At the beginning of the discussion, one of the main objectives of this discussion that we decided to have on is to discuss on what kind of project we wanted to discuss upon, whether it's a program that we wanted to do or would it be an application software. The reason that we wanted to do an application software is that with the popularity of mobile terminal devices such as smartphones and ipads, people are gradually getting used to using APP clients to access the Internet. APP is playing an increasingly important role in people's lives as now we can just take out our phones and just open an app instantly and browse for our own needs. From there, we reached a consensus and decided to have a discussion on making an app.

The next topic is what kinds and types of app that we are going to discuss. One person came up with the idea of making an app consist of ATM locators. Even though we know that google map and other banking applications have this feature, we still think is a good idea since we are only discussing on how to produce such a product and its process. We came up with the idea that the application we are discussing should access the public APIs in order to locate any ATMs. By this, we think of using the Google Map APIs since it's more convenient. In addition to the app, it should also demonstrate which bank the ATM is affiliated with if it's applicable so that the user has more information on it. Furthermore, it should also demonstrate the options to allow users to filter out ATMs based on the distance that the user is located and also filters out any of the ATMs depending on the fees they might charge if they do not affiliate with any of the financial institutions that the user has. These are just a few of the most basic features that the discussion we have come up with. More features can be added if later discussions allowed.

Asides from this idea of making an application of universal ATM locators, we do, in fact, have other ideas about applications. Other ideas that were being discussed were also locators but with different meanings. One is the locator for e-waste disposal, e-waste describes discarded electrical or electronic devices. E-waste contains a list of chemicals that are harmful and toxic to people and the environment and therefore it's necessary to make sure they are taken care of. Another idea that we have is the locator for the public bathrooms as sometimes this can also be important. In the end, we came to a consensus and decided to focus the discussion on the ATMs locator as we believe these kinds of apps would serve more purpose to the community and have a larger number of users.

While we are on the discussion, I believe the discussion went very smoothly. Even though not everyone opened their mic and speak, we all do participate in the discussion by our own preferred mode of communication, whether it's discussing over voice or by discussing through the chatbox by texting. Everyone shared their ideas through various modes of communication and no awkwardness was found. Each member on the discussion found their own roles, some were discussing the ideas about the app, and some were takings notes regarding it through texting on the chatbox. By speaking of roles, during the middle of the discussion, one of our members came up with the idea that we might be able to split into different teams and that each respective team would be responsible for different components of the app, that includes the front end, the back end implementation of this application. The team for the front end is responsible for the visual elements of the application, they also determine the structure and design of the applications and ensures that the design is optimized. For the back-end team, they are responsible for first determining where the app

going to be hosted, whether it's cloud hosting or any other options that are available. They also discuss on choosing between the different options of virtual machines and servers. I believe that splitting the teams into different teams with different responsibilities would be very helpful in this case because, by that, each member can join to different teams that they are familiar or have experience with, which can in a way enhance the process of producing the app and ensuring the quality of the app.

  In the end, I believe that the discussion went very smoothly as no problems occurred. Everyone got the chance to present their ideas to others and that we can elaborate on them. The outcome was also pretty satisfactory as I see. Few of the advantages as I see of collaborative working is that it can promotes creativity thinkings as it can expands the directions of the project. It can also promote producticvity with this number of people involved, as long as they are working. By sharing each other's opinions and ideas, we are all learning together, which cannot be complished if we were working alone by ourselves. However, I do see that there might be some disadvantages for collaborative working in a large group of people, some includes that it might create complexity in the working environment, it can also divert energy and resources away from the actuai main objective. With these great number of opinions together, it can also become difficult for the team to come to a consensus. As what I see, it would just be a matter of personal preferrene of whether to work collaborative or just by themselves, there are, in fact, people who works productively and better if they work individually.