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Project idea 1

1. One potential project idea that I have identified is that of improving the interfaces that an air passenger uses while travelling on a plane and combining them into one simple to use interface. The functions available could include controlling in-flight entertainment, controlling lighting, calling for assistance, controlling the air conditioning, ordering drinks or playing games. I feel this is a problem worth addressing as I have experienced poor user experience with controls provided on the airplanes that I have travelled on and feel that there is room for improvement.
2. The prospective users would include any travelling on the aircraft, so would include users of all ages, with differing technological experience as well as different backgrounds and cultures. The user will be stationary and will be using the interface as an individual while inactive, but the environment could be variable, in that there may be different levels of light when the user is interacting with the interface, or they could be distracted by other things around them. They will also be in close proximity to other passengers, and so the interaction should not disturb others. Air travellers could be expected to have differing physical, sensory and cognitive capabilities, and so this would need to be considered. Travellers may be frequent fliers, or nervous about travelling by air, which could affect their ease of use of the interface.
3. The improvements that I am aiming to make in this area are mostly concerned with safety and reducing the number of times things are done by accident. For example, in my experience it is easy to call for assistance when you really meant to turn on the light, or it is easy to nudge the light controls when they are located in the arm rest. An improved interaction in this area could provide a better flying experience overall.

**Word count: 307**

Project idea 2

1. Another potential project idea that I have identified is that of a ‘smart’ home controller app, which allows the user to control all their smart devices in one place. I feel this problem is worth addressing because as a user of smart home devices, I find the current user experience cumbersome, as I must log in to multiple apps to control various devices. My idea is to create one interface where a user may control multiple devices in their home, such as light bulbs, switches, the thermostat or the burglar alarm.
2. Many of the users of the app would probably have some technological experience, as they would have installed and controlled the smart devices in their home previous to using my solution. The users are likely to have differing physical and sensory capabilities which should be considered. I would not expect the user of the app to be particularly active while doing so, but as with any mobile app the user could be almost anywhere during use, so this should also be considered. Saying this, as the app is designed to control items within the home, it may predominantly be used inside said home.
3. The user experience improvement that I am aiming to make in this area is to provide a useful interface that does not currently exist, and would be of use to consumers. This would improve on the user experience of any existing solution by being less frustrating due to the ease of use, and by providing an interaction and service that will prove enriching to the user.

**Word count: 263**

Project idea 3

1. A third potential project that I have identified is that of redesigning the interface of a car park ticket machine. In my experience, and from questioning friends and family, this is an interaction which can currently cause frustration and irritation, and has scope to be improved. Instructions for current interactions are often not clear, meaning understanding of how to use the interface can be challenging., leading to a negative user experience.
2. Users of the interface would vary in age, experience and culture, and so the only real assumption I could make about a user would be that their age is within the legal age boundaries for driving a vehicle. I could also make further assumptions about the physical and cognitive capabilities of the user, as a person must have certain capabilities to drive a car. The user may be experiencing a feeling of pressure to get the task completed quickly to prevent a queue forming. The activity that is being carried out will be very focused to the one objective of purchasing a ticket in a single stationary spot. The user is very likely to be outside, depending on the location of the machine, and so could be subjected to different environmental conditions such as weather and light level.
3. The improvements that I am aiming to produce with this project are an increase in efficiency when purchasing a car parking ticket, and to allow users to complete the task of buying a ticket more effectively. My aim is to improve user experience by reducing the level of frustration experienced by users, and other users in the queues that sometimes form for these machines due to the current poor interface.

**Word count: 282**

Question 2

1. For the airplane interface project idea, I would not struggle to find users to test the interface, but I may face challenges when attempting to imitate the environment they would be in when interacting with the interface, which could mean tests may not be accurate. Prototypes for the interface could become quite complex, particularly those concerning the area of the in-flight entertainment offering, and so these could potentially need to be quite high-fidelity to mimic the interactions as closely as possible.

Concerning the smart home controller project idea, I would assume it would be fairly easy to find appropriate users to involve in the design process. Preferred users would be those with smart home products installed in their home, and fortunately I have access to such users. I envisage the use of both low-fidelity prototypes to collate initial layout ideas, and more high-tech prototypes to demonstrate the interaction more precisely. As the interface will be quite rich in features, I would produce code-based prototypes to mimic the final product as closely as possible. These prototypes will allow me to observe users' interactions with the potential designs.

If conducting the parking meter project, I do not think that I would struggle to find users, including those that had previous experience with other parking meter interfaces, meaning I could conduct meaningful tests. This interface would potentially be fairly simple as the activity being carried out is not overly complex, and as such the prototypes required could be straightforward. Saying this, the project would benefit from creating high fidelity prototypes to achieve a testing experience as close as possible to the real experience.

1. My preferred project would be to create an app for controlling the smart devices in a home, as this is a product that I would be very interested in using myself, and solves a problem that I have experienced and would like to find a solution for. I think the problem offers a level of complexity that will create an interesting project and allow me to investigate different aspects of interaction design, but the scope is not so large that it will become too complex. The production of the various prototypes that may be needed throughout the design process should be straightforward due to experience I have producing both low and high- fidelity prototypes in the past.

**Word count: 389**