**CIS 2170 - Lab 5**

**Soohwan Kim**

**1349765**

**Lab Section 1**

**Mar 6, 2025**

**Part 1**

**Usability**

When I hear the term “usability”, first thing that pops up in my head is how easy to use a certain thing or how versatile it is. However, if I think about this matter in a design perspective, I think it means how intuitive it is for users to identify things in UI.

Uber: A Positive Example of Usability

Uber exemplifies good usability due to its intuitive design, clear interface, and smooth user experience. According to Usability 101, usability is defined by five key components: learnability, efficiency, memorability, error reduction, and satisfaction. Uber effectively meets these criteria:

Learnability – New users can quickly understand how to book a ride without needing instructions. The onboarding process is minimal, and essential functions such as entering a destination, selecting ride options, and confirming a trip are straightforward.

Efficiency – Once familiar with the app, users can book a ride in just a few taps. The app remembers frequently used locations, streamlining the process further.

Memorability – Even after a long period of inactivity, users can easily return to the app and book a ride without confusion due to the consistent and predictable interface.

Error Reduction – The app minimizes potential errors by providing fare estimates, real-time tracking, and clear ride details. Users receive confirmation prompts before booking and alerts if an address is incomplete or incorrect.

Satisfaction – The visual design of Uber plays a key role in its usability. Its color scheme and layout design are well-structured, making key actions easy to find. The real-time tracking feature further enhances user satisfaction by providing transparency on the ride’s arrival and progress.

Uber's strong usability ensures a seamless experience, making it a prime example of well-designed software that aligns with usability best practices.

Amazon: A Poor Example of Usability

In contrast, Amazon's interface often struggles with usability due to information overload and complex navigation. While Amazon is feature-rich and offers a vast selection of products, its interface does not effectively align with usability principles:

Learnability – New users may struggle with navigating the website due to excessive menus, numerous recommendations, and cluttered pages filled with advertisements and promotions.

Efficiency – The large number of options, buttons, and filters can slow down the shopping process. Users often have to sift through unnecessary details to complete a purchase.

Memorability – Returning users may struggle to find specific features, such as order tracking or account settings, due to inconsistent placement of buttons and frequent layout changes.

Error Reduction – The website can be overwhelming, leading to mistakes such as selecting incorrect product variations or missing important details about a purchase. Additionally, misleading product listings from third-party sellers can contribute to user frustration.

Satisfaction – While Amazon provides extensive functionality, its hectic and visually crowded layout reduces user satisfaction. The homepage is often overwhelming, filled with multiple banners, promotions, and recommendations, which can make it difficult for users to focus on their primary shopping goal.

**Usability Testing**

To improve the usability and enjoyment of our “Fun Light Switch” concept, we could run a moderated in-person test where participants interact with a physical prototype of the switch in a mock-up environment. The facilitator would prompt users to turn off the lights within the given time to avoid the annoying music, as well as highlight the money-saved statistics. This think-aloud protocol would allow us to observe any confusion or difficulties and to gather direct feedback about what users find motivating or frustrating. We could then refine aspects such as the placement of the countdown indicator, the timing of musical cues, or the clarity of cost-saving information.

We would be less likely to use methods such as eye tracking or diary studies for this project. Eye tracking would be complex and less meaningful in a physical-switch context (compared to a traditional screen interface), and diary studies wouldn’t be as useful because the idea hinges on quick, in-the-moment interactions rather than extended usage over time. By focusing on simple, direct user testing (particularly with a prototype), we could gather practical, real-world insights early and make iterative design changes to ensure the switch remains intuitive, engaging, and fun.

**Best Method We Chose**