HCI Lab Assignment 3
Mobile App Usability Test + Cognitive Walkthrough

Your Name

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Aim

To evaluate the usability of the Flipkart mobile application using heuristic evaluation and cognitive walkthrough.

Objectives

1. Select a mobile app (Flipkart).

2. Define 5 common user tasks.

3. Conduct usability testing with 2 first-time users.

4. Perform a cognitive walkthrough for onboarding.

5. Document confusion points and propose design changes.

6. Compare heuristic and walkthrough findings.

User Tasks

1. Search for a product (e.g., "iPhone 15").

2. Apply filters (brand, price range, rating).

3. Add product to cart.

4. Proceed to checkout and review payment options.

5. Track an existing order.

Usability Testing Observations

Task	User 1 Observation	User 2 Observation
Search product	Found search bar easily	Initially scrolled homepage before noticing search icon
Apply filters	Could apply brand filter but missed rating option	Took time to locate price filter
Add to cart	Clear and quick process	Confused between "Buy Now" and "Add to Cart"
Checkout	Smooth till payment screen	Confused by too many payment options
Track order	Found under "Orders"	Looked in "Account" first

Cognitive Walkthrough (Onboarding)

- **App Launch:** Too many promotional popups at the start.

- **Account Creation:** OTP login is simple but social login options are hidden.

- **Homepage:** Overcrowded with offers, new users may miss the search bar.

- **Navigation:** Multiple categories (Grocery, Fashion, Electronics) may overwhelm new users.

Heuristic Evaluation (Nielsen's 10 Heuristics)

Heuristic	Observation	Severity
Visibility of system status	No clear loading indicators for filters	Medium
Consistency and standards	"Track Order" sometimes under Account, sometimes under Orders	High
User control and freedom	Hard to undo accidental "Buy Now" action	High
Recognition rather than recall	Filters hidden inside menus, requires recall	High
Aesthetic and minimal design	Homepage overcrowded with offers and ads	High

Suggested Design Changes

- Make search bar larger and fixed at top of homepage.

- Simplify filters with icons and default recommendations.

- Clearly differentiate "Buy Now" and "Add to Cart" with distinct colors.

- Group payment methods into categories (Wallets, UPI, Cards).

- Reduce homepage clutter by personalizing offers.

- Provide consistent access to "Track Order" from both Account and Home.

Annotated Screenshots

Comparison: Heuristic vs Walkthrough Findings

- **Common Issues:** Homepage clutter, confusing navigation.

- **Heuristic-specific:** Consistency, recognition vs recall problems.

- **Walkthrough-specific:** Onboarding confusion, checkout overwhelm.

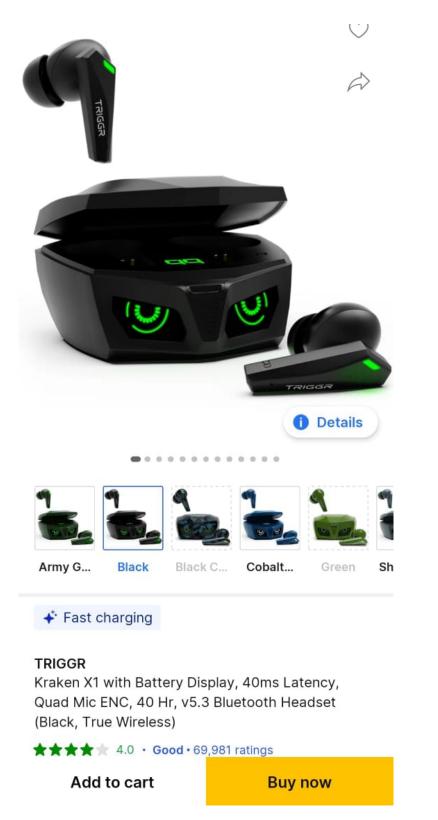Figure 1: Flipkart Homepage showing clutter and hidden search bar

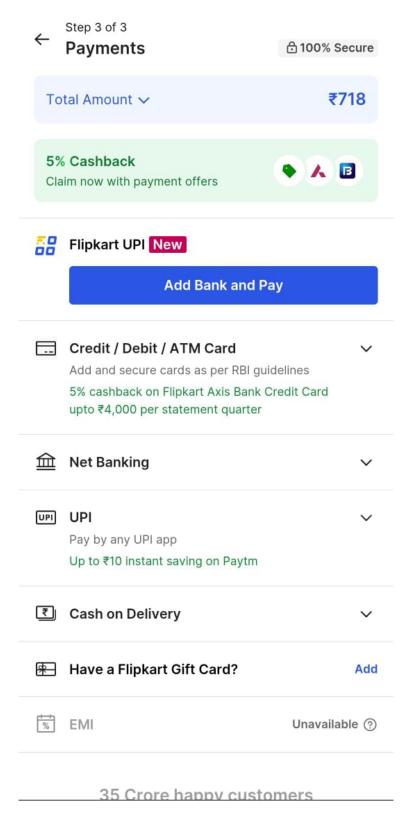Figure 2: Product Page showing "Buy Now" vs "Add to Cart" confusion

Figure 3: Checkout page showing too many payment options