MSA MAD

Assignment-2

18124011600|
Vishwas Acharya

Page No.: 1
Date: / /

1) What is Intents in Android? Explain all types of Intents in Android.

Ans
- In Android, it is quite usual for users to witness a jump from one application to another as a part of the whole process.
- For example, searching for a location on the browser and witnessing a direct jump into google maps.
- This process of taking users from one application to another is achieved by passing the Intent to the system.
- Intents in general, are used for navigating among various activities within the same application, but note, is not limited to one single application, i.e., they can be utilized from moving from one application to another as well.

• **Application of Intent**

↳ Sending the User to Another App
↳ Getting a Result from an Activity
↳ Allowing other Apps to start your activity.

• **Types**

↳ Implicit
↳ Explicit

• Implicit Intent

  ↳ It **doesn't specify** the **component.** In such a case, intent provides information on available components provided by the system that is to be invoked.

  ↳ For example, you may write the following code to view the webpage

```
Intent intent = new Intent (Intent. ACTION_VIEW)
intent.setData (Uri. parse ("http://www.vishwas.com"))
startActivity (intent);
```

• Explicit Intent

  ↳ It **specifies** the **component.** In such a case, intent provides the external class to be invoked.

```
Intent i= new Intent (getApplication(context(),
Activity Two.class);
startActivity (i);
```

2) What is Fragments? Explain the life cycle of fragments in Android.

Ans - **Android Fragments** is the part of activity it is **also known as sub-activity.**

  - These can be more than one fragment in an activity.

  - Fragments represent multiple screen

inside one activity.
- Android fragment lifecycle is affected by activity lifecycle because fragments are included in activity.
- Each fragment has its own life cycle & methods that is affected by activity life cycle because fragments are embedded in activity.
- The FragmentManager class is responsible to make interaction between fragment objects.

• **Android Fragment Lifecycle**

↳ The lifecycle of android fragment is like the activity lifecycle.
↳ There are 12 life cycle methods for fragment.

=> (Fragment is Added)
↓
  ↳ onAttach()
  ↳ onCreate()
  ↳ onCreatView()
  ↳ onActivityCreated()
  ↳ onStart()
  ↳ onResume()
↓
(Fragment is Active)
↓   ↓

The fragment returns to the layout from the back stack

  ↳ onPause()
  ↳ onStop()
  ↳ ondestroyview()
  ↳ ondestroy()
  ↳ onDetach()
↓
(Fragment is Destroyed)

user navigates backward or fragment is removed/replaced

The fragment is added to the back stack them removed/replaced

3) Explain the types of fragments.

Ans - Basically fragments are divided as three stages as shown below.

- **Single frame Fragments**
  - These are using for hand hold devices like mobiles, here we can show only one fragment as a view.

- **List fragments**
  - It is having special list view is called as list fragment.

- **Fragments transaction**
  - Using th. with fragment transaction, we can move one fragment to another fragment.

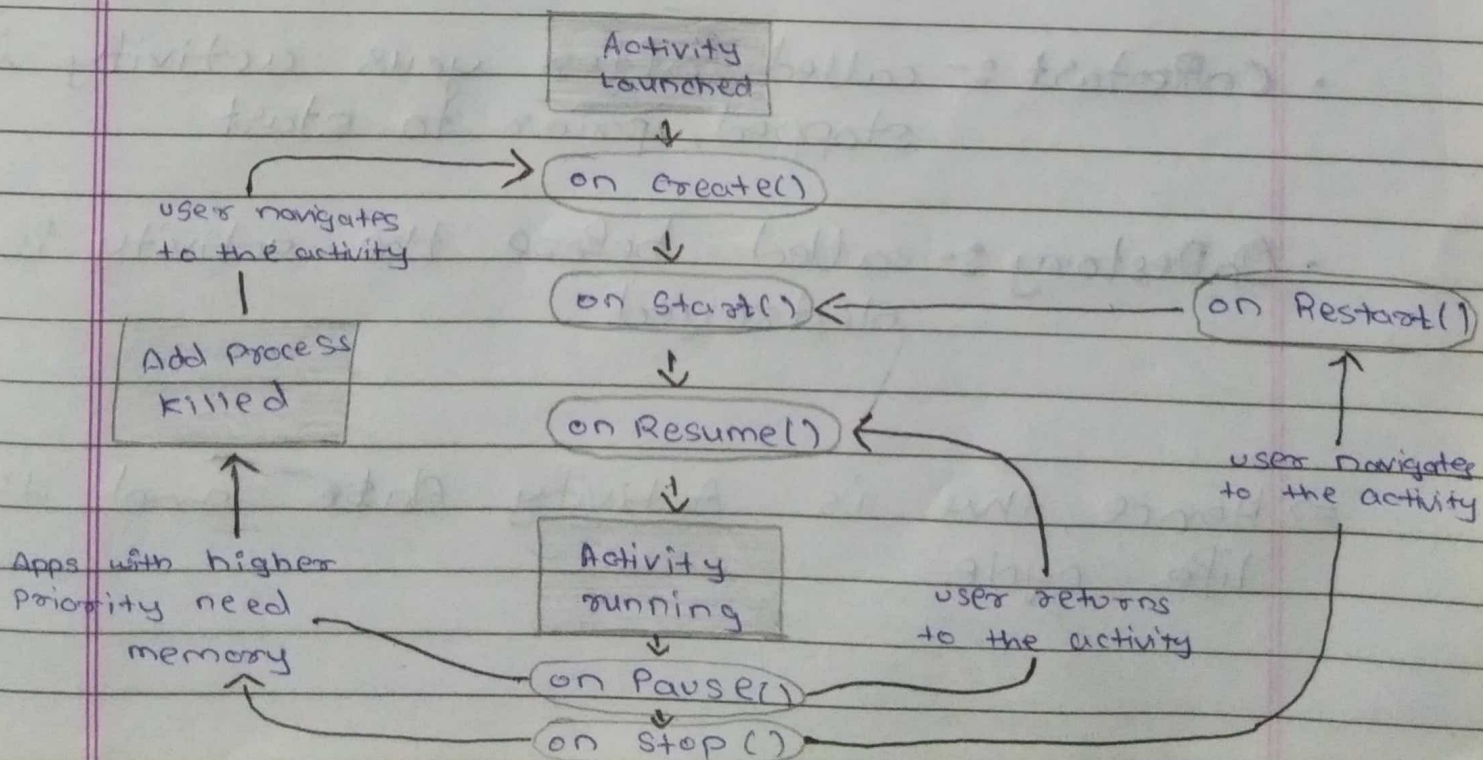4 What is Activity class? Explain the Activity Life cycle with diagram.

Ans - In Android, an activity is referred to as one screen in an application.
- It is very similar to a single window of any desktop application
- An android app consists of one or more screens or activities.
- Each activity goes through various stages or a lifecycle and is managed by activity stacks.
- So when activity starts, the previous one always remains below it.

- There are four stages of an activity.

1. If an Activity is in the foreground of the screen, then it is said to be active or running.

2. If an activity has lost focus and a non-full-sized or transparent activity has focused on top of your activity. Such activity is completely alive.

3. If an activity is completely hidden by another activity, it is stopped or hidden.

4. The system can destroy the activity from memory by either asking it to finish or simply killing its process.

- ## Activity Life Cycle

The activity is finishing
or being destroyed by the
system

↓

(on Destroy())

↓

```
Activity
shut Down
```

- OnCreate :- called when activity is first
created

- OnStart :- called when activity is becoming
visible to the user

- OnResume :- called when activity will start
interacting with the user

- OnPause :- called when activity is not
visible to the user

- OnStop :- called when activity is not
longer visible to the user

- OnRestart :- called after your activity is
stopped, prior to start

- OnDestory :- called before the activity is
destroyed.

=> Hence, this is Activity class and it's
life cycle.