**UID LAB EXP 6**

**UI Design Lifecycle Using RAD Model for “BOOKNOOK” Interface**

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# UI Design Lifecycle Using RAD Model

## Project: "booknook" – A Book Shopping App Interface

## Aim

To demonstrate the application of the Rapid Application Development (RAD) model in designing the UI for "booknook", a book shopping app. The goal is to visually simulate each stage of the UI design lifecycle using rapid prototyping principles and iterative feedback, focusing on creating a smooth and user-friendly shopping experience.

## Simulating the Lifecycle Stages Using the RAD Model

The RAD Model focuses on quick iterations, collaboration, and continuous testing through four main stages:

### 1. Requirements Planning

#### Objective:

To define the core layout, user needs, and essential features of the "booknook" app interface.

#### UI Structure and Feature Analysis:

- Navigation Bar: Includes options like Home, Categories, Wishlist, Cart, Search, and Profile.  
- Hero Banner: Displays a featured book collection, offers, and a Call to Action (CTA) like “Shop Now”.  
- Category Cards: Represent genres like Fiction, Self-Help, Romance, Children’s Books, etc.  
- Book Grid Display: Shows popular or recommended books with cover, title, author, rating, and price.  
- Filter and Sort Options: Allow users to sort by price, popularity, genre, and rating.  
- Login Modal: Clean interface with email, password fields, and login/signup buttons

### 2. User Design (Prototyping with Axure RP)

#### Tool Setup:

Launch Axure RP and create a new project:  
Project Name: booknook UI Design

#### Page Breakdown:

a. Homepage  
- Navigation Bar: Home, Categories, Wishlist, Cart, Search, and Profile.  
- Hero Section: Large banner promoting book bundles or limited-time deals.  
- Genre Cards: Fiction, Romance, Non-fiction, Mystery, etc.  
- Footer: App download links, social media icons, support and FAQs.  
  
b. Category Page  
- Book Card Grid: Shows a list of books in a specific genre/category.  
- Filter Panel: Filters for price range, author, language, and ratings.  
  
c. Product Detail Page  
- Book Cover Image  
- Book Info: Title, author, description, formats, price, ratings, and reviews.  
- Buttons: Add to Cart, Add to Wishlist, Buy Now.  
  
d. Login/Signup Modal  
- Fields: Email and Password.  
- Buttons: Login, Signup, Forgot Password.  
- Modal Style: Centered popup with overlay background.

#### Wireframing and Prototyping Steps:

- Create master components for navigation and footer.  
- Add dynamic interactions: hover states, clickable cards, and modals.  
- Link pages for full navigation flow simulation.  
- Annotate components for developers with notes on responsiveness, padding, and visual hierarchy.

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### 3. Construction

#### Interactive Prototyping in Axure RP:

- Use Axure’s interactions and dynamic panels to simulate real behavior (like adding items to cart or opening login).  
- Apply brand style guide (colors, typography, iconography) for a polished prototype.  
- Set page transitions (e.g., fade for modals, slide for navigation).

#### Functionality Simulated:

- Navigation bar linking between home, category, and detail pages.  
- Filter buttons open dropdowns.  
- Add to cart triggers notification popup.  
- Modal appears on clicking login icon.

### 4. Cutover (Testing and Feedback)

#### User Testing:

- Preview prototype using Axure Share link.  
- Conduct usability tests with test users (focus on navigation clarity, visual feedback).  
- Gather feedback on:  
 - Button responsiveness  
 - Page load experience  
 - Mobile vs desktop layout flow

#### Iteration:

- Apply feedback for UI refinement.  
- Adjust font sizes, button spacing, and contrast for better accessibility.  
- Final polish of transitions and animations.

## Conclusion

This project outlines how the Rapid Application Development (RAD) model can effectively guide the UI design lifecycle of the "booknook" book shopping app. Using Axure RP, each phase was simulated — from user requirement gathering to interactive prototyping and feedback-driven iteration. The result is a realistic, user-centered app interface that can easily evolve into a production-ready solution through rapid cycles of improvement.