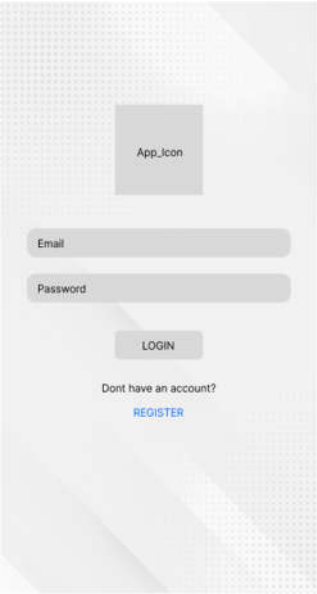
Criterion B: Design

1. Program Prototype

The prototype of my product is created using the non-coding app Figma.com which can be accessed from this link https://www.figma.com/file/m8jbl5vPR5ccrD2hsoY5Eg/Farmers-Marketplace?node-id=0%3A1

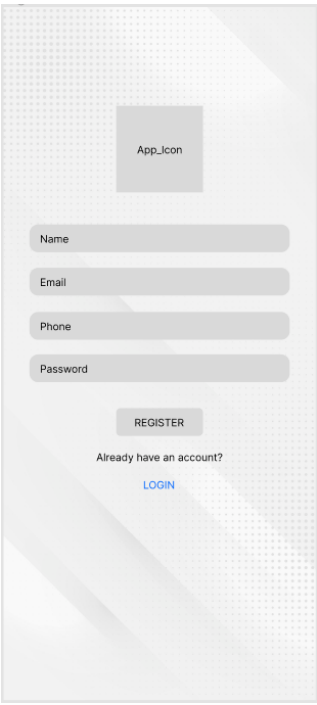
1.1. Login Page



Algorithms

1. Input email
2. Input password
3. Click LOGIN button.
   Validate input with database entry.
   - If input email is invalid, show message “Email is invalid”
   - If input email is valid and input password is invalid, show message “Password is invalid”
   - If email and password input are valid,
     - Login user
     - Go to dashboard page
4. Click REGISTER button. Go to registration page

1.2. Registration Page

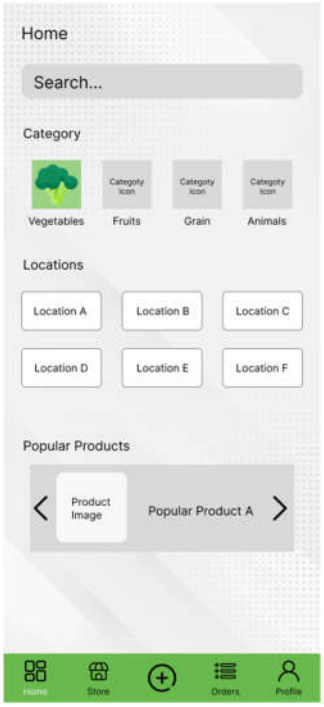


Algorithms

1. Input name
2. Input email
3. Input phone
4. Input password
5. Click REGISTER button.
   Validate Input
   i. Name
      - If name is invalid, show message “Invalid Name”
   ii. Email
      - If email is invalid, show message “Invalid Email”
      - If email already exists, show message “Email already exists”
   iii. Phone
      - If phone is invalid, show message “Invalid Phone Number”
   iv. Password
      - If password less than eight characters, show message “Password too short”
   v. If no invalid input, create user account.
      - Add account database entry
      - Go to login page
6. Click LOGIN button. Go to login page

1.3. Dashboard Pages

1.3.1 Home Page



Algorithms

Search

1. Click search. Search function to search for products

Category

1. Click Vegetable Category. Go to vegetable category page
2. Click Fruit Category. Go to fruit category page
3. Click Grain Category. Go to grain category page
4. Click Animal Category. Go to animal category page

Location

1. Click Location A. Go to Location A page
2. Click Location B. Go to Location B page
3. Click Location C. Go to Location C page
4. Click Location D. Go to Location D page
5. Click Location E. Go to Location E page
6. Click Location F. Go to Location F page

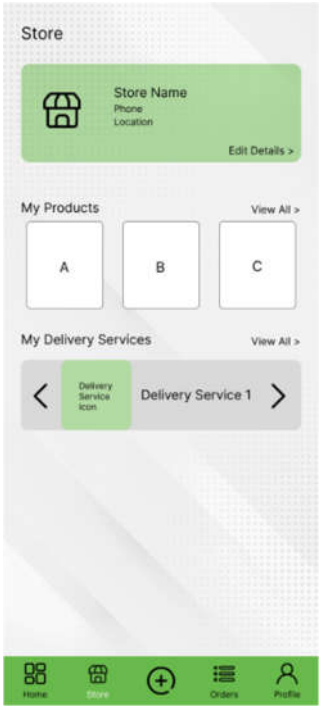
Popular Products

1. Click Arrow Left. Cycle popular product to the left
2. Click Popular Product A Box. Go to Product A listing page
3. Click Arrow Right. Cycle popular product to the right

Bottom Navigation Bar

1. Click Home. Do nothing
2. Click Store. Go to store (management) page
3. Click “+”. Go to add products page
4. Click Orders. Go to orders page
5. Click profile. Go to profile page

1.3.2 Store Page



Algorithms
Store Detail
1. Click “Edit Details >” button. Go to edit details page

My Products
1. Click Product A. Go to Product A listing page
2. Click Product B. Go to Product B listing page
3. Click Product C. Go to Product C listing page
4. Click “View All >” button. Go to All Products page

My Delivery Service
1. Click Arrow Left. Cycle delivery service to the left
2. Click Delivery Service 1 Box. Go to edit delivery service page for Delivery Service 1
3. Click Arrow Right. Cycle delivery service to the right
4. Click “View All >” button. Go to All Delivery page

Bottom Navigation Bar
1. Click Home. Go to home page
2. Click Store. Do nothing
3. Click “+”. Go to add products page
4. Click Orders. Go to orders page
5. Click profile. Go to profile page

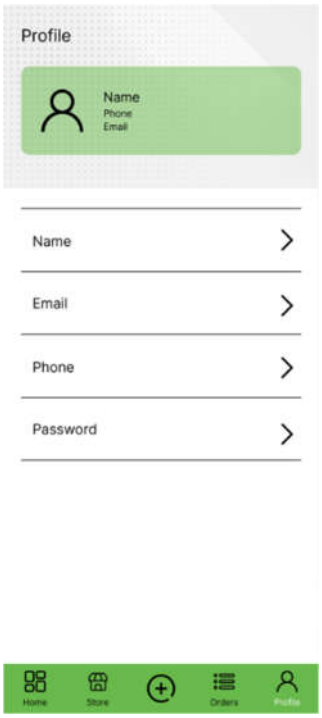
1.3.3 Order Page

Algorithms
Pending Orders
1. Click Order #ID1. Go to Order Detail page of Order #ID1
2. Click Order #ID2. Go to Order Detail page of Order #ID2
3. Click Order #ID3. Go to Order Detail page of Order #ID3
4. Click “View All >” button. Go to All Pending Order page

History
1. Click Order #ID4. Go to Order Detail page of Order #ID4
2. Click Order #ID5. Go to Order Detail page of Order #ID5
3. Click Order #ID6. Go to Order Detail page of Order #ID6
4. Click “View All >” button. Go to All Order History page

Bottom Navigation Bar
1. Click Home. Go to home page
2. Click Store. Do nothing
3. Click “+”. Go to add products page
4. Click Orders. Go to orders page
5. Click profile. Go to profile page

1.3.3 Profile Page



Algorithms

Profile Details

1. Click Name. Change account name
2. Click Email. Change account email
3. Click Phone. Change account phone
4. Click Password. Change account password

Bottom Navigation Bar

1. Click Home. Go to home page
2. Click Store. Go to store page
3. Click "+". Go to add products page
4. Click Orders. Go to orders page
5. Click profile. Do nothing

Dashboard Page Flow

1.4. Product Page

Algorithms

Navigation

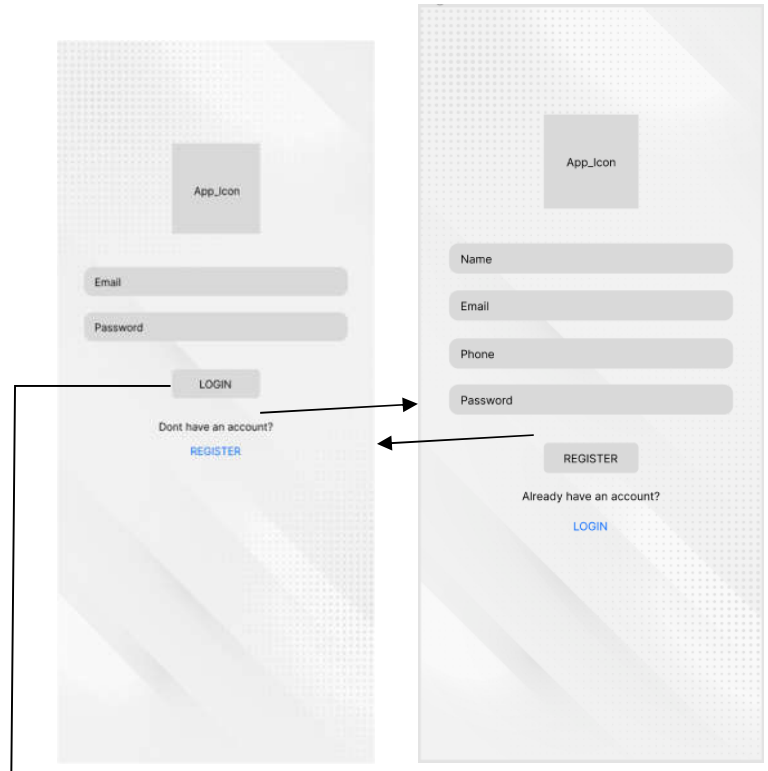
1. Click Arrow Left. Go to previous page
2. Click Store A's box. Go to Store A' Page

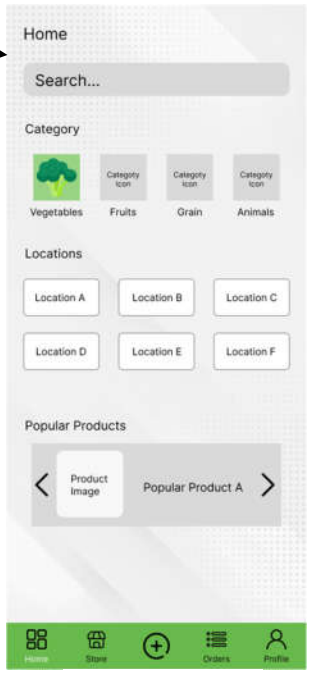
Cart

1. Click Add to Cart button. Add product into shopping cart

Program Prototype Flow

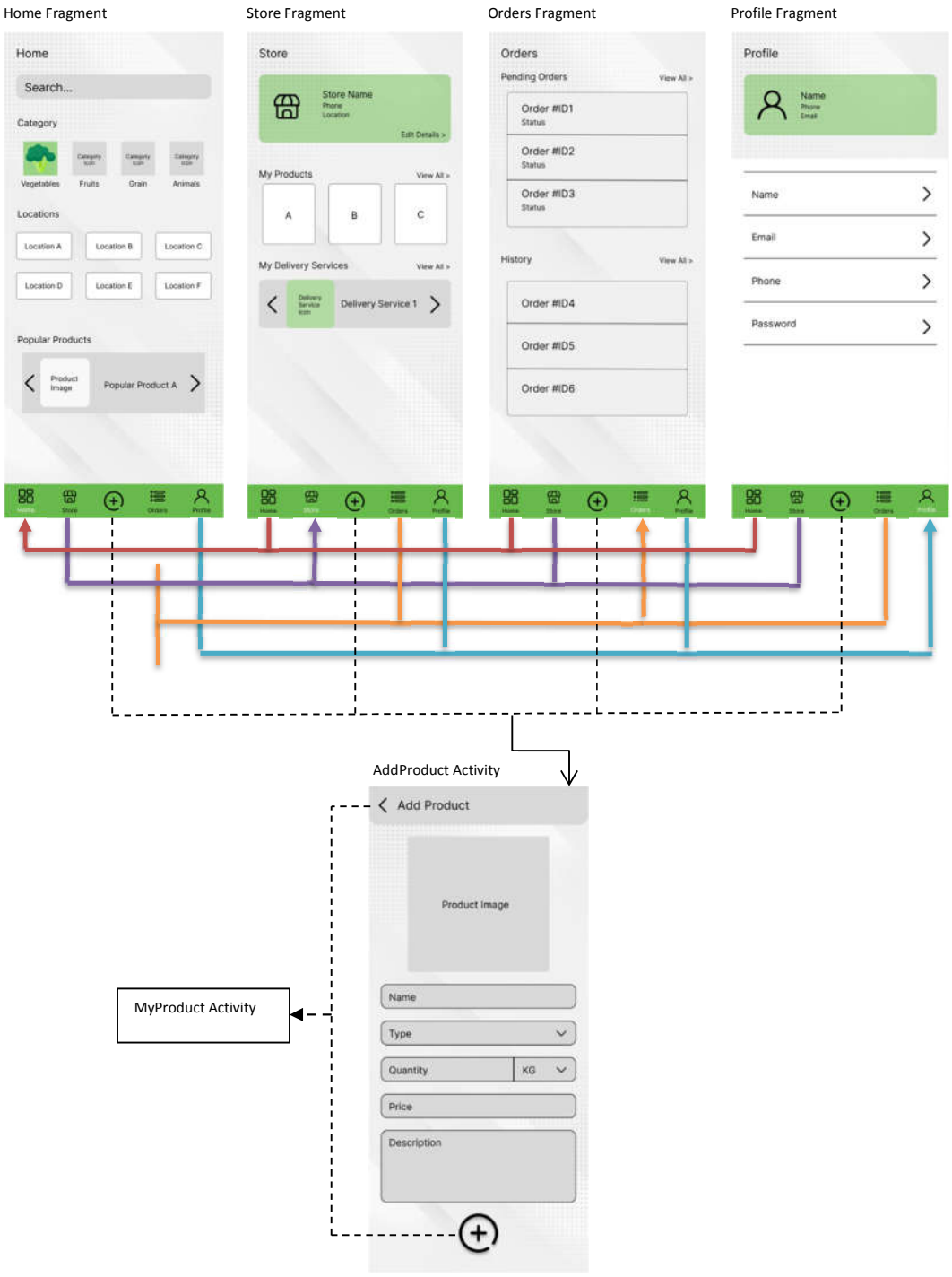
Login/Register Page



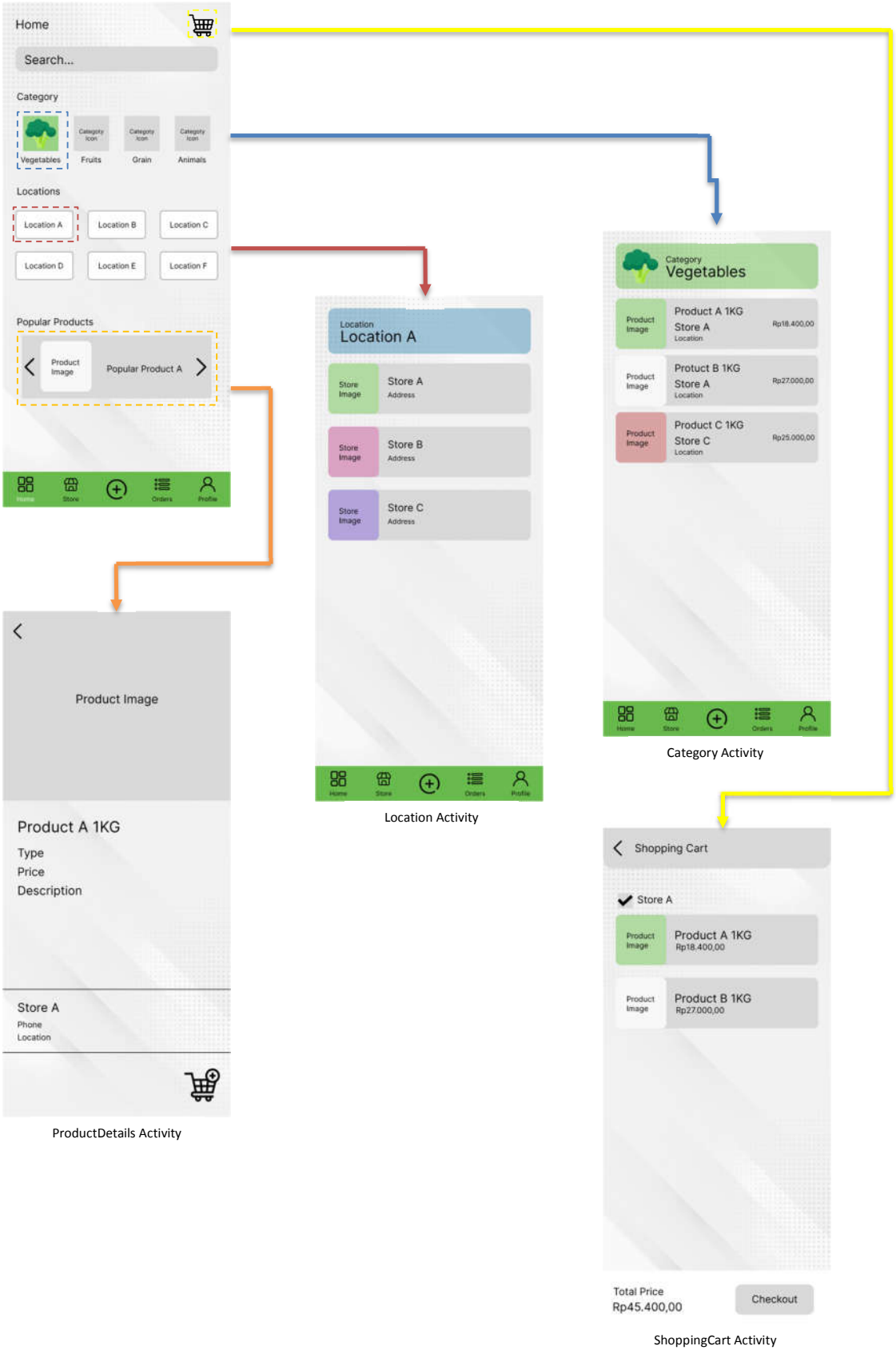


Dashboard Page

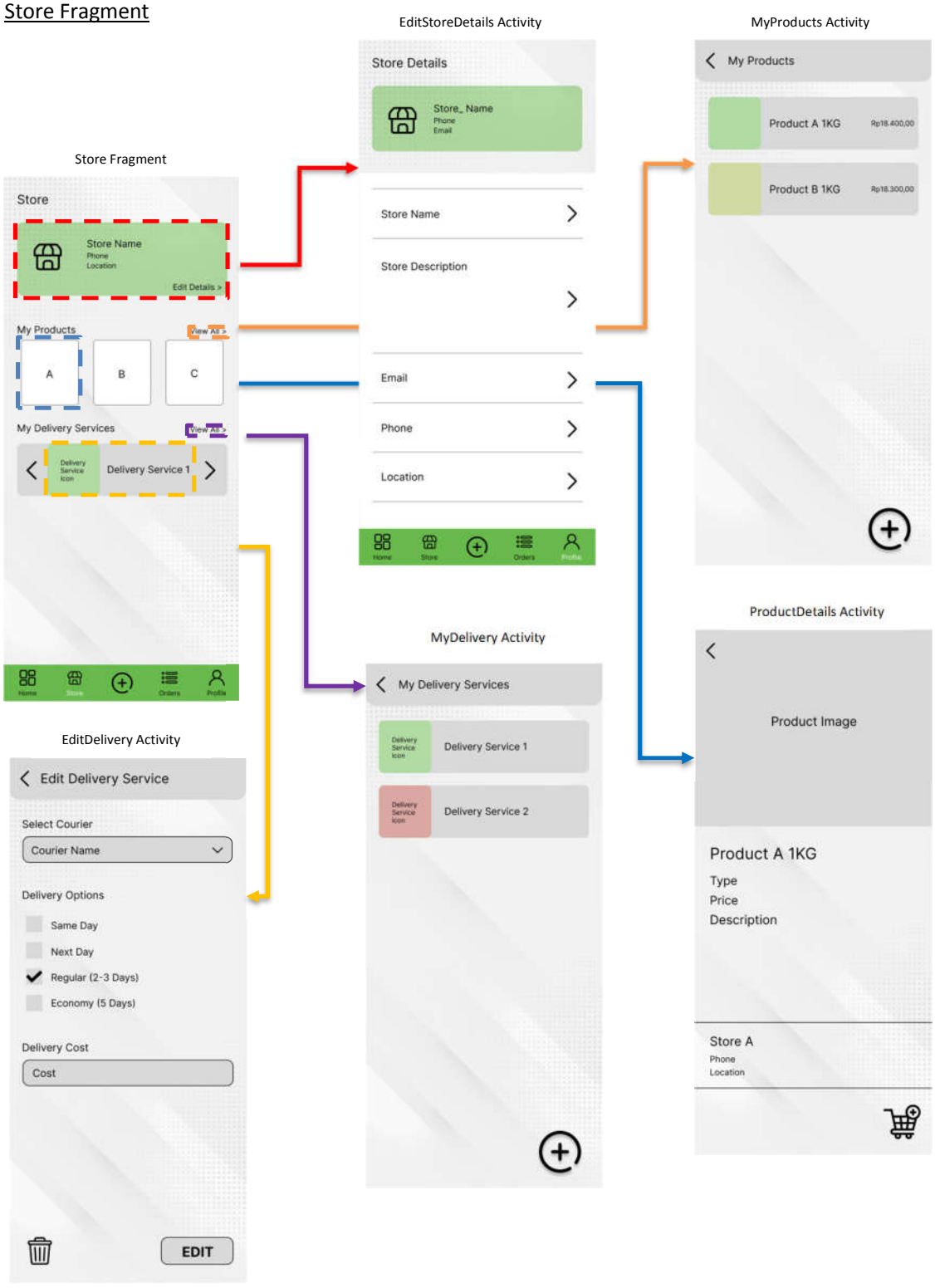
Dashboard Pages Flow



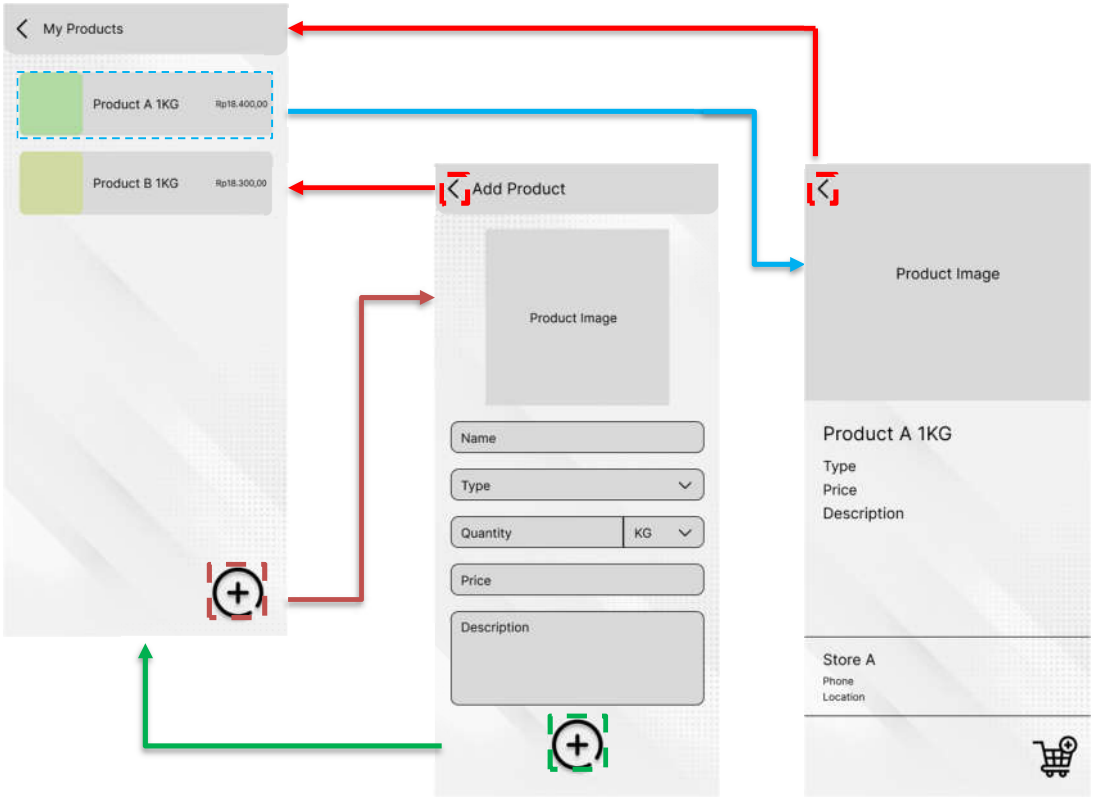
Home Fragment


Home
Search...
Category
Vegetables
Fruits
Grain
Animals
Locations
Location A
Location B
Location C
Location D
Location E
Location F
Popular Products
Product Image
Popular Product A
Location
Location A
Store A
Address
Store B
Address
Store C
Address
Category
Vegetables
Product A 1KG
Store A
Protuct B 1KG
Store A
Product C 1KG
Store C
Product Image
Product Image
Product Image

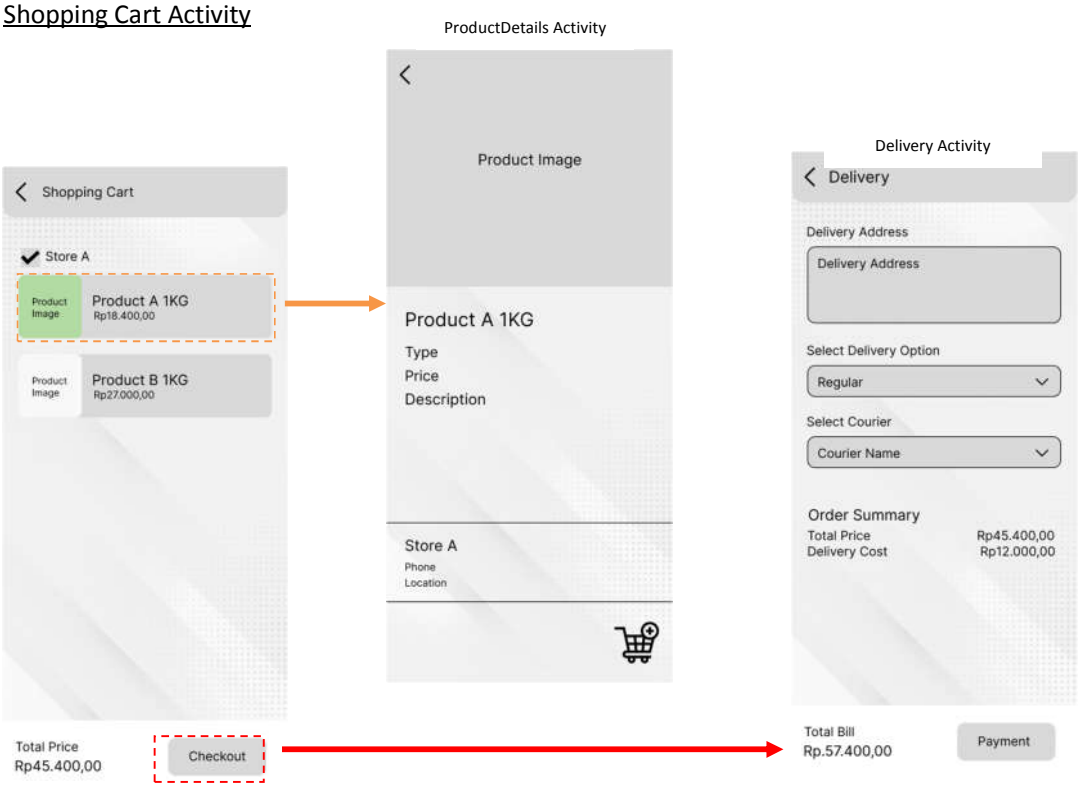
Store Fragment



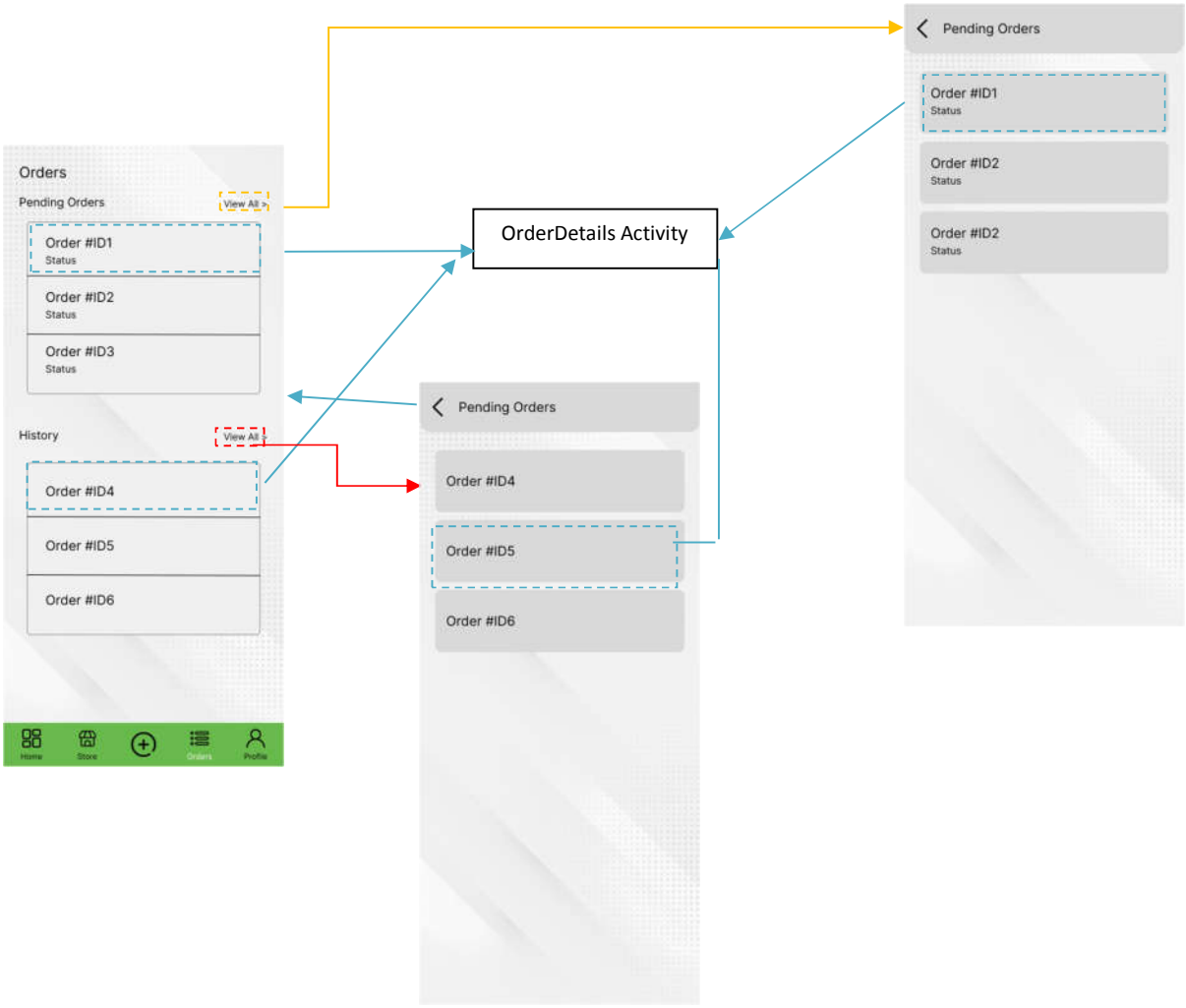
MyProductActivity



Shopping Cart Activity

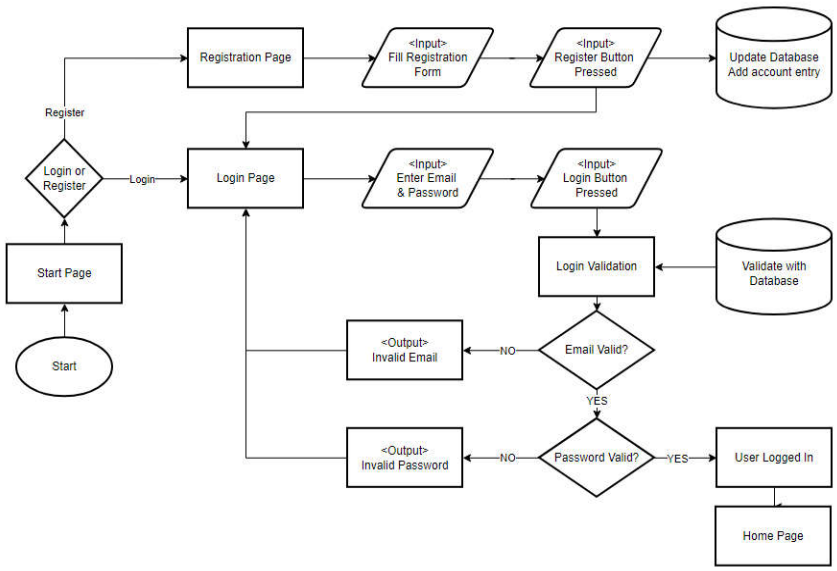


Order Fragment



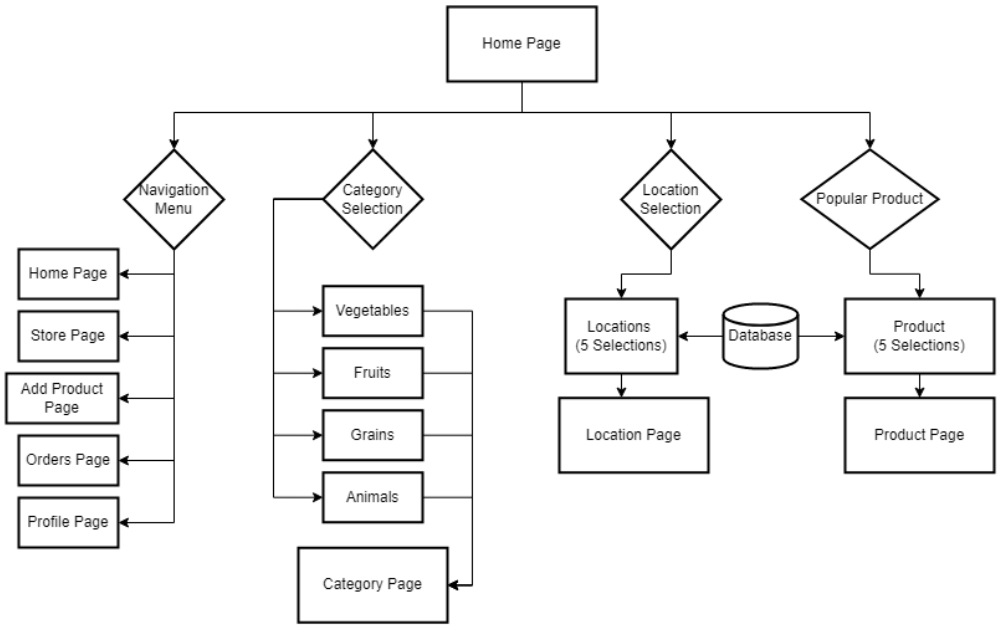
2. Program Flowchart

2.1. Login/Registration Flowchart

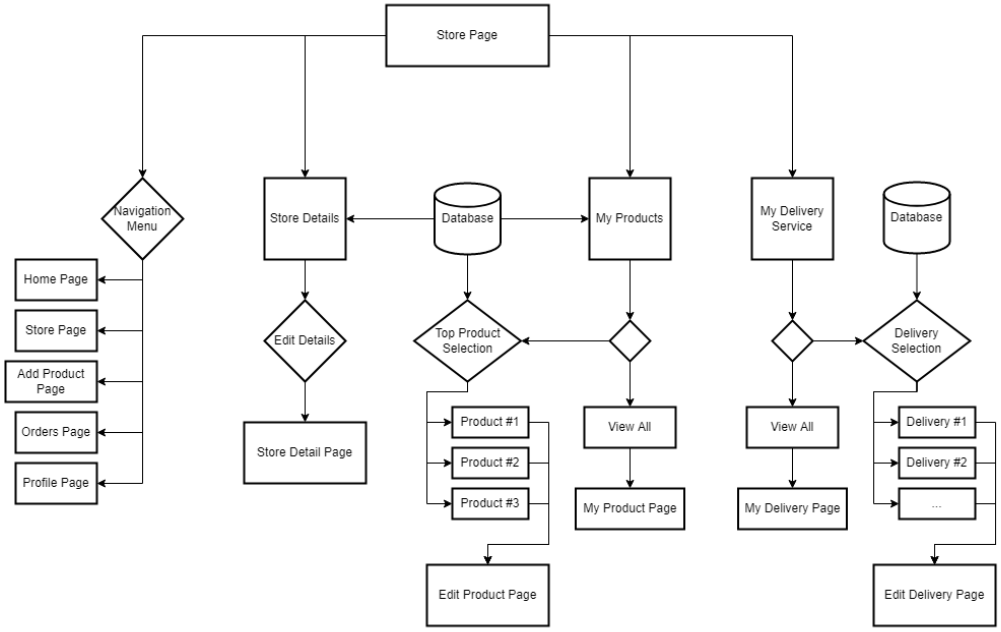


2.1. Dashboard Flowchart

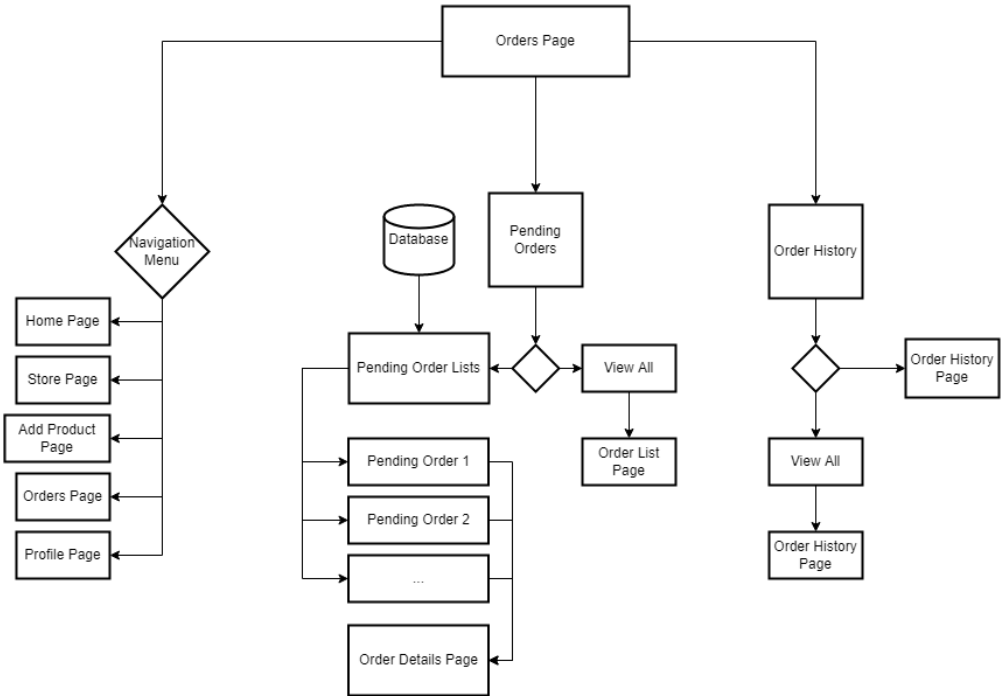
Home Fragment



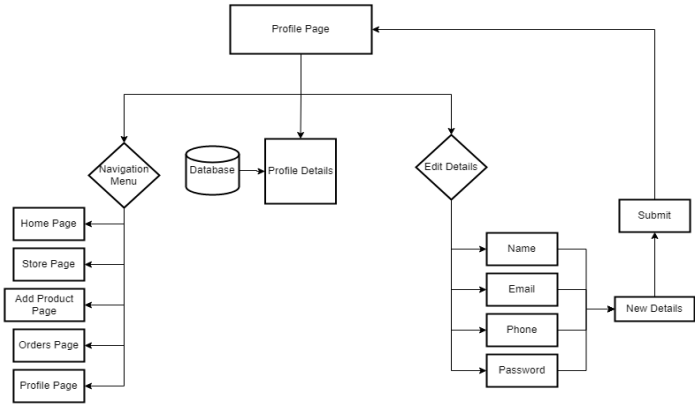
Store Fragment



Order Fragment

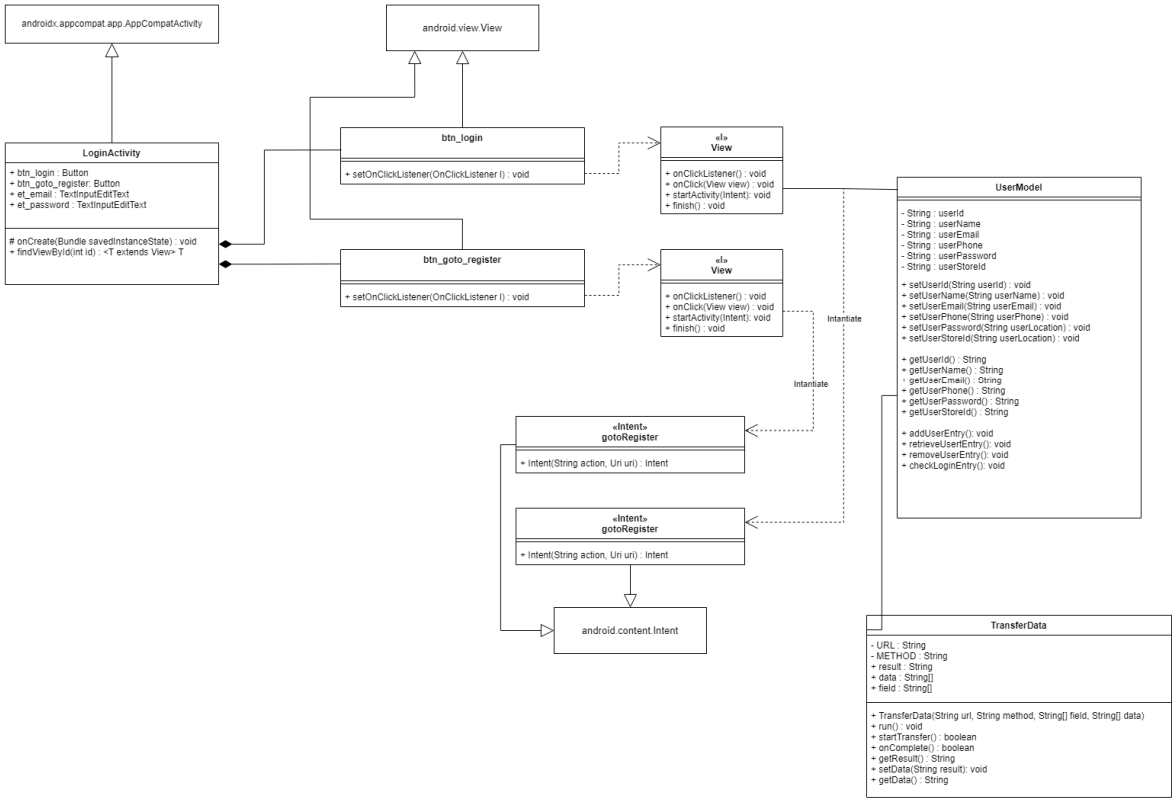


Profile Fragment



UML Class

LoginActivity



Testing Plan

Success Criteria	Expected Result
Front End: 1. a. i. 1. a. ii.	**Normal:** The user enters correct email, phone, password format into the registration field. **Expected Result:** An account will be created based on the information entered by the user on registration field. **Abnormal:** The user enters an existing account **Expected Result:** Error message that user exist will be shown **Extreme:** The user does not enter some fields **Expected Result:** Error message ill be shown according to the missing fields
Front End: 1. b. i. 1. b. ii.	**Normal:** The user enters their email and password according to their accounts **Expected Result:** The user logs in to his account and program goes to the dashboard page **Abnormal:** The user enters incorrect email and/or password **Expected Result:** If the email is invalid, the error message “Email is not found” will be shown If password is invalid, error message “Invalid Password” will be shown **Extreme:** None
Front End: 1. c. i. 1. c. ii. 1. c. iii. 1. c. iv.	**Normal:** Each account details will be changed of an account will be changed to another values **Expected Result:** Each detail will change to the new information provided by the user on the edit prompt of each detail **Abnormal:** None **Extreme:** None
Front End: 2. a 2. b 2. c 2. d	**Normal:** Navigation menu items (Home, Store, Order, Profile) are selected individually. **Expected Result:** The app navigates to the page corresponding to the menu items. **Abnormal:** None **Extreme:** None
Front End: 3. a. i.	**Normal:** Create new store and entering the details of the store.

	Expected Result: The store will be created based on the details provided. The store page changes from add store to the page of the store created **Abnormal:** One or more input field is empty **Expected Result:** Show error message “All fields required” to the user. **Extreme:** None
Front End: 3. a. ii.	**Normal:** Editing the details of the store linked to the account. **Expected Result:** The store details change according to the input provided by the user **Abnormal:** One or more input field in edit store details is empty **Expected Result:** Show error message “All fields required” to the user. **Extreme:** None
Front End: 3. b. i.	**Normal:** Listing a product with product details such as name, description, type, quantity, unit, price, image from the store. **Expected Result:** A product listing is created with the details provided by the user. The product will be able to be viewed by customers **Abnormal:** One or more input field is empty or image is not attached **Expected Result:** Show error message “All fields required” to the user. **Extreme:** None
Front End: 3. b. ii.	**Normal:** Editing the details of product listing. Changing its name, description, type, quantity, unit, price, image of a product **Expected Result:** The product listing details will change depending on the input of the user **Abnormal:** One or more input field in edit product details is empty **Expected Result:** Show error message “All fields required” to the user. **Extreme:** None
Front End: 3. c. i.	**Normal:** Create new delivery service with delivery details. **Expected Result:** The delivery service will be created based on the details provided. **Abnormal:** One or more input field is empty **Expected Result:**

	Show error message “All fields required” to the user. **Extreme:** None
Front End: 3. c. ii.	**Normal:** Editing the details of the delivery service provided by the user. **Expected Result:** The delivery service details change according to the input provided by the user **Abnormal:** One or more input field in edit is empty **Expected Result:** Show error message “All fields required” to the user. **Extreme:** None
Front End: 4. a.	**Normal:** Visit category page to view product in respective category **Expected Result:** Category page visible to the user and have product lists in their category **Abnormal:** None **Extreme:** None
Front End: 4. b.	**Normal:** View product listing when a product of category list is selected **Expected Result:** Product page visible to the user with their own details **Abnormal:** None **Extreme:** None
Front End: 5.	**Normal:** Able to see the product listing with their details Able to add products onto cart **Expected Result:** Product page visible to the user with their details Product are added into cart **Abnormal:** None **Extreme:** None
Front End: 6.	**Normal:** Visit store page reference by their id **Expected Result:** The user visits a store and able to see their details and products **Abnormal:** None **Extreme:** None
Front End: 7	**Normal:** Visit order list page referenced by user id **Expected Result:** Order page visible with their associative details **Abnormal:** None **Extreme:** None
Front End:	**Normal:**

8.a-8.e	Visit shopping cart **Expected Result:** Shopping cart visible with their associative list **Abnormal:** None **Extreme:** None
Front End: 8.f	**Normal:** Remove shopping cart item **Expected Result:** Shopping cart item is removed from the page **Abnormal:** None **Extreme:** None
Front End: 9	**Normal:** Visit checkout page and proceed to checkout **Expected Result:** Checkout page visible with the products, quantity, and total cost **Abnormal:** None **Extreme:** None
Front End: 10	**Normal:** Visit delivery checkout page **Expected Result:** Delivery checkout page visible with options to select delivery **Abnormal:** None **Extreme:** None
Front End: 12	**Normal:** Visit delivery order page **Expected Result:** Delivery status page of an order list visible with options to select delivery **Abnormal:** None **Extreme:** None
Front End: 12	**Normal:** Visit order completion page **Expected Result:** Order completion page is shown, go to the dashboard page afterwards **Abnormal:** None **Extreme:** None