UID EX 6

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RAD (Rapid Application Development) is a software development methodology that emphasizes **quick development and iteration** of prototypes over strict planning and long development cycles. It's ideal for projects where requirements evolve through user feedback and where fast delivery is important.

Key Characteristics of RAD:

- Focus on **prototypes** instead of extensive documentation
- **User involvement** throughout the development process
- **Fast development cycles** with frequent iterations
- **Reusable components** to reduce effort
- Best suited for **UI/UX-intensive projects** like web and mobile apps

Phase 1: Requirements Planning

This is where the **project goals, system requirements, and user needs** are identified. Stakeholders, users, and designers collaborate to decide what needs to be built.

1) **Identify Key Features**

   Navigation:
   - Home
   - Product Categories
   - Product Listings
   - Product Details
   - Cart
   - Order Confirmation

   User Actions: Browsing, Searching, Adding to Cart, Checkout, Tracking Orders

2) **Create a Requirements Document:**
   1. View list of product categories
   2. View products under each category
   3. View detailed information about a product
   4. View and edit cart
   5. Checkout and enter user/shipping/payment details
   6. View order confirmation message

Phase 2: User Design

Designers and users collaborate to **create wireframes and prototypes**. The idea is to show how the application will look and behave before any actual coding starts.

1) **Tools Used: Axure**: Used to design the wireframes and UI prototype.
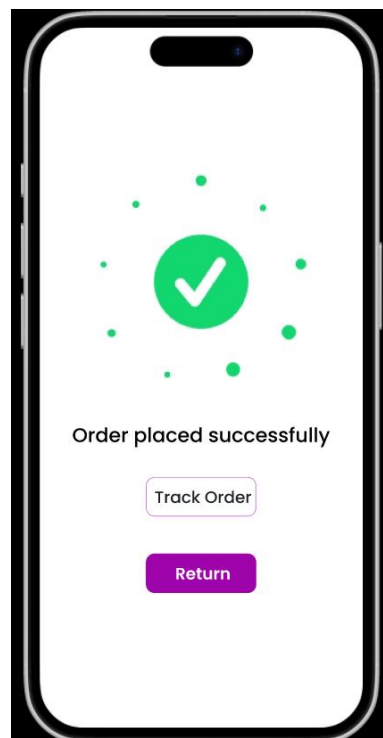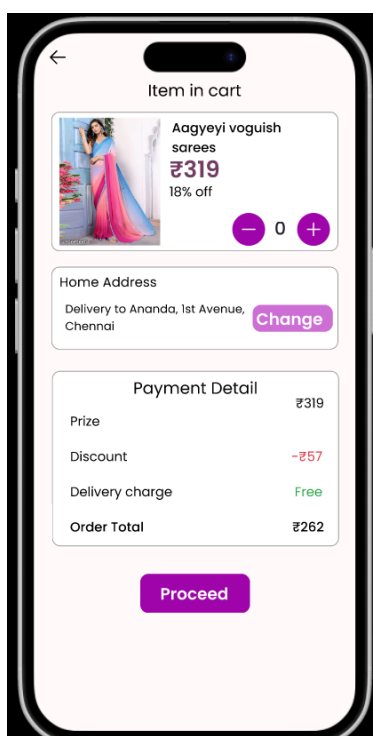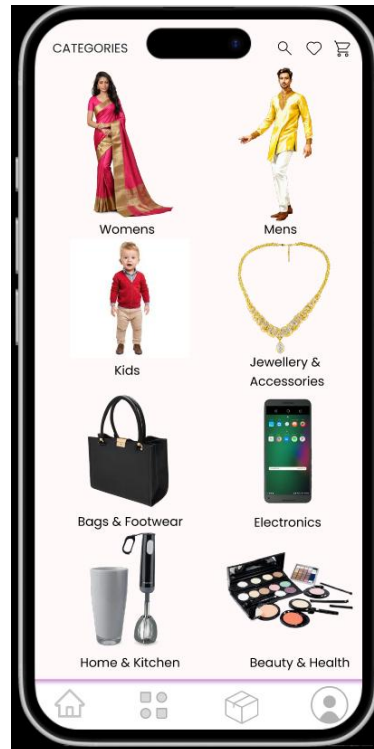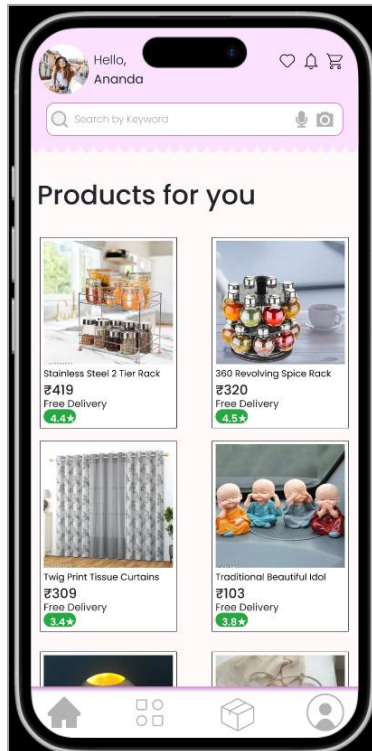2) **Wireframes Designed:**
   - **Home Page:** Highlights featured products and links to categories.
   - **Product Categories:** Lists all product categories to explore.
   - **Product Listings:** Shows products under a selected category.
   - **Product Details:** Displays product info with "Add to Cart" option.
   - **Cart:** Shows added items with price and quantity details.

- **Checkout:** Collects shipping and payment information.
- **Order Confirmation:** Confirms successful order placement.

Designed **interactions and navigation** using Axure's Prototype mode
Reused components like headers/footers using **Components**
Annotated elements for clarity (e.g., what a button does, purpose of sections)

Phase 3: Construction

This is where the **actual development happens**, but in RAD, it is tightly coupled with ongoing testing and feedback. You refine the prototype based on user responses.

1) **Interactive Prototypes:**
   - Created using Axure's **prototype linking** features.
   - Functional paths designed:
     - From **Home → Product Categories → Product Listings → Product Details → Add to Cart → Checkout → Order Confirmation**

2) **Dynamic Elements:**
   - Simulated transitions and modals for adding to cart and checking out.
   - Screens simulate real-time behavior such as navigating between product listings and cart.

3) **Testing and Iteration:**

   - Prototype previewed with **"Present"** mode in Figma.
   - Collected feedback from stakeholders (assumed for documentation).
   - Iterated based on visual hierarchy, accessibility, and flow suggestions.

Phase 4: Cutover

In this final phase, the system goes live. This includes **finalizing the design**, **training users**, and **preparing documentation** for developers.

1) **Finalization and Export:**

   - Final design prototype shared through Figma link.
   - Ready for hand-off to development team.
   - Could be exported to **HTML/CSS** using plugins like Figma-to-HTML or further tools if needed.

2) **User Training & Support:**

   - Walkthrough of the prototype for stakeholders or development team.
   - Notes/documentation provided for developers to understand functionality and user flow.
   - Easy access to Figma comments for further collaboration and questions.