I) Android Assignment

Research

1)

a) Android is a mobile OS based on a modified version of the Linux Kernel and other open source software, designed primarily for touchscreen mobile devices such as smartphones and tablets. It was created by Android Inc. which Google bought in 2005. An android App is a software running on the android platform.

b) Android Studio.

c) Java, Kotlin. InstiApp uses Java (There was a java folder in the app folder of InstiApp in Github).

d) To navigate between the different stages of an app’s lifecycle, android gives a set of six functions which we can adjust.

Flowchart in next page

e) A few different UI elements in an Android App are TextView, ImageView, Button, SeekBar, Switch, etc.

f) Perks of Java: Java is Object Oriented,

Java is simpler than C++, although similar, it removes confusions such as pointers, etc.

Java supports functional programming such as lambda expressions.

Perks of Kotlin:

Kotlin has read only variables, has a single type system (objects and integers are called in same way), Kotlin imports a lot of libraries initially itself.

*Flowchart for Activity life cycle*

onCreate()

Activity launched(App opened)

onRestart()

onStop()

onPause()

Activity running(Using app, basically)

onResume()

onStart()

onDestroy()

Task

1) A View is the basic building block of an app, which is rectangular objects like EditView, Button, etc. A bunch of views together is called a View Group. Now view groups can be either linear or relative layout or a combo of both.

In linear everything is arranged from top to bottom or from left to right. In relative, every view is positioned relative to its neighbours.

2) The home screen would have a heading bar on top with Book-Ed! written on it, three buttons for home, search and profile in the bottom, and in the centre there will be a map which shows people in our vicinity who are willing to lend books, a marker for each person on the map.

3, 4) Pic in Github.

5, 6) Github.