Creating Android Application

- Creating Android project :-

A new android project with android studio, and it describes some of the file in the project.

- Install the android studio.
- click on create project.
  (if you have project already then open the new project.)

The configure your project window complete the following.

- Enter first App name.
- Enter com.example.myfirst in the package name fields.
- save the location
- choose the java or kotlin language drop down list.
- and select minimum SDK
- and click finish

Now take a moment to review the most important files.

- project window is open.
- first be sure the project window is open.

app > java > com.example.myfirstapp > MainActivity

This is the main activity.

It is a entry point of your app

app > res > layout > activity_main.xml

This is a file defines the layouts for the activity's user interface (UI) It contains a TextView element with the text "Hello, World!"

app > manifests > AndroidManifest.xml

This file contain fundamental characteristics of the app define each of it's components.

project structure :-

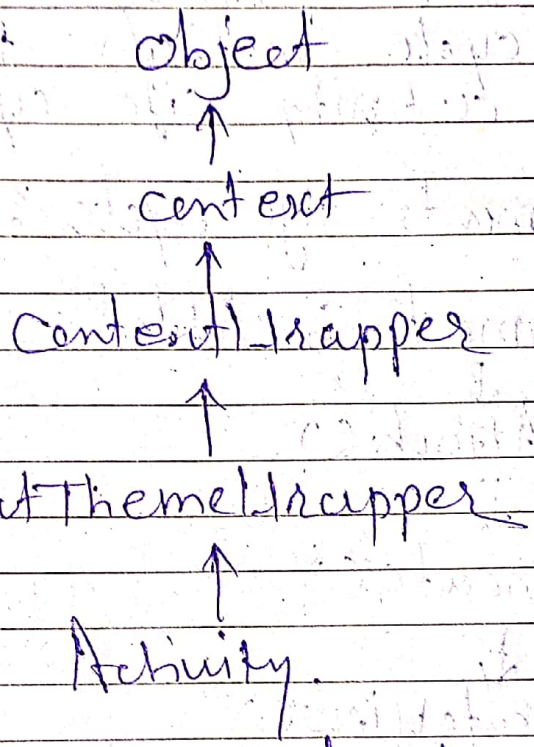
Manifests folder
java folder
res (Resources folder
- Drawable folder
- Layout folder
- Mipmap folder
- Value folder

Gradle scripts

The android project contains different types of app modules source code files and resource file ; we will explore all the folder and files in the android app.

Activity and Activity Life cycle:

Activity life cycle is controlled by 7 methods of android.app Activity. Class. The android Activity is the subclass of ContextThemeWrapper class.



Let's see 7 methods of android activity.

onCreate() - Created Activity.
onStart() - visible to the user
onResume() - interacting to the user
onPause() - not visible to the user
onStop() - no longer visible to user
onRestart() - prior to Start
onDestroy() - Activity is destroyed.

These are 7 methods using in activity life cycle.

Page No.
Date: / /

Fragments life cycle :-

Android fragment is the part of activity it is also known as sub-activity. There can be more than one fragment in an activity.

Each fragments has its own life cycle methods that is affected by activity life cycle.

Fragments life cycle :-

Fragment is Added

↓

onAttach()

↓

onCreate()

↓

onCreateView()

↓

onActivityCreated()

↓

onStart()

↓

onResume()

↓

fragment is Active

↓

onPause()
↓
onStop()
↓
onDestroyView()
↓
onDestroy()
↓
onDetach()
↓
Fragment is Destroyed.

View and ViewGroups :-

In android layout is used to describe the user interface for an app or activity, and it store the UI elements that visible to the user. This user interface is made up of a series of view and viewgroup elements.

View is basic building block of UI user interface in android.
A view is small rectangular box that responds to user inputs.

ViewGroups : Invisible container of other views (child views) and other.

Page No:
Date: / /

View :-

View refer to android.view.View class. which is base of class of UI classes.
android.view.View class is the root of UI class.

eg: TextView
ButtonView
ImageView
EditText
ProgressBar

ViewGroup :-

The ViewGroup is class of subclass of View class.
android.view.ViewGroup class, which is base class of UI classes that can contain other view object as children.

ex: FrameLayout.
WebView,
ListView,
GridView,