

USER INTERFACE DESIGN

Roll no:230701233

AIM: The aim is to demonstrate the lifecycle stages of UI design via the RAD model and develop a small interactive interface employing Axure RP

The **RAD (Rapid Application Development) model** in **User Interface Design (UID)** focuses on quickly building and refining the UI through continuous user feedback and rapid prototyping. Instead of spending time on detailed documentation upfront, RAD allows designers to create interactive mockups and iterate based on real user input. This user-centric, flexible approach helps identify design issues early, ensures the UI aligns with user expectations, and speeds up development

PROCEDURE:

- => Phase 1: Requirements Planning(Identify Key Features, Create a Requirements Document)
- => Phase 2: User Design (Display The Wireframe)
- => Phase 3: Construction (Test and Iterate)
- => Phase 4: Cutover(Finalize and Export)

Experiment:

Phase1:

Identify the requirements:

- Login
- Signup
- Homepage with general shopping app features
- Options: cart, favorites, profile, exit
- Add to cart option

Requirements Document:

Objective

The objective of this e-commerce app UI design is to create an intuitive shopping experience with a sleek dark background and high-contrast elements. The app features a dual entry system with prominent "SIGNUP" and "LOGIN" options, comprehensive user registration fields (username, password, Gmail ID, phone number), and a vibrant red "ENTER" button. The main shopping interface displays a bold green "SHOPPY" header with category filtering (MEN, WOMEN, KIDS, OTHER), search functionality, and organized product categories (Accessories, Gadgets, Appliances, Electronics). The cart interface clearly displays selected items with images, details, and pricing, culminating in a prominent green "PLACE ORDER" button. The consistent bottom navigation bar provides quick access to favorites, cart, user profile, and additional options.

How to Measure

The effectiveness of the UI design will be measured through several key usability metrics: user task completion rate (how easily shoppers can search, browse categories, add items to cart, and complete purchases), time on task for common shopping functions, user satisfaction through feedback and testing, error rate during the shopping journey, and retention rate indicating how frequently customers return to the app for additional purchases.

Who Are the Users

The primary users include online shoppers seeking convenient product browsing and purchasing across various categories. Different demographic segments are explicitly acknowledged through the category tabs (MEN, WOMEN, KIDS), while the "OTHER" option ensures inclusivity. The interface accommodates both casual browsers who may want to save favorites and serious shoppers ready to complete transactions. The bottom navigation provides clear paths to different user needs: Wishlist management, cart review, personal account settings, and additional options.

Product Flow

The user journey begins with either signup or login through a secure authentication screen requiring comprehensive identification details. Upon successful entry, users arrive at the main "SHOPPY" marketplace featuring categorized navigation, search functionality, and trending items. Users can browse product categories displayed in a clean grid layout, add items to their cart, and proceed to checkout. The cart screen presents a detailed summary of selected items with product images, descriptions, quantities, costs, and a prominent call-to-action button to complete the purchase. The consistent bottom navigation ensures users can easily move between different app sections (favorites, cart, profile) throughout their shopping experience, creating a cohesive and intuitive flow.

User Stories and Use Cases for E-commerce App

User Story 1: As a new customer, I want to easily sign up for an account so I can start shopping immediately.

- **Use Case:** User selects the "SIGNUP" button on the black login screen, completes all required fields (username, password, Gmail ID, phone number), and clicks the red "ENTER" button to create their account.

User Story 2: As a returning customer, I want to quickly log in to access my shopping profile.

- **Use Case:** User selects the "LOGIN" option, enters their credentials in the appropriate fields, and clicks "ENTER" to access the main shopping interface.

User Story 3: As a shopper, I want to browse products by category so I can find items that interest me.

- **Use Case:** From the "SHOPPY" main screen, user navigates through category tabs (MEN, WOMEN, KIDS, OTHER) and selects from grid options (Accessories, Gadgets, Appliances, Electronics) to view relevant products.

User Story 4: As a customer, I want to search for specific products quickly.

- **Use Case:** User clicks on the search bar at the top of the "SHOPPY" screen, types their query, and receives filtered results from the inventory.

User Story 5: As a shopper, I want to view trending items so I can discover popular products.

- **Use Case:** User scrolls to the "TRENDING" section on the main screen to view highlighted products with images, like skincare collections and cleaning supplies.

User Story 6: As a customer, I want to easily add items to my cart and manage my selections.

- **Use Case:** User selects a product, reviews details, adds it to cart, then navigates to the "CART" screen where they can see their selected item (hamam soap) with image, quantity, and cost details.

User Story 7: As a shopper ready to purchase, I want a clear checkout process.

- **Use Case:** From the cart screen showing all selected items, user clicks the green "PLACE ORDER" button to proceed with payment and complete their purchase.

User Story 8: As a frequent shopper, I want to save favorite items for future reference.

- **Use Case:** User taps the heart icon in the bottom navigation bar to access and manage their wishlist of favorite products.

User Story 9: As a customer, I want to access my profile settings to manage my account information.

- **Use Case:** User taps the profile icon in the bottom navigation to view and update personal information, addresses, and payment methods.

Phase 2: User Design

Create The Wireframes:

SIGNUP PAGE:



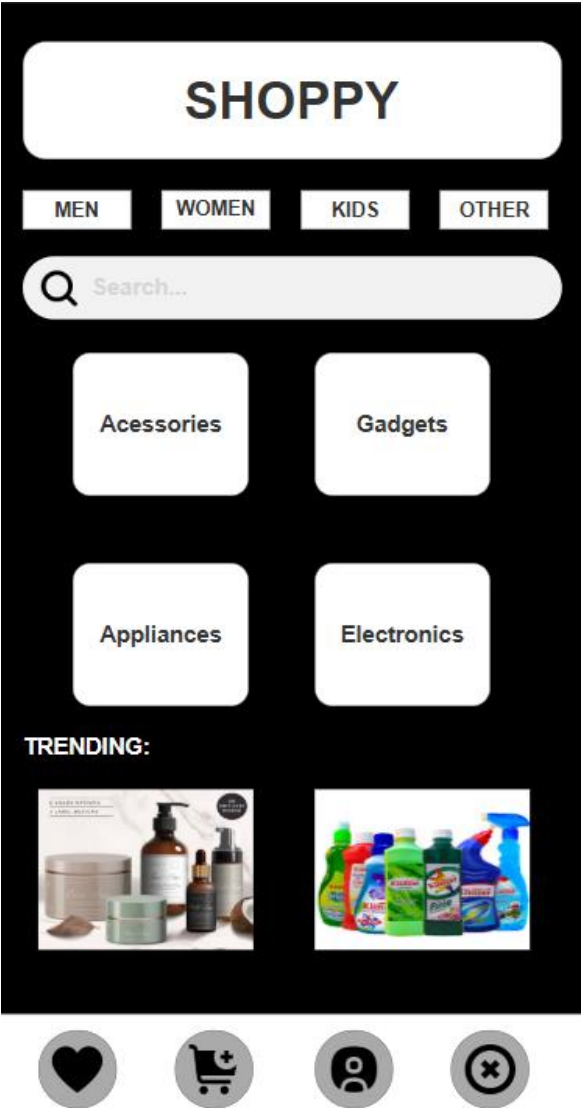
A wireframe of a signup page with a black background. At the top, there is a horizontal bar with two buttons: "SIGNUP" and "LOGIN". Below this, there are five input fields, each preceded by a label: "name:", "user name:", "password:", "Gmail ID:", and "phone number:". At the bottom, there is a single button labeled "ENTER".

LOGIN PAGE:

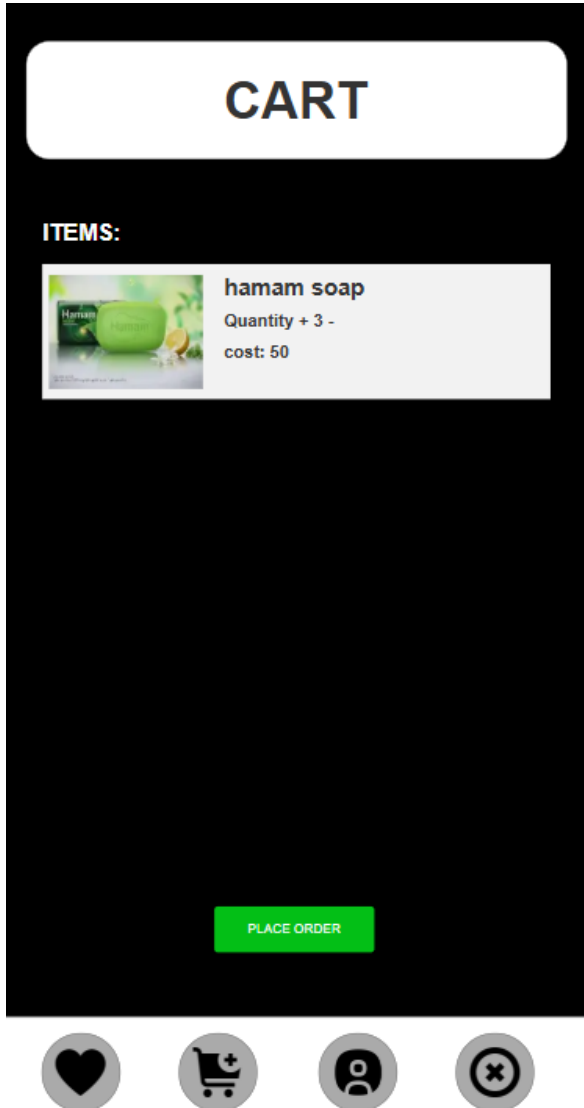


A wireframe of a login page with a black background. At the top, there is a horizontal bar with two buttons: "SIGNUP" and "LOGIN". Below this, there are four input fields, each preceded by a label: "user name:", "password:", "Gmail ID:", and "phone number:". At the bottom, there is a single button labeled "ENTER".

HOME PAGE:



CART PAGE:



Phase 3: Construction (Test and Iterate)

- Test = Show your app design (like a wireframe or prototype) to users and see what works or doesn't.
- Iterate = Make changes and improve the design based on the feedback. Then test again

Test (n Times):

In this testing part the users or the stakeholders are given the developed application in each test , they will use the application and give feedback to the developers team .The feedback will be noted by the developing team and they work on the feedback. After recording the feedback to work with the feedback a iteration will be done and again a test is conducted.

Iteration 1:

=>User Feedback: app logo can be displayed in the login and signup screen

Iteration 2:

=>User Feedback: the home page could be more colorful

Iteration 3:

=>User Feedback: the enter option in the login and signup need to be more highlighted

Iteration 4:


=>User Feedback: add a “add to cart” option in the cart page

FINAL DESIGN:

SIGNUP PAGE:

SIGNUP

LOGIN



name:

user name:

password:

Gmail ID:

phone number:

ENTER

LOGIN PAGE:

SIGNUP

LOGIN



user name:

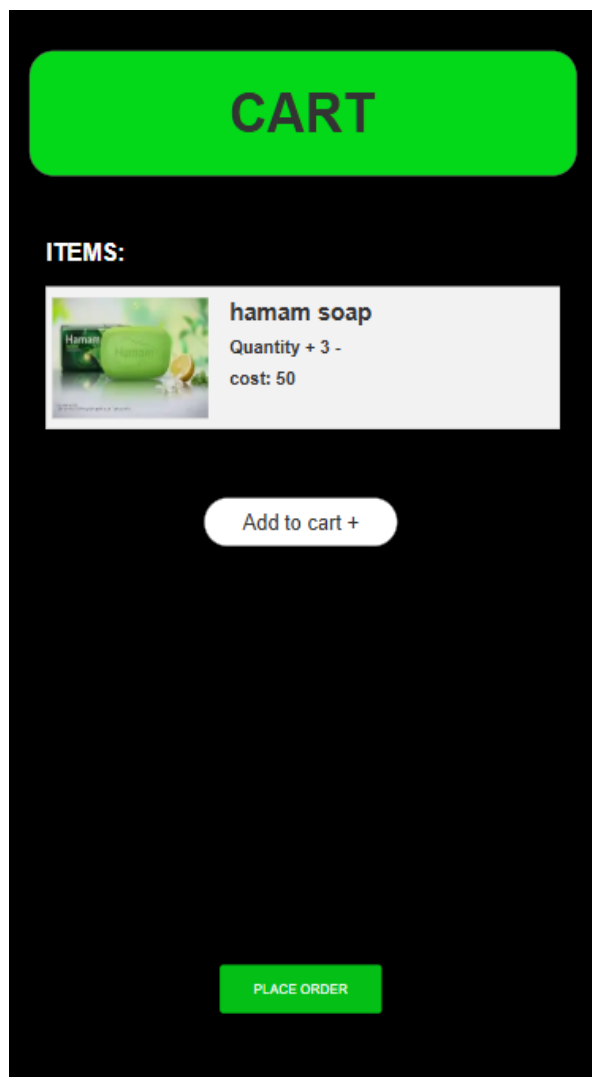
password:

Gmail ID:

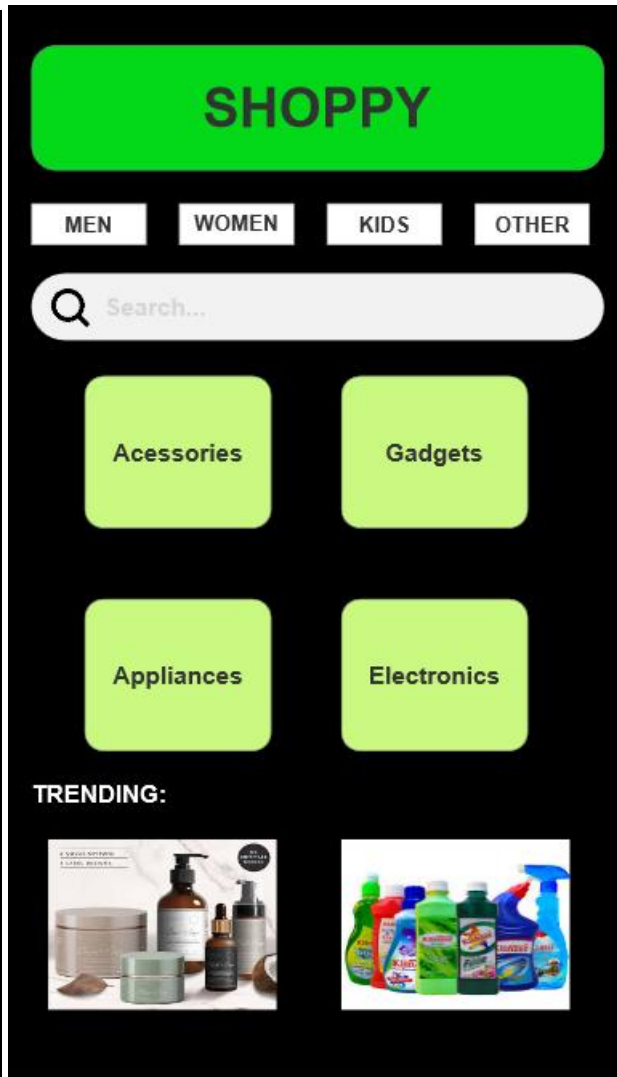
phone number:

ENTER

CART PAGE:



HOME PAGE:



AXURE EXPORT LINK:

<https://5e284q.axshare.com>

