Spotify Redesign

HCI Principles & User-Centered Research Report

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Project Overview

Transitioning from system-oriented workflows to human-perceptual and cognitive-driven interaction design.

Home Screen (User-Centered + Task-Oriented)

- **Navigation Reform:** Matches user tasks over business goals, prioritizing content discovery and recent items.
- **Visual Recognition:** Card-based interfaces facilitate immediate recognition of playlists and artists.
- **Reduced Cognitive Load:** Simplified architecture minimizes scanning effort and decision paralysis.

Now Playing (User-Centered + Task-Oriented)

- **Visual Priority:** Primary controls (Play/Pause) are visually emphasized via high-contrast scaling and color.
- **Contrast Integrity:** Improved readability with structured backgrounds, ensuring WCAG compliance for text.
- **Task Speed:** Logical placement of secondary controls allows for faster task execution and reduced error rates.

Library (Recognition-Based + Task-Oriented)

- **Grid Architecture:** Replaced dense text lists with visual album grids to support rapid visual recognition.
- **Fitts's Law:** Large touch targets strategically placed within the primary "Thumb Zone" for mobile ergonomics.
- **Information Scent:** Clear visual cues lead users directly to their desired content categories.

Artist Page (Recognition-Based + Task-Oriented)

- **Spatial Hierarchy:** Information organized by frequency of use, placing popular tracks at the visual starting point.
- **Album Card Cards:** Uses album artwork to facilitate memory-free recognition of discography.
- **Action Discoverability:** High-priority buttons (Shuffle/Follow) are immediately visible without scrolling.

Profile (Activity-Oriented + Recognition-Based)

- **Structured Data:** User stats and activity logs are mapped to structured layouts for rapid interpretation.
- **Social Visibility:** Encourages social interaction by surfacing "Find Friend" and "Share" features as top-level actions.
- **System Feedback:** Constant visibility of system status regarding following states and active sessions.

Lyrics Page (User-Centered + Activity-Oriented)

- **Active State:** High-contrast white text for the active lyric line provides instant focus and state awareness.
- **Persistent Control Card:** Playback controls remain accessible, preventing context loss while interacting with lyrics.
- **Synchronized Awareness:** Bridges the gap between auditory output and visual confirmation.

History Feature (Recognition-Based + Task-Oriented)

- **Eliminating Recall:** Users browse past activity passively rather than having to remember specific song titles.
- **Natural Interaction:** Supports the human psychological pattern of repetitive music consumption.
- **Conservation of Energy:** Minimizes cognitive friction required to re-engage with content.

Performance Evaluation vs. Original Design

Research suggests User-Centered Design significantly outperforms System-Oriented UIs in mobile media contexts.

Conclusion

- ✓ Strategy: **User-Centered Design (UCD)**
- ✓ Principle: **Recognition over Recall**
- ✓ Goal: **Cognitive & Perceptual Ergonomics**

Thank You!

Questions & Discussion

Spotify HCI Application Redesign Project