# Implementation

Implementation is the deployment phase of design where a design is converted into a code. Implementation is carrying out the finished design structure which will later be converted into working product which fulfills the business requirements of client. Coding is the thing done during implementation. Implementation also includes development of functional and non-functional requirements of clients.

# Programming Language

Android is the most used operating system of the world and almost every smartphone has android with them. Android is also open source and anybody can develop a application for them as per their requirements. As android, being the most used operating system in the world, I wrote the application use Android Studio IDE and Java as a programming language. Java is the most popular language running over billions of devices around the world. Some of the reasons for developing android application are

1. Has large userbase
2. Has dedicated marketplace if I want to sell the product.
3. Official support by Google as Android is owned by Google.
4. Capable for performing almost any task on low requirement devices like android.
5. Easy to develop using IDE and readily available information on internet.

# Developing Environment

## Integrated Developing Environment (IDE)

For developing and testing the application Android Studio is used as IDE for java. Android Studio is easy to use and efficient for running android applications with the help of virtual device. We also can set the virtual device and its property and also can decide what version of OS does it run. As the application uses MYSQL database to store and retrieve information, WampServer is used to store and host MYSQL locally on the device. The web API that communicates with the database and returns the data to android application are stored in WWW directory of the Apache Server on drive. Sublime text is the text editor used to edit web API for the application.

## Deployment Strategy

Different version the code is pushed on the GITHUB directory and also the application can be deployed using Google Play Store, official store for google. As android being huge platform, getting user informed about the application is going to be difficult. Once the application gets promoted, more downloads can be expected and the data on database increases as user submits the data using the application. The achievements obtained by users are stored and users are encouraged to make more and more data submissions.

## User Training

Training user to be capable to submit the data is going to be difficult. Users with experience in using similar android applications can make the submission easily. As for disabled people accessibility options are used inside the application which delivers easy usage. As also for easy of use, easy to use UI is used and is tested for acceptance where everybody agreed that the developed UI is easy to use.

Also, for providing the information about the application inbuilt guide is made on how to use the application. Also, the user manual is made for the users which help them to learn on using the application easily.

The UI of the application with its code is shown in images below