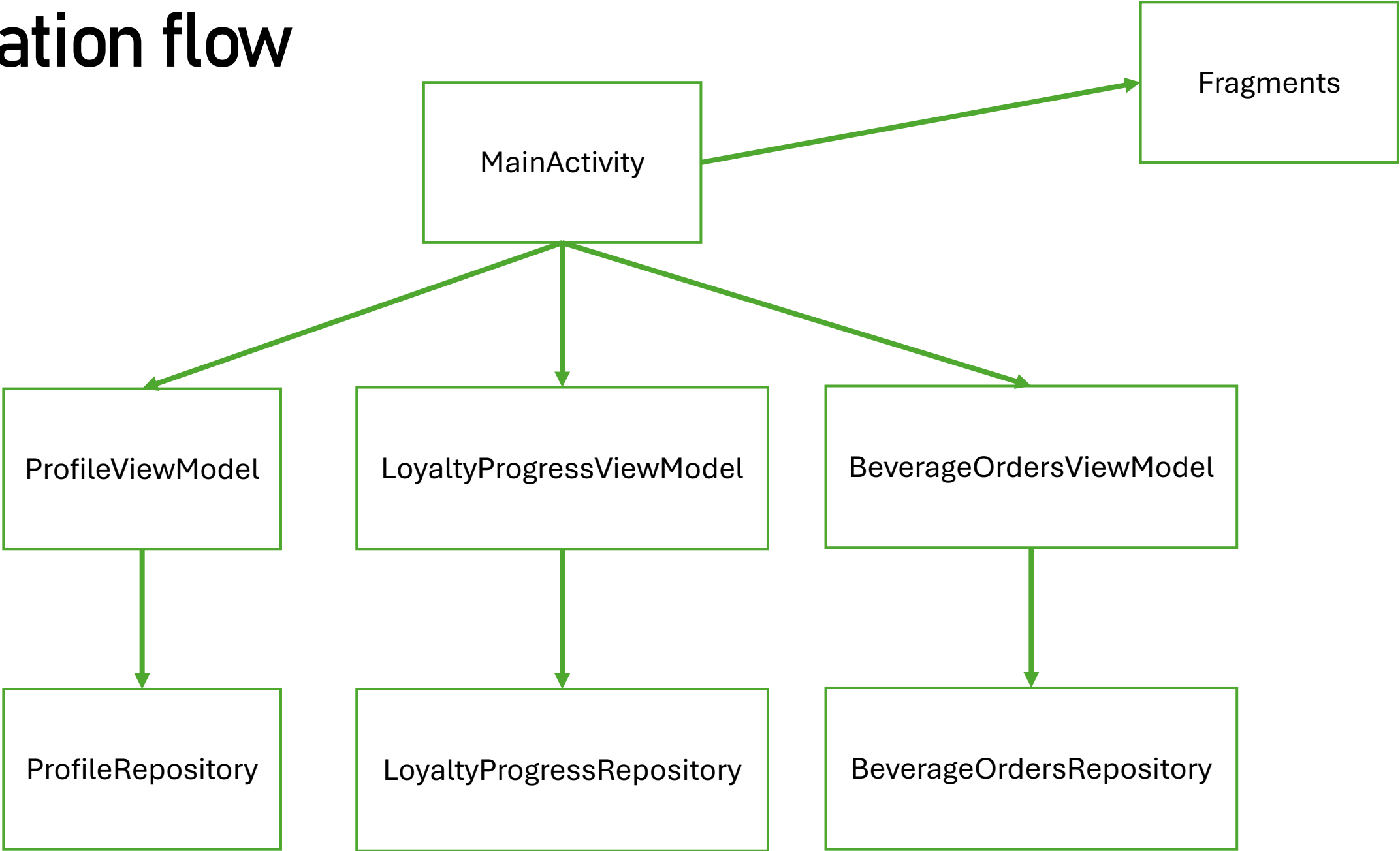
The application is structured into the following components:

- **SplashActivity:** Responsible for displaying the splash screen.
- **MainActivity:** The central activity where all app functionality takes place.
- **Data Package:** Handles data management and backend logic.
- **UI Package:** Contains the application's fragments, each of which is attached to MainActivity.

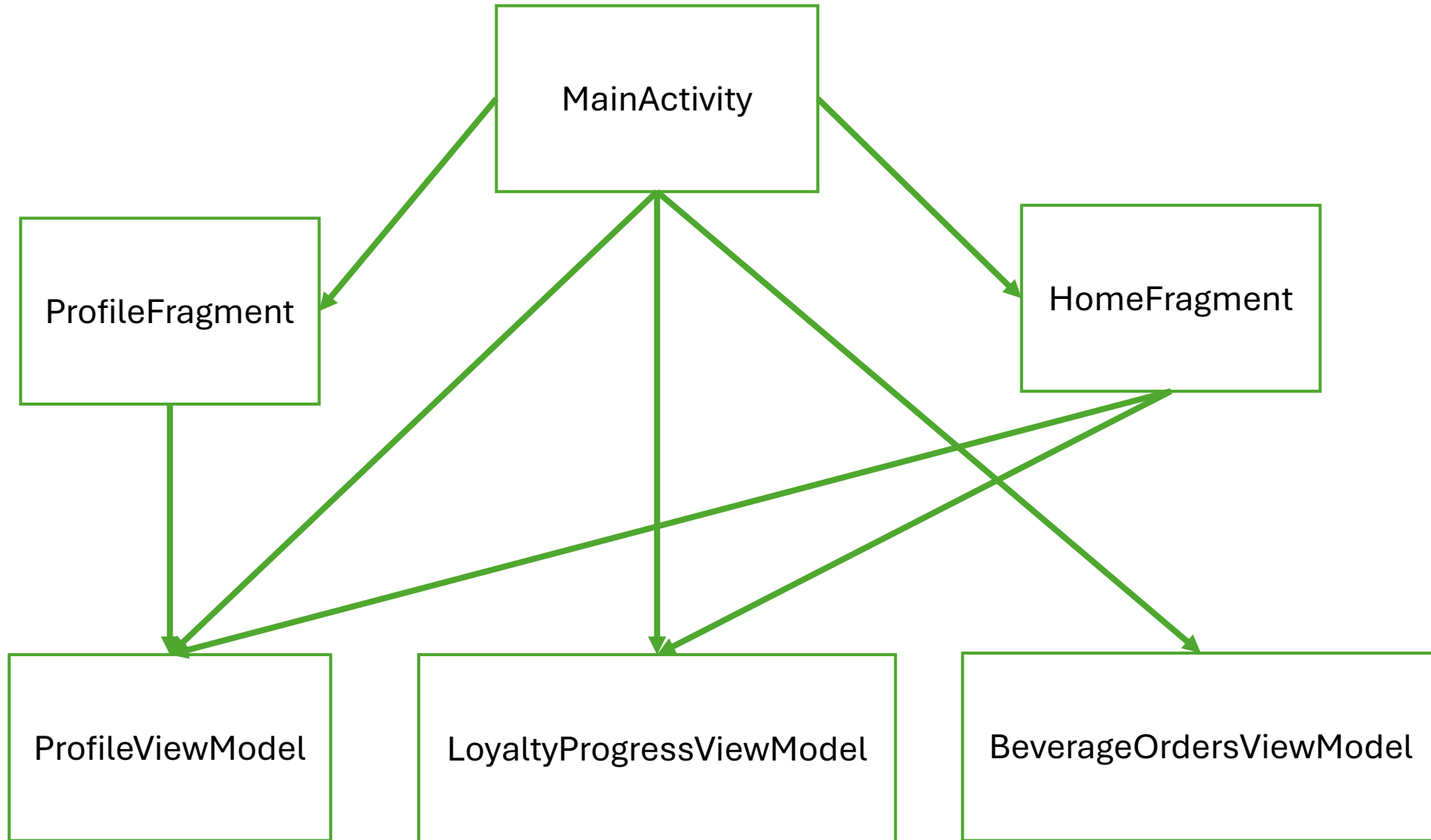
Application flow



Application flow



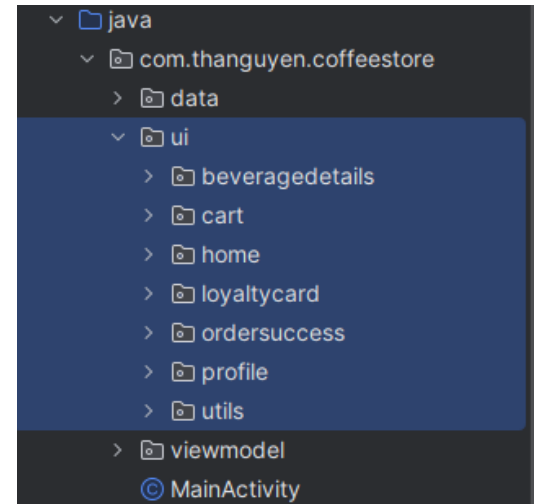
Application flow



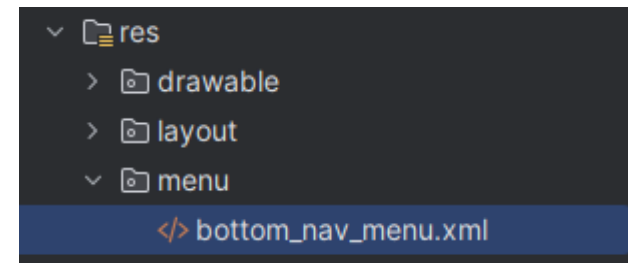
MainActivity

Each screen corresponds to a Fragment, which will be placed here.

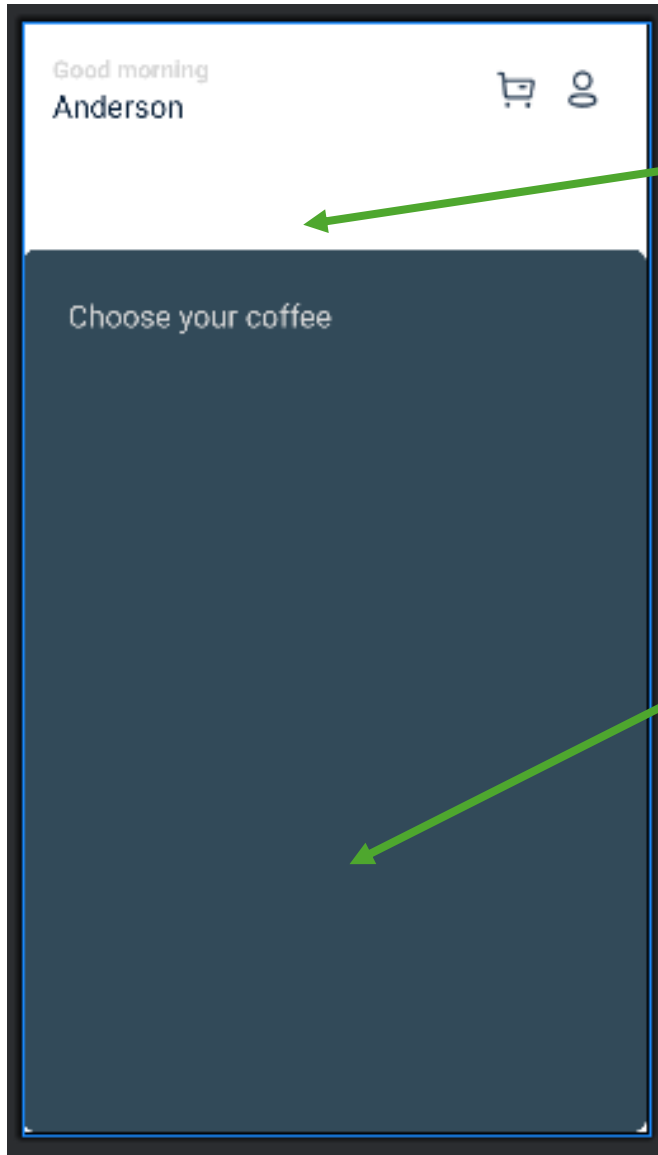
Use **NavController** to manage the navigation between Fragments. The navigation mapping is defined in the **mobile_navigation.xml** file.



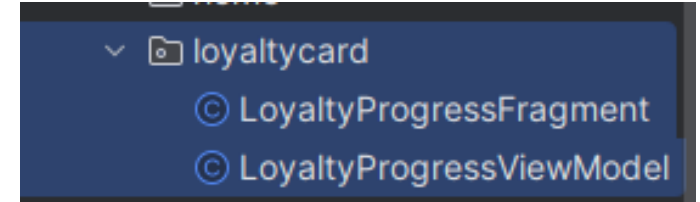
BottomNavigationView is managed by Activity.



HomeFragment



Loyalty card will be generated by **LoyaltyProgressFragment**.



Menu items will be added through the **setupBeverageMenu()** function.

Fetch data to ViewModel by **BeverageRepository**.

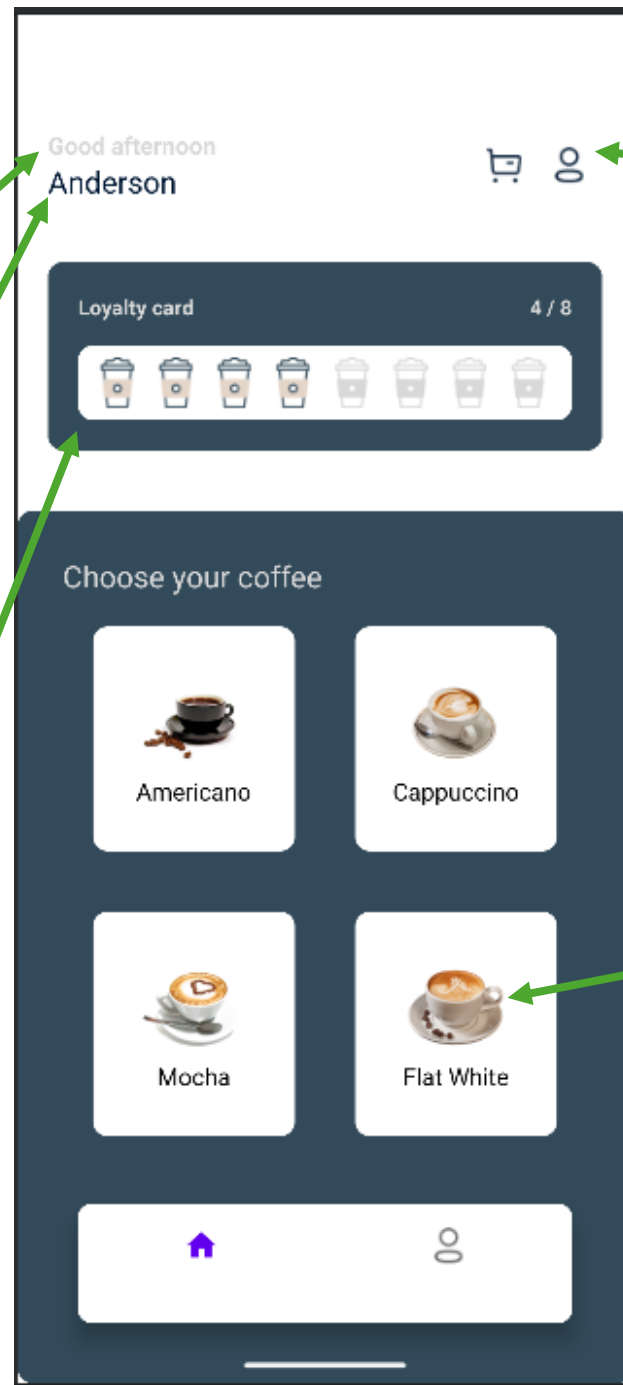
Each item layout is inflated using the **beverage_menu_item_fragment_home.xml** layout.

HomeFragment

The greeting message is dynamically updated by the **HomeViewModel**.

The username is dynamically updated by the **ProfileViewModel**.

Loyalty card generated by **LoyaltyProgressFragment**.



Clicking this button will navigate the user to the **ProfileFragment**, as defined by the **setupProfileButtonListener()** function.

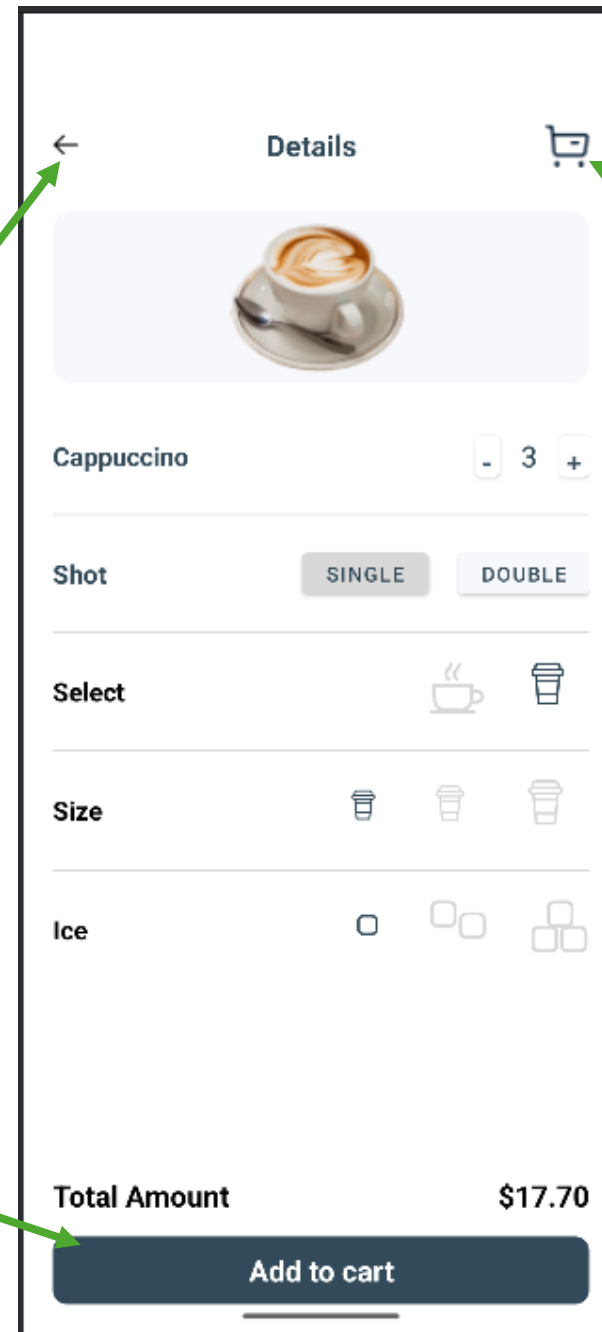
When the user clicks a menu item, a **Bundle** containing the corresponding information is created and passed to the new Fragment (**BeverageDetailsFragment**) during navigation via **NavController**.

BeverageDetailsFragment

Receive data from **Bundle** and shows to layout.

The back button will navigate to the previous Fragment by popping the current one using **NavController**.

When the user clicks **Add to cart**, a **Bundle** containing the corresponding information is created and passed to the new Fragment (**CartFragment**) during navigation via **NavController**.

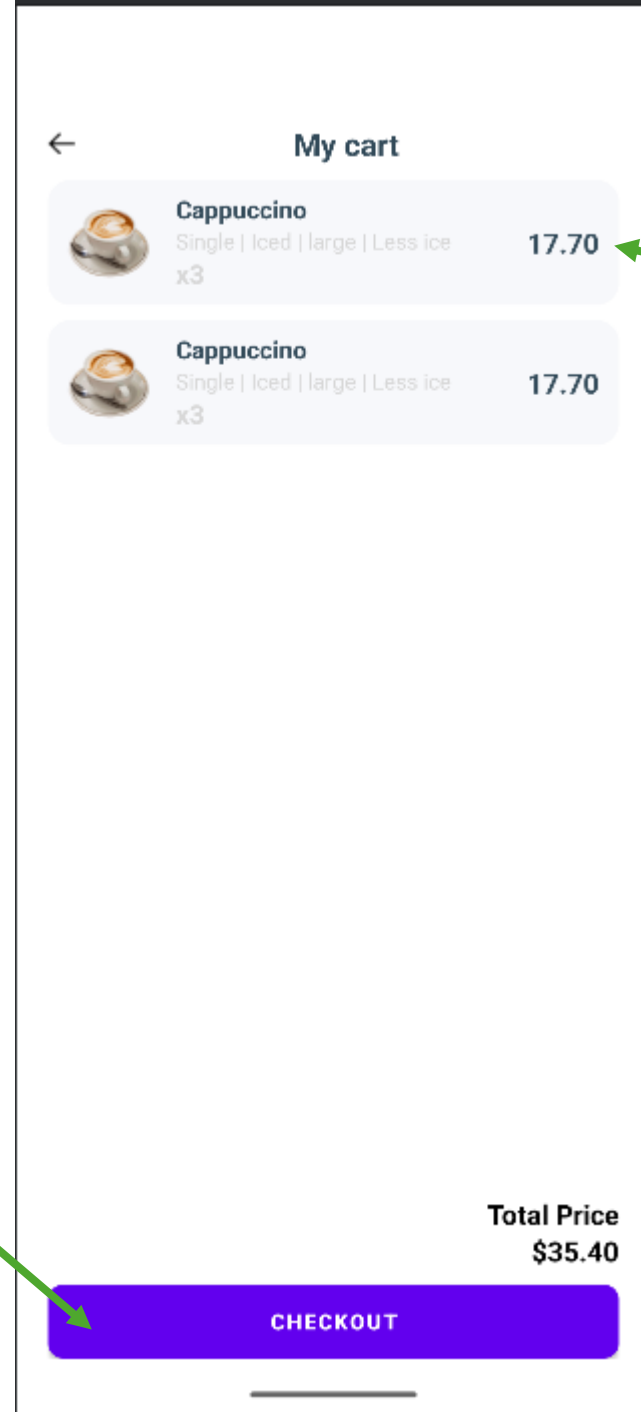


The **My Cart** button will navigate the user to the **CartFragment** using **NavController**, without passing any data through a **Bundle**.

CartFragment

Receive data from **Bundle** and shows to layout.

- When the user clicks **Checkout**:
- Update **beverageOrdersViewModel**.
 - Update **loyaltyProgress**.
 - Navigate to next Fragment.




Each cart item is inflated using the **item_cart_fragment_cart.xml** layout.

Handle swipe event by **utils/OnSwipeTouchListener**.

ProfileFragment


Data managed by
ProfileViewModel1.


Profile



Full name


Anderson






Phone number


+60134589525






Email

Anderson@email.com





Address

3 Addersion Court Chino Hills,
HO56824, United State

