Written summary

The purpose of my interaction is to look at the ways that you could look to make the process of getting in and out of the halls less time consuming and more efficient. Throughout this interaction, there were a few emotions experienced by Jakob from being happy in the 'easy-going' elements of the interaction to being a little more frustrated and angry due to the less efficient elements making the interaction more time consuming for Jakob. In this interaction, the elements involved is Jakob (the person), the keycard (used to scan/get in the building), and the scanner. There are some more notable and significant elements in my interaction including the queue of people waiting to get inside the building and the waiting process for the scanner to beep, opening the door. The elements that have the biggest influence on this interaction is the keycard and the scanner as this is a step in the process which decreases the overall efficiency of the interaction and causes the negative emotion.

There are only a few steps that are involved in this interaction however, there are added factors that keep these few steps from being an easy process due to the development of their designs. The first step (walk up to the door and locate scanner) is fairly straightforward so Jakob feels overly happy in this step of the interaction. However, due to the influence of the keycard and the scanner, there is an added factor of the queue of people waiting to get inside as its time consuming having to do the second step of the interaction which is to find and pull your keycard out of your pocket and then the third step which is to scan the keycard, making Jakob angry. The fourth step of the interaction is to wait for the beep of the scanner in which will open the door leading to the fifth step of the interaction which is when the door will unlock and open, which makes Jakob a little frustrated as he has to spend more time above waiting in the queue.

The pain point in this interaction is the factor of uni students having to remember their hall keycard everytime they go to uni in which could be frustrating as they already carry lots of things (books, laptops, etc) to uni and having to remember to bring one more thing could be a pain. This is because there are no substitutes or other ways of getting inside the hall due to the scanner only being able to pick up that one ID card. This is where I think this interaction could be improved where the alternative of having an app on blackboard where you have to press a button and the scanner recognizes you, could benefit Jakob. All Jakob has to do is (1.) Walk to the door, (2.) Open the app, (3.) Press the button, (4.) Enter the building, which is less time consuming and creates a more efficient interaction as students anyway carry their phones everywhere they go in which they are almost always gonna have access to the halls, making Jakob more happy throughout the interaction.

An experiment that inspired me to do this improvement for my interaction is an experiment which was carried out on mobile payment. This experiment had similar traits including having to open the app and scan your phone on the cash machine which is a less time-consuming process than getting your credit card out, swiping, and putting in your pin. Miller's law can be applied to this improvement as the button will be used as the 'keycard' to get inside the building so Jakob won't have to go through a series of taps or button clicking to get to the app. Hick's law is also applied to this improvement with the scanner picking up when you press the button and unlocking the door instead of the app notifying you that you have been

verified which could benefit Jakob if say he had to take a call or he had an emergency inside the building, in which he wouldn't have to stay on the app waiting for a notification.

Notes

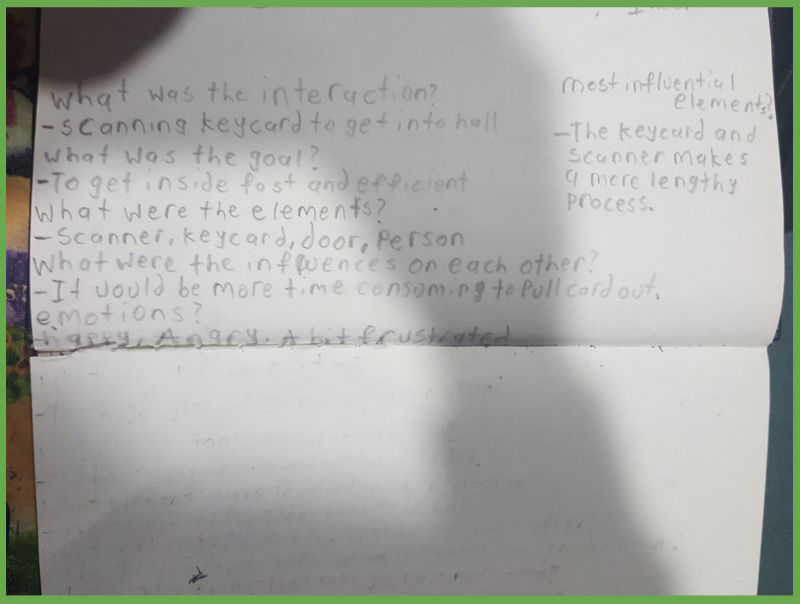
What is the goal of the interaction and what are the steps to reach the goal?

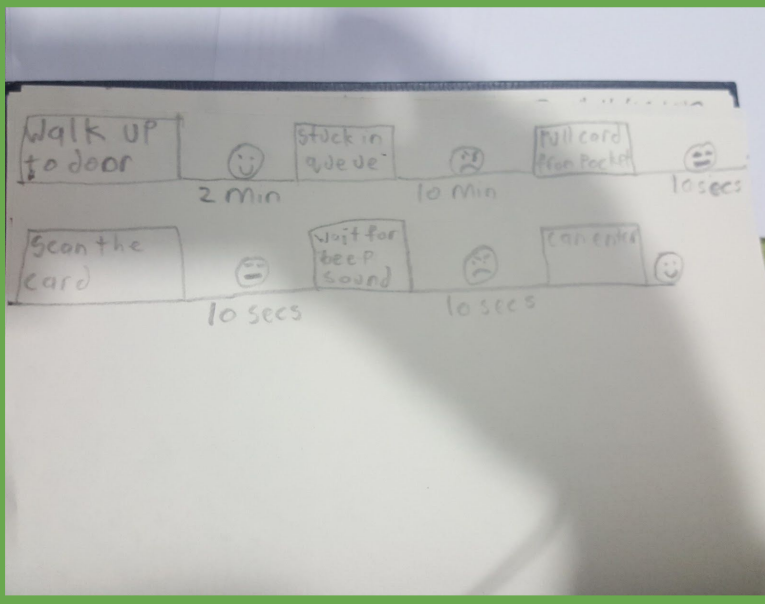
The goal of the interaction was to get inside of the building in which you needed to have a keycard in order to scan on the scanner in which the doors will open and you can enter the building. Without a keycard, you can't enter the building due to security as the 'halls' won't accept you if you don't have the special hallroom card.





1. Walk up to the door and find the scanner location (it has a blue light).
2. When you find the scanner, pull your hall keycard out from wherever it is.
3. Press the keycard against the scanner light (make sure to scan the back side of the card).
4. Once you scan the keycard, the light will make a sound which will cause the door to open.
5. You can enter through the door (goal has been reached).





Research of related experiment

An experiment that I found through research online that relates to my interaction is the experiment that was carried out in a San Francisco hotel in which they tested out using smartphones as room keys. The purpose of this experiment (or goal) was basically to benefit guests who may have had experiences where they have lost their key card or damaged it in some sort of way not allowing them to get into their room.

How this works is guests staying in the hotel have to download an app that the hotel provides specifically for this hotel and once they are given a room, the app gets allerted. Through this, all guests have to do when they get to their room is press the key icon on the app that they've downloaded on their smartphone in which gives a sound that allows for the door sensor to unlock the door. In steps this is basically: (Positive)

1. Go to front desk and download the app on your smartphone
2. Once checked in, and assigned a room, app gets alerted
3. Walk up to the door of the room and load the app on your smartphone
4. Press the key icon on the app and wait for the sound
5. Door gets unlocked and your free to walk in

This experiment relates to my interaction through the fact that even though different elements were used, in both situations, the influence that the elements had on the interaction were very similar and had almost the same goal of trying to get inside the building. This can be seen with the key card on the scanner in my interaction and the smartphone with the door sensor in this experiment. This can also be seen with the fact that the scanner in my interaction made a sound when the door was unlocking just like in this experiment where the sound from the app unlocked the door as well.

Research of the two principles I used

- Hick's Law - Shouldn't be more than 7 things on the screen. Purpose of the notification was to spend less time on the phone and instead show the content on the notification rather than the notification reeling you onto the app. Notifications on the blackberry / Facebook notifications
- Miller's Law - Making sure the user doesn't cram all the information into one section. An example of this is with an essay where instead of just one paragraph, we split it into multiple paragraphs which have different points. Another example of this is lectures & how they are all split up instead of one big lecture with different topics in it.

References

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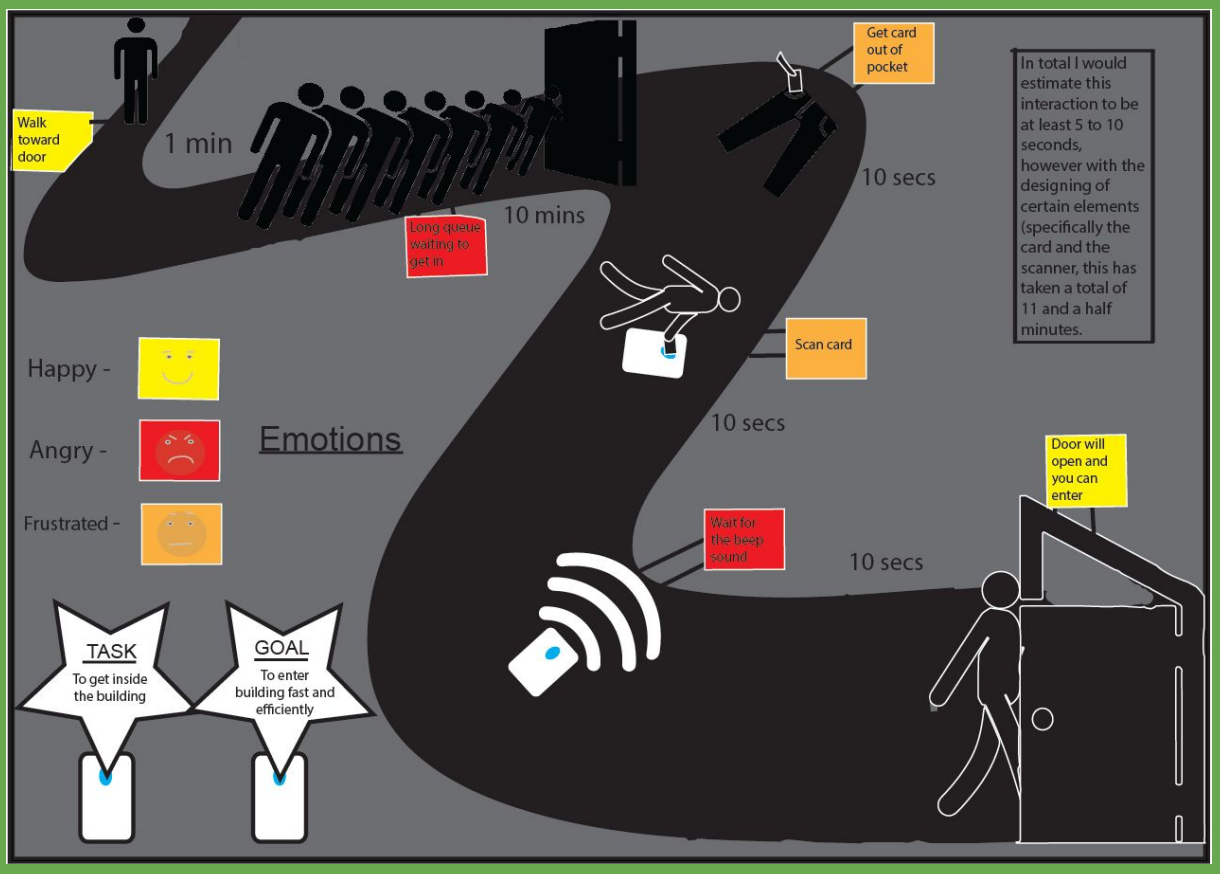
Journey map 1 - Original Interaction



Journey map 2 - Altered Interaction