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Lab 1

After deliberating with our group, we decided to create software for a universal ATM locater. We came to this decision after narrowing our choices down to what would be most useful for the ordinary person. Some of the ideas we proposed as a team included e-waste disposal area locater, public restroom locater, and the one we picked, a universal ATM locater. We realized that although there is a demand to locate e-waste disposal facilities and public bathrooms, an ATM locater would be most beneficial since every person takes out cash. Some businesses may not as of yet accept debit or credit transactions, so our group were cognizant to those businesses especially in these times where small-business need support to survive. Additionally, in regions other than big cities it is hard to find available ATMs so our product will attempt to solve this problem by locating available ATM machines closest to a person.

Our product design for a universal ATM locater was thoroughly discussed upon. Our client side will have a design search filter index by query for fees, distance, and bank type. This means that a user will be able to pick ATMs by several criterions like which ATMs have the lowest fee, which are closest distance to the user, and which will actually be accepted by the users bank. Our backend will have a cloud repository with data access objects to perform our queries. Lastly, our frontend will have a user-friendly UI so it will be easy to use for people that are not tech-savvy. We will also focus on designing this as a mobile application because users will most likely be on the move and away from their desktops.

Since creating this application will have several features, we decided it would be best if our large group was split into four groups composed of three members per group. This is because it is challenging to work in a large group and because it becomes much more difficult to communicate and collaborate with each other when there is a large number of people working together. Therefore, two groups will tackle a component in the backend and two more groups will tackle a component in the frontend. Choosing who will be on frontend and who will be on backend is determined by the skills and languages one possess and past experiences of working in a section. This could be for instance integrating with API’s in the backend or design and layout in the frontend. Responsibilities in the backend include determining where the application will be hosted, whether it will be solely cloud based or hybrid, and database scheme and layout. Responsibilities in the frontend include creating a balance between functional and aesthetic design, optimizing for maximum speed and scalability, and maintain design consistency throughout the application.

Splitting into sub-teams did make collaboration easier. We found that it was easier to communicate with each other because of how we split the groups. If a person needed help, a group-member would provide assistance because he/she would have knowledge of the problem since groups were created based on shared knowledge of the task. The only collaboration challenges were the initial introductions to each other because some of us were shy at first to talk to each other. However, when we did get started, it became more fluid and natural to talk to each other so that was not much of a difficult problem. Another challenge was coming to a general agreement when facing a problem. We found it was best to listen to one’s solution and if that didn’t work we would look to another group members solution. The advantages of collaborating together were effectively and efficiently solving problems and communicating with each other so we do not get stuck at a problem for a long time.