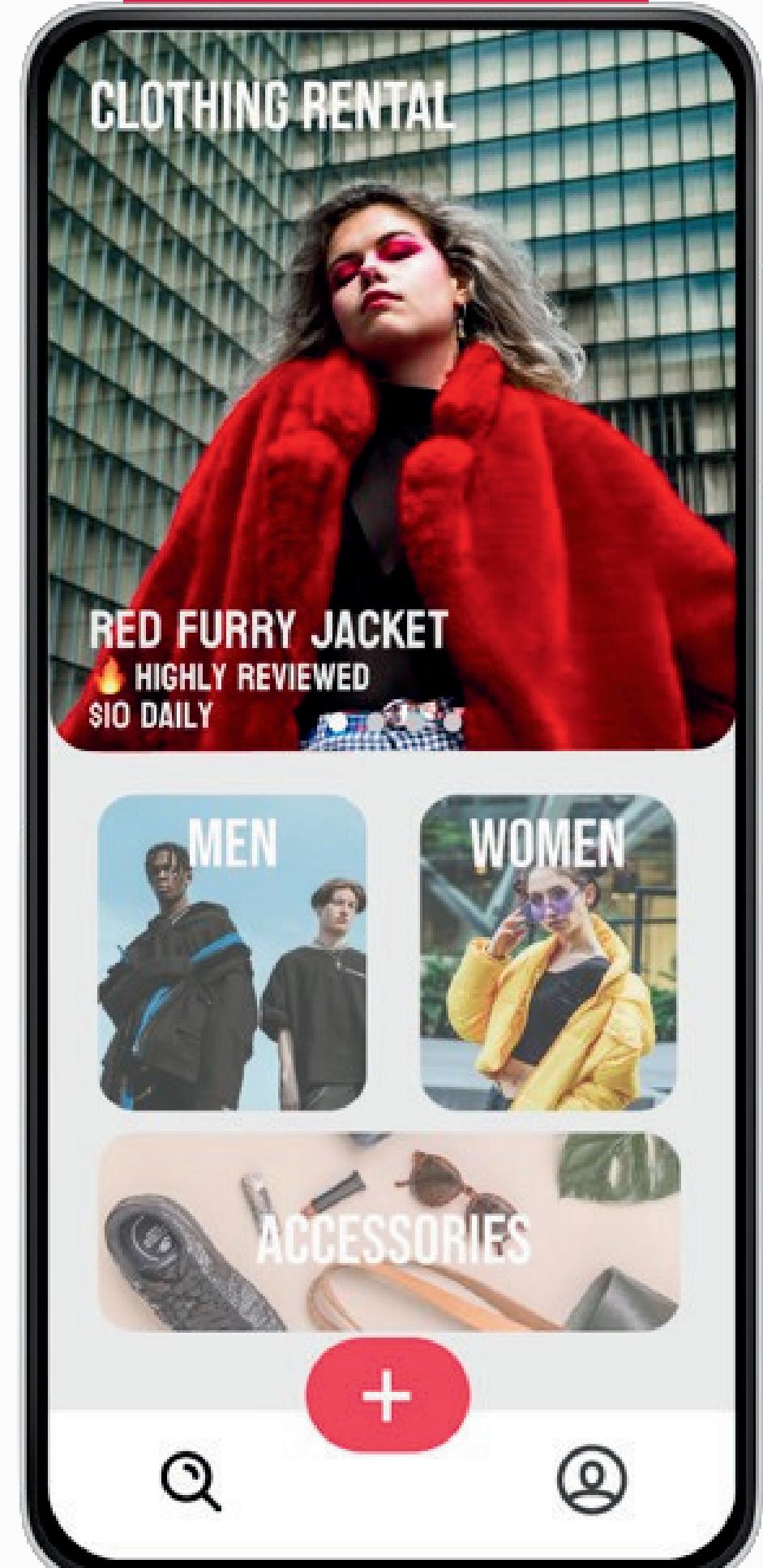


Group 45

# FLEXHAVEN

## CHECKOFF 1

Mok Shum Jung	1006619
Ong Jung Yi	1006655
Tejaswini	1007014
Ernest Tan	1006883
Luong Viet Hung	1007160
Raymond	1007040



# Problem Statement

Singaporean students face **financial constraint** that limits access to essential items such as iPads with **high upfront cost**. Purchasing such items leads to financial strain, yet not doing so limits their ability to fully enjoy and adapt to their living situations.

On the other hand, certain individuals may have the items wanted, but may face **difficulty in selling the items** due to **high costs and personal attachment**.





# User Persona

- **Context and Needs:** Budget-conscious student, needs affordable access to tech gadgets and clothings for his studies and hobbies, that also fits his budget.
- **Solution and User Story:** Our rental app FlexHaven offers cost-effective, affordable rentals, rewarding responsible use and enabling an income stream through item rentals, enabling John's needs to pursue and purchase his items without financial strain.

# 2D Aspect

---

Programming Language: Java



01

**Data storage**

possibly using  
firebase/mariaDB

02

**Local storage**

possibly using  
HashMap

03

**Item Display**

possibly using  
Priority Queue

keys may be  
generated based  
on user tier

04

**Classes**

User, Item class

Item may  
implement from  
interface

# Priority Levels

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- Statically tie deposit and rental rates to user tier.
- Add and remove products from store page
- Purchase products



- Login Page



- Chat feature between renter and rentee
- Search bar
- Dynamically render featured page

# Timeline



**Phase 1:**  
**Week 5-6**



**Phase 2:**  
**Week 7-9**

Finalise details of our  
project (2D aspects, UML  
class diagrams)

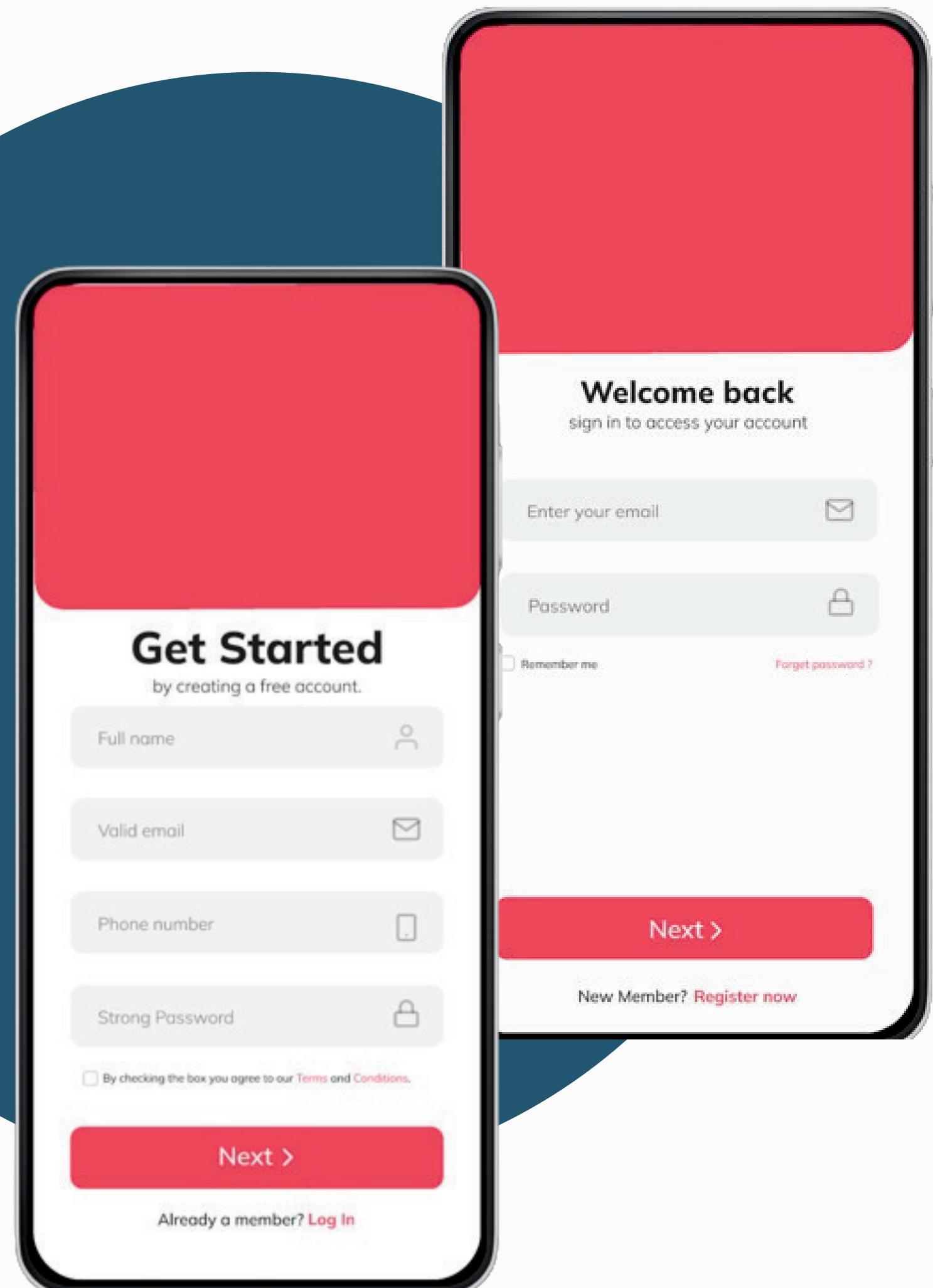


**Phase 3:** Integration between front  
and back ends  
User Testing and Refinement



**Phase 4:**  
**Week 12-14**

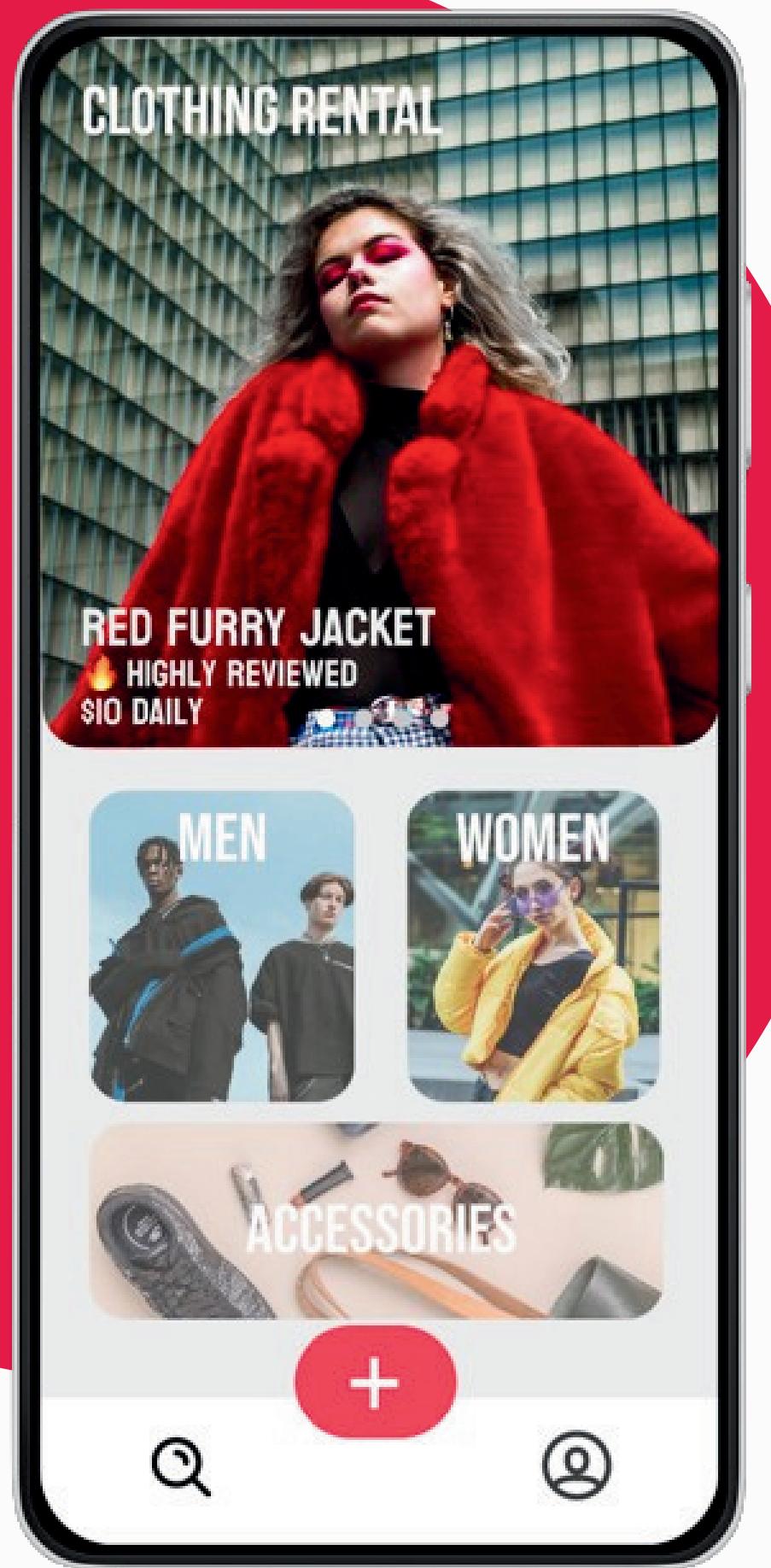
Finalise App for  
presentation  
Submit project



# User Authentication

Priority : P1

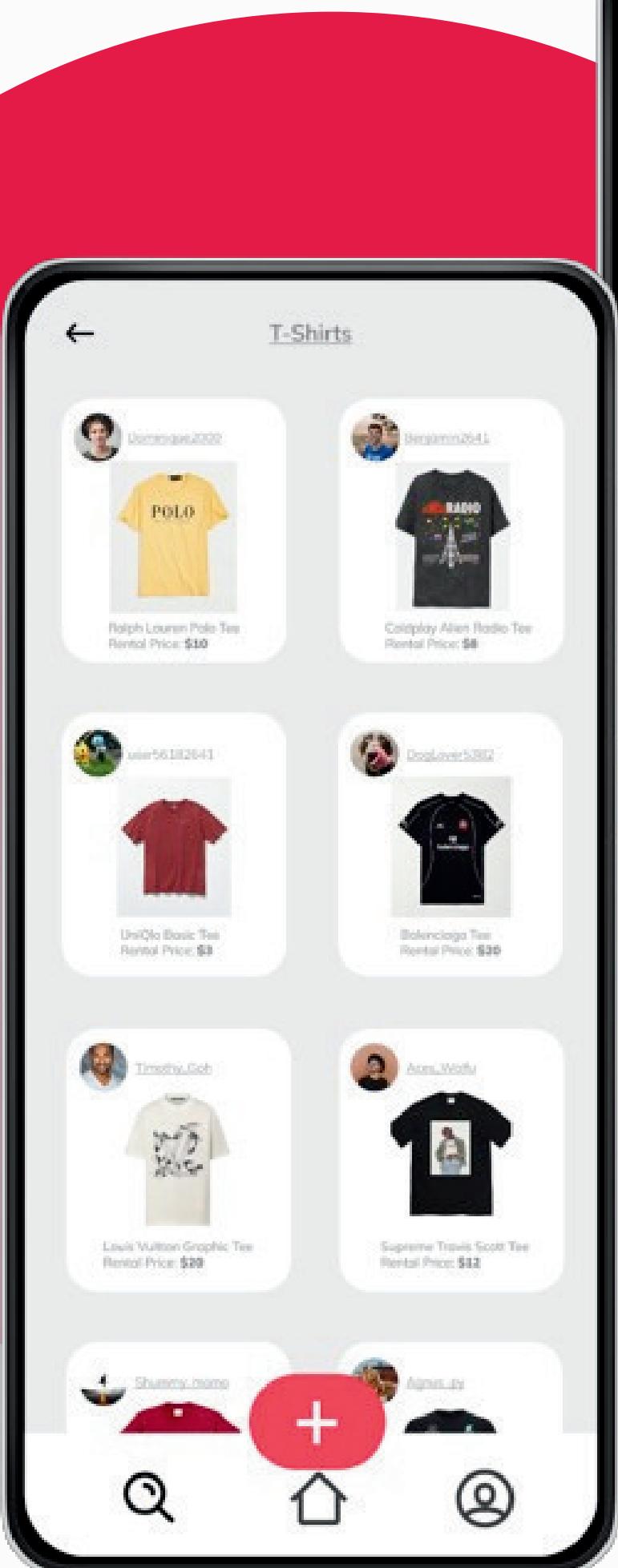
- User-Friendly Form Fields and Placeholders
- Integration with Database to store input fields



# Home Page

Priority : P0

- Clear and intuitive navigation menu
- Displays popular or trending items based on categories (Item class)



# Individual Listings

Priority : P0

- Details of product
- Item and Seller Ratings
- Rental and Deposit Rates
- Information stored in Item class

# Sustainability, Diversity & Inclusion



## Sustainability: UN Goal 12

- Users incentivised to rent items cheaply, instead of purchasing expensive items.
- Unused items reused instead of being inefficiently disposed.



## Diversity & Inclusion

- Straightforward UI, large widgets caters to less technically inclined, older users

THANK  
YOU

# Budget

\$30

ISTD booth-material for posters,  
printing,etc

\$50

For Computational Structures

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\$80

Total Budget