

# Human-Computer Interaction (HCI) Project Report

## Case Study: Mobile App Redesign (Craigslist)

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**Course:** Human-Computer Interaction

**Date:** December 17, 2025

## 1. Team Members & Roles

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### 1.1 Mohamed Ahmed Mohamed Ibrahim Fathy -2023165

**Role:** Lead UI/UX Designer & Heuristic Analyst

**Responsibilities:**

- Conducted the full visual design and prototyping of the new interface.
- Performed the Heuristic Evaluation to identify specific usability violations (Accessibility, Fitts's Law, Cognitive Load).
- Executed the “Before & After” redesigns, ensuring WCAG compliance and modern aesthetic standards.

### 1.2 Loai Shaaban Ibrahim Aboyousef -2023160

**Role:** UX Researcher & Scope Definer & GitHub Creator

**Responsibilities:**

- Conducted market research to identify high-traffic applications with severe usability issues.
- Selected the specific user flows and pages (Home, Search, Account) that required critical intervention.
- Collaborated on the design strategy, providing feedback on layout choices and feature necessity to ensure the solution met user needs.

## 2. Project Rationale: Why Craigslist?

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Our team focused on solving a realistic, high-impact problem rather than creating a theoretical concept. We sought an application that is integral to millions of users' daily lives but creates significant friction due to poor design.

### The “Paradox of Success”

Through our research, we identified Craigslist as a unique digital anomaly.

- **Market Dominance:** It remains the undisputed #1 classifieds platform in the United States and Canada.
- **Massive Traffic:** The platform generates over **250 Million visits per month** and billions of page views.
- **The Problem:** Despite this elite-level traffic, the mobile application features a design language stuck in the mid-1990s. It suffers from severe accessibility failures, tiny touch targets, and a lack of visual hierarchy.

**Conclusion:** We chose Craigslist because it offered the greatest opportunity for impact—improving the experience for a massive existing user base by applying modern HCI principles.

### 3. Methodology: Scientific Design Principles

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We did not simply “beautify” the app; we applied core HCI theories to solve functional problems:

- **Fitts’s Law:** We expanded touch targets (buttons and cards) to fit the “Thumb Zone” for mobile ergonomics.
- **Gestalt Principles:** We used the Law of Proximity and Common Region to group related information (like Price and Features) into cards.
- **Cognitive Load Theory:** We replaced dense “walls of text” with icons (Dual Coding) to speed up information processing.
- **WCAG Accessibility:** We corrected contrast ratios (changing dark purple text to white/bright) to ensure inclusivity for visually impaired users.

### 4. Presentation Structure Overview

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The attached slide deck serves as a visual walkthrough of our redesign process. It is structured to tell a compelling story of transformation:

#### 4.1 Part 1: The Hook & Context (Slides 1–4)

These opening slides establish the narrative. We highlight the contrast between modern hardware (iPhone 15) and Craigslist’s archaic design. We present the data (250M+ visits) to justify the redesign’s importance. We introduce the concept of “Moving from Chaos to Order” using abstract imagery.

#### 4.2 Part 2: The “Before & After” Analysis (Slides 5–24)

The core of the presentation follows a strict comparative format. For every key screen (Welcome, Home, Search, Details, Account), we display the **Original Design** (The Problem) alongside our **Redesign** (The Solution). Each comparison includes detailed annotations explaining the specific HCI violations found and how our design rectified them.

#### 4.3 Part 3: Measuring Success (Slide 25)

We conclude by defining how success would be measured in a real-world scenario (e.g., Task Completion Time, Error Rate reduction, and System Usability Scale scores).

### 5. Final Conclusion

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This project demonstrates that legacy applications can be modernized without losing their core utility. By prioritizing the user’s cognitive limits and physical ergonomics, we transformed Craigslist from a “digital relic” into a functional, accessible, and modern mobile experience.