**Technology Stack**

Before deciding on what technologies to use for the application, the handles and scope of the app must be determined.

As the development of this application is part of the CO225 course, the language used to code the application is JAVA.

1. The application interacts with users and therefore needs a **User Interface (UI).**

To design the UI we will be using **Android Studio.**

Android studio is an integrated development environment for Android Application development.

With this tool kit, changes to the application can be made and pushed while the application is running.

An application built in Android studio is compiled into the APK format for submission to Google Play Store.

Q. Why Android Studio?

The code editor in android studio offers advanced code completion and great code analysis.

It allows you to start and test the app on various android device configurations as phones, tablets, android TV, etc.

It is also possible to simulate multi touch input.

It also provides templates which can be used in the development of an app. This makes it easier to add on to well established patterns.

Android studio provides lint checks (automated checking for programmatic and stylistic errors in the source code) across the application.

Most importantly it integrates with github so you can make changes to the code as a team.

1. The application must be able to store data entered by the user and therefore needs a **database.**

For the database we will be using MYSQL and to access the data we will be using sql queries.

1. For the back-end development of the application we will be using spring boot.

Spring tool gives comprehensive infrastructure support for developing JAVA applications.

The application’s logic, API development, etc will be performed using this framework.

High and well performing apps can be developed using POJOs (Plain Old Java Objects) using spring tool.

The reason we chose to work with spring tool is because of its focus on speed, simplicity, and productivity.

1. To test and verify the API we will be using postmen.

Using postman, we can create a request and test our API to see if the relevant element exists in the API to handle the request.

By doing so we can get better visibility into errors and will be able to debug them easily.

Thus, postman can be used to see how the API we have developed will run before the app is published.