**Describe how you would apply source control in your development (Version Control)**

Source control can easily fit to the description as a backup of the application being developed. Although this may be the case, we as the developer have to treat it more than that and make sure to follow best practices when committing into our repository. One of the best practices is to always provide informative commit messages. The same as when we are writing code’s comments, commit messages must also be able to easily get the idea across of the committed lines of codes, method, or class. Another is to commit complete lines of codes. By that we mean to write codes that would be a complete method or class that has objectives in solving issues, bugs or adding new functionality.

In practice, android studio has already provided a great integrated source control tool, Git. This tool assisted greatly to create, either local or online, repository and also in branching and in merging once fully confident that newly added functionality is working and tested. This helped a lot especially when creating new screens/activity aside from adding methods and click event listeners.

**Explain the importance of source and version control both for individual development and developing in a team.**

The importance of source and version control in either individual or team development is not far from each other. Advantages and importance of individual source control can also be argued as important in team development but would have more outlined importance.

One of the importance of source control in individual development is the ability to track records of modifications. This reinforces the reusability of codes, reducing the duplication of methods implemented. Another would be the accessibility. Tools such as Git for source control allows us to have our source control in local or cloud therefore, empowering developers to continue the development in multiple places and devices. Moreover, source control enables development to have more exploration; gives developers room for experimenting their codes in finding better solutions and increasing efficiency in developing the application. Generally achieved through branching repositories.

On the side of the importance of source control in team development, aside from all the importance laid out above, collaboration is where the importance of source control is shown the most. In Agile methodology, each developer can be tasked to run iterations of each small feature of the application and source control enables them to merge their work together easily once those iterations are complete.

**Describe areas that are crucial to app optimisation and the tools and techniques you could use.**

Optimisation in android development is crucial since the device to support can have limited resources and unlike computers, hardware’s, if not usually, are not upgradable at all. There would also be the difficulty in building UI because the devices to support will have a very wide variety of sizes. Moreover, performance and battery consumption are very crucial since these factors mainly determine whether the app would be successful or not.

Although there may be a lot of challenges in optimisation, there are tools, algorithms and even the Android OS itself that can assist in optimising android apps that we develop. Firstly, the Android Studio programming language provides us great tools for monitoring memory, aside from the help of the Android OS garbage collector and to reduce GPU overdraw. Furthermore, we could also use algorithms to support this tool, writing efficient codes and spreading processes into multiple threads but keeping in mind to assign correct priority. Therefore, we must always keep in mind that in SDLC of android apps we consider wherever we can impose efficiency in utilising resources.