**Required hardware and software for an Android application**

Android applications require certain hardware and software to run, which are outlined below.

Required Hardware:   
-An Android device with a CPU and GPU (or a development board with these components)   
-A USB cable to connect the device to your computer   
-A text editor, such as Notepad or Microsoft Word, for creating the AndroidManifest.xml file

Required Software:   
-The Android SDK installed on your computer   
-An understanding of how to use an Android device, such as how to open an app, access the settings menu, and take a photo

## What is code?

Code is a set of instructions written in a specific language that can be executed on a computer to produce a result. Code can be used to control the execution of the program or to produce specific results.

## What is code representation?

In code representation, a file or set of files that define the structure and behavior of a software application can be specified in a specific programming language. Once the code representation is created, it can be used as a template to create source code for the application. The code representation also enables developers to isolate parts of the application and work on them without affecting other parts of the application.

## What are the different types of code representation?

There are different types of code representation that can be used in Java programming. These include:

• Source code representation: This is the most common type of code representation, and it shows the actual source code for each line of the program. This is helpful for debugging and analyzing the program.

• Output code representation: This type of code representation is used when you want to output the results of a calculation or a function call to a file or another resource. It shows the formatted results of the calculation or function call on each line of the file.

• Assembly language representation: Assembly language is a lower-level programming language that allows you to write code that is machine-independent. This means that it can run on different platforms without any changes. Assembly language is used when you want to create very low-level programs that are not readable by humans.

## What are the benefits of code representation?

There are many benefits of code representation when developing an app. Code representation helps to set the layout of the application by calling the layout files, and it contains different necessary methods for the application like Algo, AlgoAdapter, AlgoListner, AlgoViewholder, and the main method called MainActivity. Additionally, it defines the onclick methods for the buttons in the design of the application. The main menu is developed in this file using the array list, and it is the default main activity for the application. It represents the first screen of the application while running or deploying the application. Finally, it helps the user of the application to interact with the application by calling another activity defined in another file of the project.