

Flipkart Web Application

The Flipkart Web Application project aims to analyse, document, and break down the features and functionalities of **Flipkart.com**, one of India's leading e-commerce platforms. This project is approached from the **customer's perspective**, focusing on the various modules and features that users interact with while browsing, shopping, and managing orders on the website.

The project uses **Flipkart's actual interface and user flow** as a reference for decomposing the system into functional units — such as product discovery, cart management, checkout, payments, and post-order services.

Each module of the application is broken down into clearly defined Epics, and further detailed through Feature sets, User Stories, Acceptance Criteria, and development Tasks. This structure not only serves the purpose of Agile work item planning (in tools like Azure DevOps) but also enables proper understanding and documentation of a large-scale e-commerce system.

- ✓ Created a Project in Azure DevOps Platform as “**Flipkart Web Application**”

Create new project ×

Project name *

Description

The Flipkart Web Application project aims to replicate and document the functionality of Flipkart.com — one of India's leading e-commerce platforms — from a customer's perspective. The system allows users to browse, search, and purchase a wide range of products across categories such as electronics, fashion, home, and more.

This project focuses on modeling and tracking the key features and user journeys that make up the Flipkart customer-facing web interface. These include product discovery, cart and wishlist management, secure checkout, payment gateway integration, order tracking, and user account handling.

The work item hierarchy has been designed to simulate a real-world development process

Visibility

Private

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^ Advanced

Version control [?](#)

Git

Work item process [?](#)

Agile

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❖ In this Project there are in total 8 Epics.

EPIC 1: Home Page Experience

Epic 86: Home Page Experience

Description: This Epic focuses on building and optimizing the Flipkart home page — the entry point for users to discover deals, browse categories, and explore promotions. It includes elements like the top navigation bar, dynamic banners, product carousels, and category shortcuts.

Discussion: Add a comment. Use # to link a work item, @ to mention a person, or ! to link a pull request.

Planning:

- Priority: 1
- Risk: 1 - High
- Effort:
- Business Value:
- Time Criticality:

Deployment: To track releases associated with this work item, go to [Releases](#) and turn on deployment status reporting for Boards in your pipeline's Options menu. [Learn more about deployment status reporting](#)

Development:

- Add link
- Link an Azure Repos [commit](#), [pull request](#) or [branch](#) to see the status of your development. You can also [create a branch](#) to get started.

Feature 1.1- Top Navigation Bar

Feature 87: Top Navigation Bar

Description: Build a persistent, responsive header containing the search bar, user profile menu, cart icon, and "Become a Seller" options — available across all pages.

Discussion: Add a comment. Use # to link a work item, @ to mention a person, or ! to link a pull request.

Planning:

- Priority: 1
- Risk: 1 - High
- Effort:
- Business Value:
- Time Criticality:

Deployment: To track releases associated with this work item, go to [Releases](#) and turn on deployment status reporting for Boards in your pipeline's Options menu. [Learn more about deployment status reporting](#)

Development:

- Add link
- Link an Azure Repos [commit](#), [pull request](#) or [branch](#) to see the status of your development. You can also [create a branch](#) to get started.

User Story 1.1: Implement Persistent Header

New User Story *

Name: Implement Persistent Header

Author: Simantini Patil

Comments: 0

Tags: Add Tag

Save

State: New

Reason: New

Area: Flipkart Web Application

Iteration: Flipkart Web Application

Description: As a user, I want to see a consistent top bar with search, profile, and cart options so that I can access them from any page.

Acceptance Criteria:

- Header is sticky on scroll
- Cart icon shows item count
- Profile dropdown appears when logged in

Planning:

- Story Points: 3
- Priority: 1
- Risk:

Classification:

- Value area
- Business

Deployment: To track releases associated with this work item, go to [Releases](#) and turn on deployment status reporting for Boards in your pipeline's Options menu. [Learn more about deployment status reporting](#)

Development:

- Add link
- Link an Azure Repos [commit](#), [pull request](#) or [branch](#) to see the status of your development. You can also [create a branch](#) to get started.

Task 1.1: UI Design of top bar

NEW TASK *

UI Design of top bar

Simantini Patil | 0 Comments | Add Tag

State: New | Area: Flipkart Web Application
Reason: New | Iteration: Flipkart Web Application

Discussion

Add a comment. Use # to link a work item, @ to mention a person, or ! to link a pull request.

Effort (Hours)

Original Estimate
Remaining
Completed

Implementation

Integrated in Build

Development

Add link
Link an Azure Repos commit, pull request or branch to see the status of your development. You can also create a branch to get started.

Related Work

Add link ▾
Parent
103 Implement Persistent Header Updated 4m ago • New

EPIC 2: Product Search & Discovery

EPIC 103

103 Product Search and Discovery

Simantini Patil | 0 Comments | Add Tag

State: New | Area: Flipkart Web Application
Reason: New | Iteration: Flipkart Web Application

Description

Enable users to easily discover products using keyword search, filters, and sort options. This Epic focuses on delivering intelligent search results with a fast and user-friendly experience.

Discussion

Add a comment. Use # to link a work item, @ to mention a person, or ! to link a pull request.

Planning

Priority: 1
Risk: 1 - High
Effort:
Business Value
Time Criticality
Start Date: 7/21/2025 12:00 AM
Target Date:

Deployment

To track releases associated with this work item, go to [Releases](#) and turn on deployment status reporting for Boards in your pipeline's Options menu. [Learn more about deployment status reporting](#)

Development

Add link
Link an Azure Repos commit, pull request or branch to see the status of your development. You can also create a branch to get started.

Feature 2.1- Search Functionality

FEATURE 104

104 Search Functionality

Simantini Patil | 0 Comments | Add Tag

State: New | Area: Flipkart Web Application
Reason: New | Iteration: Flipkart Web Application

Discussion

Add a comment. Use # to link a work item, @ to mention a person, or ! to link a pull request.

Classification

Value area: Business

Planning

Priority: 1 - High
Effort:
Business Value
Time Criticality
Start Date: 7/21/2025 12:00 AM
Target Date: 8/1/2025 12:00 AM

Deployment

To track releases associated with this work item, go to [Releases](#) and turn on deployment status reporting for Boards in your pipeline's Options menu. [Learn more about deployment status reporting](#)

Development

Add link
Link an Azure Repos commit, pull request or branch to see the status of your development. You can also create a branch to get started.

Related Work

Add link ▾
Parent
103 Product Search and Discovery Updated Just now • New

User Story 2.1: Keyword Search with Suggestions

The screenshot shows a Microsoft Azure DevOps User Story card. At the top, it says "NEW USER STORY *". The title is "Keyword Search with Suggestions". The author is "Simantini Patil". There are "0 Comments" and a "Save" button. Below the title, there are fields for "State" (New), "Reason" (New), "Area" (Flipkart Web Application), "Iteration" (Flipkart Web Application), and "Risk" (1 - High). The "Classification" section shows "Value area" (Business). The "Development" section has a note about linking to Azure Repos. The "Related Work" section lists a task titled "104 Search Functionality" with a status of "Updated 3m ago".

Acceptance Criteria:

- Suggestions appear in dropdown
- Relevant suggestions based on trending/popular searches
- Enter redirects to search results page

Discussion:

Add a comment. Use # to link a work item, @ to mention a person, or ! to link a pull request.

Task 2.1: Search bar UI

The screenshot shows a Microsoft Azure DevOps Task card. At the top, it says "NEW TASK *". The title is "Search bar UI". The author is "Simantini Patil". There are "0 Comments" and a "Save" button. Below the title, there are fields for "State" (New), "Reason" (New), "Area" (Flipkart Web Application), "Iteration" (Flipkart Web Application), and "Effort (Hours)". The "Implementation" section shows "Integrated in Build". The "Development" section has a note about linking to Azure Repos. The "Related Work" section lists a user story titled "107 Keyword Search with Suggestions" with a status of "Updated 2m ago".

Comments:

Add a comment. Use # to link a work item, @ to mention a person, or ! to link a pull request.

EPIC 1: Home Page Experience

The screenshot shows a Microsoft Azure DevOps EPIC card. At the top, it says "86 Home Page Experience". The author is "Simantini Patil". There are "0 New" items and a "Flipkart Web Application" filter. Below the title, there are three tasks listed:

Order	Title	Author	Status	Area
89	Category Shortcuts	Simantini Patil	New	Flipkart Web Application
88	Main Promotional Banner	Simantini Patil	New	Flipkart Web Application
87	Top Navigation Bar	Simantini Patil	New	Flipkart Web Application

User Stories for Features in EPIC 1:

92		Display Major Product Categories	Simantini Patil	● New	Flipkart Web Application
91		Auto-Rotating Banner with Offers	Simantini Patil	● New	Flipkart Web Application
90		Implement Persistent Header	Simantini Patil	● New	Flipkart Web Application

Tasks for User Stories of Features in EPIC 1:

102		UI test on various screen sizes	Simantini Patil	● New	Flipkart Web Application
101		Link categories to listing pages	Simantini Patil	● New	Flipkart Web Application
100		Create reusable category icon component	Simantini Patil	● New	Flipkart Web Application
99		Navigation & click tracking	Simantini Patil	● New	Flipkart Web Application
98		Dynamic banner fetch from API	Simantini Patil	● New	Flipkart Web Application
97		Carousel component	Simantini Patil	● New	Flipkart Web Application
96		Mobile responsiveness check	Simantini Patil	● New	Flipkart Web Application
95		Connect cart and profile routes	Simantini Patil	● New	Flipkart Web Application
94		Implement sticky behavior	Simantini Patil	● New	Flipkart Web Application
93		UI Design of top bar	Simantini Patil	● New	Flipkart Web Application

EPIC 2: Product Search & Discovery

103		Product Search and Discovery	Simantini Patil	● New	Flipkart Web Application
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Features in EPIC 2:

106		Product Sorting	Simantini Patil	● New	Flipkart Web Application
105		Filtered Product Listing	Simantini Patil	● New	Flipkart Web Application
104		Search Functionality	Simantini Patil	● New	Flipkart Web Application

User Stories for Features in EPIC 2:

109		Sort Products by Price, Ratings	Simantini Patil	● New	Flipkart Web Application
108		Apply Filters on Search Results	Simantini Patil	● New	Flipkart Web Application
107		Keyword Search with Suggestions	Simantini Patil	● New	Flipkart Web Application

Tasks for User Stories of Features in EPIC 2:

119	<input checked="" type="checkbox"/> UI integration on results page	 Simantini Patil	● New	Flipkart Web Application
118	<input checked="" type="checkbox"/> Implement backend sort query	 Simantini Patil	● New	Flipkart Web Application
117	<input checked="" type="checkbox"/> Create dropdown for sorting	 Simantini Patil	● New	Flipkart Web Application
116	<input checked="" type="checkbox"/> Real-time result update	 Simantini Patil	● New	Flipkart Web Application
115	<input checked="" type="checkbox"/> Backend filtering logic	 Simantini Patil	● New	Flipkart Web Application
114	<input checked="" type="checkbox"/> Filter sidebar component	 Simantini Patil	● New	Flipkart Web Application
113	<input checked="" type="checkbox"/> Result page redirection	 Simantini Patil	● New	Flipkart Web Application
112	<input checked="" type="checkbox"/> Autocomplete suggestions with debounce	 Simantini Patil	● New	Flipkart Web Application
111	<input checked="" type="checkbox"/> Backend query optimization	 Simantini Patil	● New	Flipkart Web Application
110	<input checked="" type="checkbox"/> Search bar UI	 Simantini Patil	● New	Flipkart Web Application
...		 Simantini Patil	● New	Flipkart Web Application

Epic 3: Product Detail Page (PDP)

Displays comprehensive product information to help users make informed buying decisions.

Feature 3.1: Product Information Display

Showcases core product data including title, price, offers, specifications, delivery details, and seller information.

User Story 3.1.1: Display Product Details

As a user, I want to see product title, price, and specifications so that I can evaluate the product.

Tasks:

- **Design layout for product title, price, and description**
- **Integrate product data from backend**
- **Show delivery date and seller details**
- **Implement offer badges and stock availability**

Feature 3.2: Product Media Gallery

Allows users to view high-resolution images of the product with zoom and image switching features.

User Story 3.2.1: Enable Image Zoom and Carousel

As a user, I want to browse multiple product images and zoom in for detail.

Tasks:

- **Create image carousel with thumbnails**
- **Add zoom-on-hover functionality**
- **Enable full-screen mode on click**
- **Lazy-load high-resolution images**

Feature 3.3: Ratings & Reviews

Provides customer ratings and detailed reviews to build trust and confidence.

User Story 3.3.1: Show Ratings and Customer Reviews

As a user, I want to read real user feedback to decide whether to buy a product.

Tasks:

- **Display overall star rating**
- **Fetch and render individual reviews**
- **Add “Helpful” vote button**
- **Implement review filters (e.g., 5 stars only)**

Epic 4: Cart and Wishlist

Enables users to manage selected products for purchase or future reference.

Feature 4.1: Cart Operations

Manages all cart-related functions including adding, updating, and removing products.

User Story 4.1.1: Add Product to Cart

As a user, I want to add items to the cart so I can purchase them later.

Tasks:

- **Add "Add to Cart" button on PDP and listings**
- **Store product details in cart session**
- **Show cart count update in header**
- **Display confirmation popup**

User Story 4.1.2: Modify Quantity or Remove from Cart

As a user, I want to change item quantity or delete items from my cart.

Tasks:

- **Create quantity stepper component (+/-)**
- **Implement remove button**
- **Recalculate total price on change**
- **Update backend cart data**

Feature 4.2: Wishlist Management

Enables users to save products for future interest and track them easily.

User Story 4.2.1: Add/Remove from Wishlist

As a user, I want to save or unsave items to my wishlist.

Tasks:

- Add heart icon toggle on product cards
- Link wishlist to user account
- Create wishlist page
- Add "Move to Cart" option

Epic 5: Checkout and Address Management

Facilitates finalizing the order by managing delivery address and order summary.

Feature 5.1: Address Book

Allows users to add, edit, delete, and save delivery addresses.

User Story 5.1.1: Add or Edit Delivery Address

As a user, I want to manage multiple addresses to use them during checkout.

Tasks:

- Build address input form
- Implement validations (e.g., pin code, phone number)
- Add functionality to edit and delete
- Save address to backend

Feature 5.2: Order Summary Review

Displays the full breakdown of the user's cart and delivery info before payment.

User Story 5.2.1: Show Order Review Page

As a user, I want to see a final summary of my order to confirm everything is correct.

Tasks:

- List all cart items with price
- Show delivery address block
- Add edit buttons for address/cart
- Calculate grand total with taxes

Epic 6: Payment Integration

Ensures secure payment experience with multiple payment options and offers.

Feature 6.1: Multiple Payment Options

Provides UPI, cards, wallets, EMI, and net banking as secure payment methods.

User Story 6.1.1: Choose Payment Method and Pay

As a user, I want to select a preferred payment mode to place my order.

Tasks:

- **Design payment selection screen**
- **Integrate payment gateway SDK**
- **Handle success/failure callbacks**
- **Store payment status in backend**

Feature 6.2: EMI and Wallet Offers

Displays eligible EMI plans and wallet-based discounts during checkout.

User Story 6.2.1: Show Offers Based on Payment Type

As a user, I want to see relevant offers like EMI or cashback on selecting certain payment options.

Tasks:

- **Fetch offers from backend based on bank or wallet**
- **Show EMI breakdown**
- **Link offer T&C popup**
- **Highlight best offers visually**

Epic 7: Order Tracking and Returns

Lets users track deliveries and request returns or refunds when needed.

Feature 7.1: Live Order Tracking

Provides step-by-step tracking of orders including shipment, dispatch, and delivery.

User Story 7.1.1: View Real-Time Order Status

As a user, I want to track where my order is so I know when it will arrive.

Tasks:

- **Connect to courier tracking API**
- **Create visual tracking timeline**
- **Show estimated delivery date**
- **Add support contact for delays**

Feature 7.2: Return/Refund Management

Enables users to initiate product returns and get refunds for eligible orders.

User Story 7.2.1: Request Product Return or Refund

As a user, I want to return a damaged or incorrect product easily.

Tasks:

- **Build return request form**

- **Capture reason, upload photo (optional)**
- **Connect to return management API**
- **Update return progress on timeline**

Epic 8: User Profile and Login

Manages user accounts, login/authentication, and personal profile settings.

Feature 8.1: OTP-Based Login

Allows secure authentication using mobile number and one-time password.

User Story 8.1.1: Log in with Mobile and OTP

As a user, I want to log in using my phone number and OTP so I don't need to remember a password.

Tasks:

- **Create mobile number input screen**
- **Send OTP request via backend**
- **Verify OTP and log in**
- **Store login session/token securely**

Feature 8.2: Manage Profile Information

Lets users view and update their personal information and contact details.

User Story 8.2.1: Update Personal Profile

As a user, I want to edit my name, gender, and contact info to keep my account up to date.

Tasks:

- **Build editable profile form**
- **Fetch user data from backend**
- **Save changes via API**
- **Show success/error confirmation**

❖ Work Item Hierarchy for Flipkart Web Application :

📦 Epic 1: Home Page Experience

| └─ 🎨 Feature 1.1: Top Navigation Bar

| | └─ 📈 User Story 1.1.1: Implement Persistent Header

| | | └─ Task: UI Design of top bar

| | | └─ Task: Implement sticky behavior

| | | └─ Task: Connect cart and profile routes

| | | └─ Task: Mobile responsiveness check

- └──  Feature 1.2: Main Promotional Banner
 - | └──  User Story 1.2.1: Auto-Rotating Banner with Offers
 - | └── Task: Carousel component
 - | └── Task: Dynamic banner fetch from API
 - | └── Task: Navigation & click tracking
- └──  Feature 1.3: Category Shortcuts (Icons)
 - └──  User Story 1.3.1: Display Major Product Categories
 - | └── Task: Create reusable category icon component
 - | └── Task: Link categories to listing pages
 - | └── Task: UI test on various screen sizes
- 📦 Epic 2: Product Search and Discovery
 - └──  Feature 2.1: Search Functionality
 - | └──  User Story 2.1.1: Keyword Search with Suggestions
 - | └── Task: Search bar UI
 - | └── Task: Backend query optimization
 - | └── Task: Autocomplete suggestions with debounce
 - | └── Task: Result page redirection
 - └──  Feature 2.2: Filtered Product Listing
 - | └──  User Story 2.2.1: Apply Filters on Search Results
 - | └── Task: Filter sidebar component
 - | └── Task: Backend filtering logic
 - | └── Task: Real-time result update
 - └──  Feature 2.3: Product Sorting
 - └──  User Story 2.3.1: Sort Products by Price, Ratings
 - | └── Task: Create dropdown for sorting
 - | └── Task: Implement backend sort query
 - | └── Task: UI integration on results page
- 📦 Epic 3: Product Detail Page (PDP)
 - └──  Feature 3.1: Product Information Display
 - | └──  User Story 3.1.1: Display Product Details
 - | └── Task: Design layout for title, price, description

- | | └── Task: Integrate product data from backend
- | | └── Task: Show delivery and seller info
- | | └── Task: Implement offers and stock display
- | └──  Feature 3.2: Product Media Gallery
 - | └──  User Story 3.2.1: Enable Image Zoom and Carousel
 - | | └── Task: Create image carousel with thumbnails
 - | | └── Task: Add zoom-on-hover feature
 - | | └── Task: Enable full-screen mode
 - | | └── Task: Lazy-load images
- | └──  Feature 3.3: Ratings & Reviews
 - | └──  User Story 3.3.1: Show Ratings and Customer Reviews
 - | | └── Task: Display star ratings
 - | | └── Task: Render user reviews
 - | | └── Task: Add "Helpful" voting
 - | | └── Task: Filter reviews by rating

Epic 4: Cart and Wishlist

- | └──  Feature 4.1: Cart Operations
 - | | └──  User Story 4.1.1: Add Product to Cart
 - | | | └── Task: Add "Add to Cart" button
 - | | | └── Task: Store product in session
 - | | | └── Task: Update cart icon count
 - | | └── Task: Show confirmation popup
 - | | └──  User Story 4.1.2: Modify Quantity or Remove from Cart
 - | | | └── Task: Quantity stepper (+/-)
 - | | | └── Task: Remove button logic
 - | | | └── Task: Recalculate total price
 - | | | └── Task: Update backend data
- | └──  Feature 4.2: Wishlist Management
 - | └──  User Story 4.2.1: Add/Remove from Wishlist
 - | | └── Task: Heart icon toggle
 - | | └── Task: Link wishlist to user

| └─ Task: Create wishlist page

| └─ Task: Add "Move to Cart" option

📦 Epic 5: Checkout and Address Management

| └─ 🎨 Feature 5.1: Address Book

| | └─ 📜 User Story 5.1.1: Add or Edit Delivery Address

| | └─ Task: Create address form

| | └─ Task: Add input validations

| | └─ Task: Edit/delete options

| | └─ Task: Store in backend

| └─ 🎨 Feature 5.2: Order Summary Review

| | └─ 📜 User Story 5.2.1: Show Order Review Page

| | └─ Task: List items with price

| | └─ Task: Show delivery address

| | └─ Task: Add "Edit" buttons

| | └─ Task: Calculate grand total

📦 Epic 6: Payment Integration

| └─ 🎨 Feature 6.1: Multiple Payment Options

| | └─ 📜 User Story 6.1.1: Choose Payment Method and Pay

| | └─ Task: Design payment screen

| | └─ Task: Integrate gateway SDK

| | └─ Task: Handle payment callbacks

| | └─ Task: Update backend status

| └─ 🎨 Feature 6.2: EMI and Wallet Offers

| | └─ 📜 User Story 6.2.1: Show Offers Based on Payment Type

| | └─ Task: Fetch offer data

| | └─ Task: Display EMI breakdown

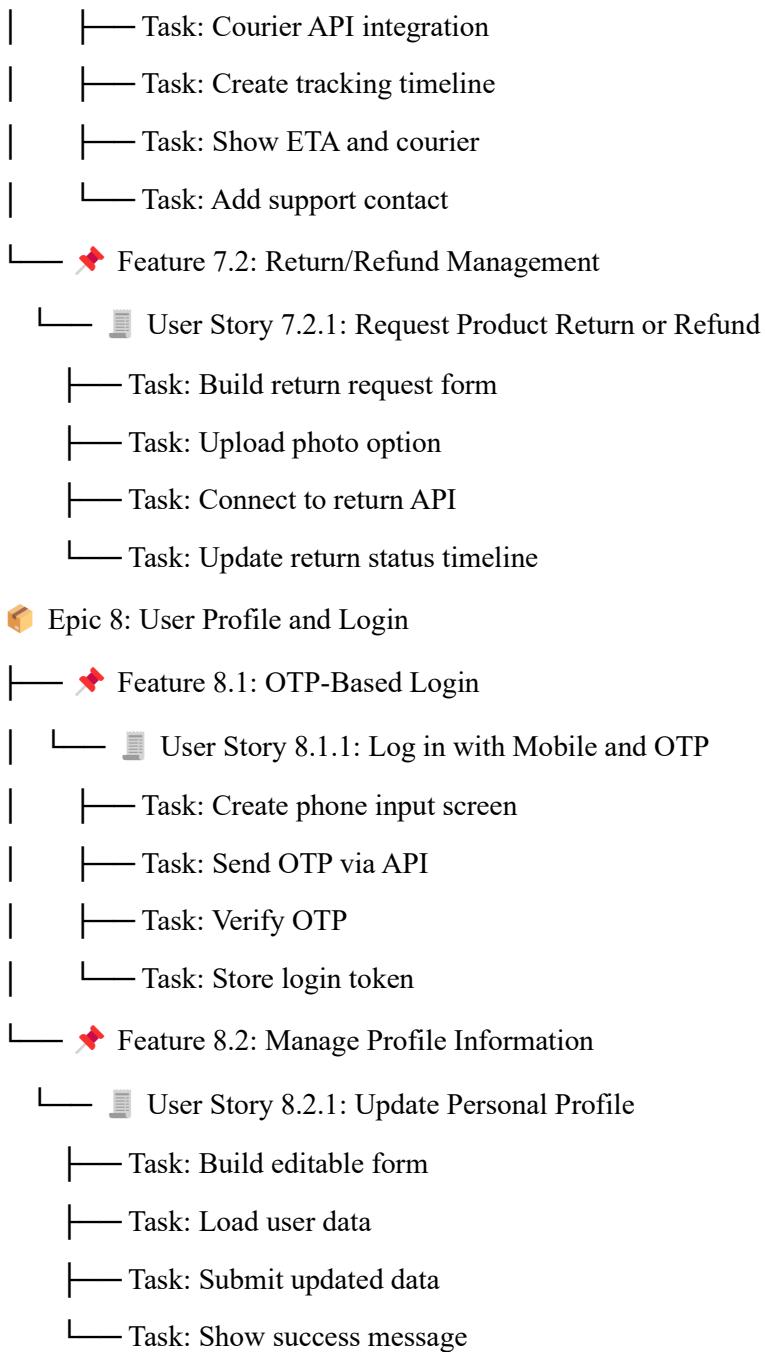
| | └─ Task: Link offer T&Cs

| | └─ Task: Highlight best offer

📦 Epic 7: Order Tracking and Returns

| └─ 🎨 Feature 7.1: Live Order Tracking

| | └─ 📜 User Story 7.1.1: View Real-Time Order Status



❖ Conclusion

The Flipkart Web Application (Customer View) is a large-scale, modular e-commerce platform designed to deliver a seamless shopping experience. This document systematically breaks down the end-user journey into clearly defined Epics, Features, User Stories, and Development Tasks.

By organizing the product functionalities into these Agile artifacts, we ensure:

- Clear visibility of user-centric needs
- Improved collaboration between design, development, and testing teams
- Scalable task management across sprints