

## Components of Android Application:-

There are many building blocks which are necessary to build an Android application. Main components are:

- 1) ~~App~~ Activities
- 2) Services
- 3) Content Providers
- 4) Broadcast Receivers

### → Activities:-

They are presentation layer of our application. The UI of our application is built around one or more extension of Activity class. Activity set layout and displays output and also respond to users actions.

### → Services:-

These components run at backend, updating your data sources and activities, triggering Notification and also broadcast intents. They also perform some task when application are not active.

There are mainly two types of services:

1) Foreground services

2) Background services

→ Content Providers:

It is used to manage and persist application data also typically interacts with SQL database. They are responsible for sharing data beyond application boundaries. Content Providers of particular application can be configured to allow access from other application.

→ Broadcast Receivers:

They are called intent listeners as they enable your application to listen to intents that satisfy matching ~~criteria~~ criteria specified by us. Broadcast receivers make our application react to any received intent and used to make event driven application.



The 4 V's of big data:

1) Volume:

Big data needs certain amount of data but having huge amount of data does not necessarily mean that you are working on this field of data. Sources are mobile phone, social media, machine's data, etc.

2) Velocity:

Velocity refers to enormous speed with which data is generated and processed. As more data will be generated, there are more methods needed to monitor the data. All the data generated from various sources will be stored and processed in very high speed in order to meet today's demand.

3) Variety:

It refers to nature of data that is structured, semi-structured and unstructured. It also refers to heterogeneous sources.

Structured data: Field & heading and datatype is known

Semistructured: This is semiorganized data. Example: log files.

Unstructured: Here data is not organized at all. It consist of text, pictures, videos, etc.

#### 4) Veracity:

It refers to inconsistencies and uncertainty in data that is data which is available can sometimes get messy and quality and accuracy is difficult to control. Data in bulk create confusion whereas less amount of data could convey half or incomplete information.