DECO3200
Portfolio

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Introduction

Issue: The experience of the pedestrian button is frustrating
Target audience: All predestrian in Sydney

Final concept/Prototype:

Our final concept is a physical game controlled by a button. The Core functionality is that the koala is hanging on the pillar by using a string. When someone presses the button five times when the traffic light is red, the stepper motor will turn one round and the koala will go up one step. Every five times the button press, the stepper motor will turn one round and the koala will be lifted.
The interface in the iPad shows the percentage pedestrian has reached, and also a figure countdown. Each time the button press, the percentage will increase.
If the pedestrian is able to reach 100% within the specified time, the user wins the game. The interface will show that you have won and played celebratory music. Meanwhile, the koala will go back to the starting point. If the 60-second countdown ends and the progress bar does not reach 100%, the screen will display a failure interface. At the same time, the koala will go back to the starting point as well. When the pedestrian traffic light turns to green, the screen will turn to a picture shows that “Please Cross the Street”. As people will focus on the game and the screen while playing, it will remind people tp cross the street at the right time and it may reduce the number of jaywalking.
Moreover, the length of time the game can be played depends on the duration of the traffic lights. When the pedestrian traffic light turns to green, the game cannot be played. When the user presses the button, the koala doesn't move either until the next red light. This is to prevent users from wasting time crossing the road because of the game.

Team Structure

Brief overview of team members and their roles.

Task	Contributors
Background research	All members
Building the low & high-fidelity prototype of the previous concepts	All members
User testing	All members
Purchasing	All members
Building the model in Dmaf	All members
Arduino and processing Coding	Siying Ma, Jiayu Ye
Designing the screen interface of the final prototype	Mengyu Li, Yiqi Liu
Filming the video	Siying Ma
Editing the video	Siying Ma
Report	Jiayu Ye, Yiqil Liu, Mengyu Li
Visual design	Siying Ma

Descriptions

In this project, I was mainly responsible for background research, building the low -fidelity prototype , high-fidelity prototype of the previous concept, user testing including questionnaire, interview, focus group, etc. Purchase model, buy the traffic light model, countdown divece,and botton. Build the model in DMAF, design the screen and interface for the final concept and write the reports. In the team, my role is mainly to investigate, design and produce. Just like the others in our group, we cooperate with each other.

Contributions

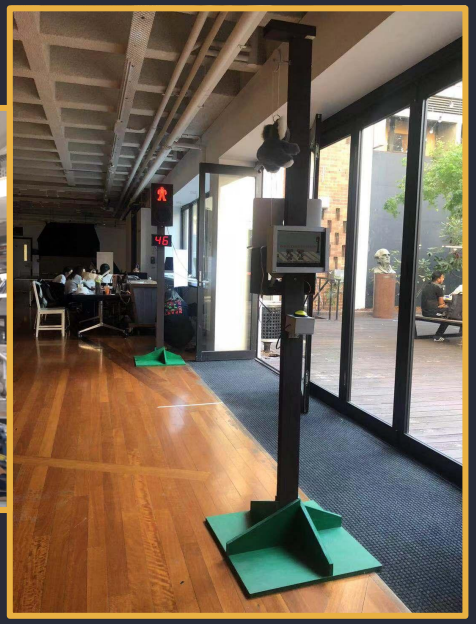
For the contributions I build the model of our first concept ,Ground Projection. After that, I conducted user tests on it, including questionnaire survey and interview and focus group.

Contributions

After the first round of user testing, we improved our concept. After that, I made an improved model and conducted user testing again, including questionnaire survey, interview and focus group. After sorting out the data, all of us collected the data and wrote it in the report.

Contributions

After several previous user tests, we designed our final concept and made the model in DMAF. Including the purchase of traffic lights model, buttons, countdown device, make the main pillars, brackets, physics games and so on.



Challenges

Overall, the semester went well. The members of our group are very happy to cooperate with each other. Everyone performed their respective duties without much conflict. If it is a challenge, it should be in user testing. Our goal in the first and second round of user testing is to interview 40 participants, which is a bit high. On the day of the test, I remember it was Thursday. We chose Wilkinson Building cafe as our location to test. There were not many people on that day. We first use Wechat to call all the friends we could find to the school, but still not enough. And then we chose to interview people who were in the rest area. It took us more than 3 hours to finish the user test that day. We were very tired but very happy that we achieved the goal.

Challenges

Another challenge was making final models. Making such a large model was a challenge for our group, and we asked Kris in DMAF for help. At first we didn't know where to start. With the help of the teacher, we began to saw wood, drive nails, and so on. It took us a long time. After the model was completed, we didn't know where to store the model, because we didn't want other students to see our model. Fortunately, our tutor agreed to store the model temporarily in their rest area, which helped us a lot!

Challenges

The last challenge we had was shooting video. Because we shot it three times. At first, we chose the cafe in Wilkinson Building as the shooting location. We moved the model down from homebase. There were a lot of people at the cafe that day, because it was the day before the exhibition, many groups were arranging their site and models. We started to try shooting, but the shooting effect was not ideal. There were too many people coming and going, the environment was too crowded, and the video shot was very messy. We decided to do it again another day. The second shooting was the day after the presentation, we were scheduled to gather at noon, this time we decided to shoot the location. We moved the model to the roadside to combine it with real traffic lights. The scene was set up very well, but when we started shooting, we found that the sun was too strong and the exposure was too heavy to shoot. We tried for a long time and finally decided to continue in the afternoon. When the sun was not strong enough at 6pm that day, we moved out the model again. This time, we successfully shot our film.

Final Reflection

Generally speaking, I think the cooperation this time is quite smooth. This is the third time for us to cooperate. We all cooperate very well and we all work hard. For this time, I think I did not collect comprehensive information in the background investigation, and the interview group was not broad enough in the user test. I hope I can do better next time.

As for the future development of our products, our group believes that we can continue to develop if possible.