Magic Mirror

Introduction

Magic mirror is a smart touch-interactive mirror that can be placed outside of a dressing room in a retail store to improve the in person shopping experience by quickly finding items tailored to a user's individual style and allowing them to quickly receive feedback. Personal style is an important part of how people present themselves, but it is notoriously difficult for people to find their perfect style, be confident in what they wear, and receive good feedback for improvement on their choices. We decided to tackle this problem for our target user, a single and ready to mingle young adult. Our team includes Falak Daud, Garrett Mar, Drew King, and Angela Eun. We each worked on conducting user research, planning and brainstorming the solution, and prototyping it, with Garrett lending his expertise with wireframing. Together, we came up with the idea of an interactive Magic Mirror.

Background

When it comes to fashion, there are hundreds of brands, styles, and trends available in a wide range of prices. Fashion also plays an important role in cultural expression, and thus there is a potential for conflict and tension because of these conflict sensitivities in the way people dress. Combine this with the difficulty of dating; first impressions make a huge difference and the clothing choices that individuals make can make a huge difference in the way potential partners perceive them. Fashion can affect morale, confidence, and esteem, and is a huge part of a person's identity and self-expression. Yet, people often feel confused and lost in the sea of possibilities. Because of this, many find the experience of shopping for clothes to be frustrating or demoralizing. We were passionate about solving this problem because we know many people who have this lack of confidence when it comes to fashion, and many of us can speak personally to the link between fashion and good first impressions. Thus, we chose this to be our problem area because we understood the ramifications of the issues here and had seen them affect people every day.

User Research

Our primary user group is young adults who are single and ready to mingle, and are looking to improve their personal style. As secondary users, we have clothing suppliers and designers, as well as retail employees. We had several methods of user research that we employed as the project went through various iterations at each stage. During ideation, we primarily conducted interviews with participants in our primary user group and used these results to inform our understanding of the problem space as a whole. From this initial foray into the problem space, we were able to distill the space into several different tasks. The tasks that we chose to address with our design were: buying clothes, finding fashion inspiration, and receiving feedback. These tasks led us to the idea of a Smart Mirror because it addresses each of them in turn. It allows our primary user group to easily shop for clothes through a virtual catalog and try them on in person. In addition, users can get feedback by sending pictures of their outfits to social media. The suggested items that the mirror displays act as inspiration for shoppers as well. After we developed an initial paper prototype, we conducted usability testing

with more users from our primary user group and performed heuristic evaluations on our design. From this, we developed a wireframe of our final Smart Mirror.

Prototypes & User Testing

One aspect of our paper prototype that we needed to improve was the inconsistency of error prevention and undoing actions. We standardized our back, close and edit buttons. We also wanted to improve the process of getting feedback on your outfit. We added a feature that connects to your facebook and opens a Facebook Live Stream where you can invite your friends to comment on things you are wearing and make suggestions on ways to improve your look. The users we used for the user testing were people that we knew that fit the category of single young adults that are trying to improve their fashion. From their perspective the actual usability was good but there were lots of comments on the look of the actual UI. There were some inconsistencies from page to page that we fixed and got more feedback about the icons we were using.

Project Retrospect

We learned that most people do want to improve their fashion but there are several things holding them back such as money, inspiration, and lack of confidence. A big constraint for our project was the idea of privacy. Our design involves having a camera around where people are changing clothes but it is specifically placed outside of the dressing room so the person has the privacy of not changing in front of the cameras. Another constraint was the ease of use. As online shopping is becoming bigger and bigger it is vital that shopping in person is both easy and fun. Our design is very simple to use and quick so that customers would rather use it than shop online. In the future our project can even better be used to get feedback and inspiration. There could be an added platform for people to buy, sell, or exchange used clothes so people can explore even more styles very affordably.

Contribution Statement:

Falak:
   ● Helped with the introduction, wrote the background and user research sections
Drew:
   ● Wrote the introduction, prototypes and retrospective
Garrett:
Angela: