Android Interview Questions

Android programming is growing day by day. The questions asked by interviewers in android is given below. A list of top android interview questions and answers:

1) What is Android?

Android is an open-source, Linux-based operating system used in mobiles, tablets, televisions, etc.

2) Who is the founder of Android?

Andy Rubin.

3) Explain the Android application Architecture.

Following is a list of components of Android application architecture:

- **Services:** Used to perform background functionalities.
- **Intent:** Used to perform the interconnection between activities and the data passing mechanism.
- **Resource Externalization:** strings and graphics.
- **Notification:** light, sound, icon, notification, dialog box and toast.
- **Content Providers:** It will share the data between applications.

4) What are the code names of android?

1. Aestro
2. Blender
3. Cupcake
4. Donut
5. Eclair
6. Froyo
7. Gingerbread
8. Honeycomb
9. Ice Cream Sandwich
10. Jelly Bean
11. KitKat
12. Lollipop

13. Marshmallow

5) What are the advantages of Android?

Open-source: It means no license, distribution and development fee.

Platform-independent: It supports Windows, Mac, and Linux platforms.

Supports various technologies: It supports camera, Bluetooth, wifi, speech, EDGE etc. technologies.

Highly optimized Virtual Machine: Android uses a highly optimized virtual machine for mobile devices, called DVM (Dalvik Virtual Machine).

6) Does android support other languages than java?

Yes, an android app can be developed in C/C++ also using android NDK (Native Development Kit). It makes the performance faster. It should be used with Android SDK.

7) What are the core building blocks of android?

The core building blocks of Android are:

- Activity
- View
- Intent
- Service
- Content Provider
- Fragment etc.

8) What is activity in Android?

Activity is like a frame or window in java that represents GUI. It represents one screen of android.

9) What are the life cycle methods of android activity?

There are 7 life-cycle methods of activity. They are as follows:

1. onCreate()
2. onStart()
3. onResume()
4. onPause()
5. onStop()
6. onRestart()
7. onDestroy()

10) What is intent?

It is a kind of message or information that is passed to the components. It is used to launch an activity, display a web page, send SMS, send email, etc. There are two types of intents in android:

1. Implicit Intent
2. Explicit Intent

11) How are view elements identified in the android program?

View elements can be identified using the keyword findViewById.

12) Define Android toast.

An android toast provides feedback to the users about the operation being performed by them. It displays the message regarding the status of operation initiated by the user.

13) Give a list of impotent folders in android

The following folders are declared as impotent in android:

- AndroidManifest.xml
- build.xml
- bin/
- src/
- res/
- assets/

14) Explain the use of 'bundle' in android?

We use bundles to pass the required data to various subfolders.

15) What is an application resource file?

The files which can be injected for the building up of a process are called as application resource file.

16) What is the use of LINUX ID in android?

A unique Linux ID is assigned to each application in android. It is used for the tracking of a process.

17) Can the bytecode be written in java be run on android?

No

18) List the various storages that are provided by Android.

The various storage provided by android are:

- Shared Preferences
- Internal Storage
- External Storage
- SQLite Databases
- Network Connection

19) How are layouts placed in Android?

Layouts in Android are placed as XML files.

20) Where are layouts placed in Android?

Layouts in Android are placed in the layout folder.

21) What is the implicit intent in android?

The Implicit intent is used to invoke the system components.

22) What is explicit intent in android?

An explicit intent is used to invoke the activity class.

23) How to call another activity in android?

1. Intent i = new Intent(getApplicationContext(), ActivityTwo.class);
2. startActivity(i);

24) What is service in android?

A service is a component that runs in the background. It is used to play music, handle network transaction, etc.

25) What is the name of the database used in android?

SQLite: An opensource and lightweight relational database for mobile devices.

26) What is AAPT?

AAPT is an acronym for android asset packaging tool. It handles the packaging process.

27) What is a content provider?

A content provider is used to share information between Android applications.

28) What is fragment?

The fragment is a part of Activity by which we can display multiple screens on one activity.

29) What is ADB?

ADB stands for Android Debug Bridge. It is a command line tool that is used to communicate with the emulator instance.

30) What is NDK?

NDK stands for Native Development Kit. By using NDK, you can develop a part of an app using native language such as C/C++ to boost the performance

31) What is ANR?

ANR stands for Application Not Responding. It is a dialog box that appears if the application is no longer responding.

32) What is the Google Android SDK?

The Google Android SDK is a toolset which is used by developers to write apps on Android-enabled devices. It contains a graphical interface that emulates an Android-driven handheld environment and allows them to test and debug their codes.

33) What is an APK format?

APK is a short form stands for Android Packaging Key. It is a compressed key with classes, UI's, supportive assets and manifest. All files are compressed to a single file is called APK.

34) Which language does Android support to develop an application?

Android applications are written by using the java (Android SDK) and C/C++ (Android NDK).

35) What is ADT in Android?

ADT stands for Android Development Tool. It is used to develop the applications and test the applications.

36) What is View Group in Android?

View Group is a collection of views and other child views. It is an invisible part and the base class for layouts.

37) What is the Adapter in Android?

An adapter is used to create a child view to present the parent view items.

38) What is nine-patch images tool in Android?

We can change bitmap images into nine sections with four corners, four edges, and an axis.

39) Which kernel is used in Android?

Android is a customized Linux 3.6 kernel.

40) What is application Widgets in Android?

Application widgets are miniature application views that can be embedded in other applications and receive periodic updates.

41) Which types of flags are used to run an application on Android?

Following are two types of flags to run an application in Android:

- FLAG_ACTIVITY_NEW_TASK
- FLAG_ACTIVITY_CLEAR_TOP

42) What is a singleton class in Android?

A singleton class is a class which can create only an object that can be shared by all other classes.

43) What is sleep mode in Android?

In sleep mode, CPU is slept and doesn't accept any commands from android device except Radio interface layer and alarm.

44) What do you mean by a drawable folder in Android?

In Android, a drawable folder is compiled a visual resource that can use as a background, banners, icons, splash screen, etc.

45) What is DDMS?

DDMS stands for Dalvik Debug Monitor Server. It gives the wide array of debugging features:

1. Port forwarding services
2. Screen capture
3. Thread and heap information
4. Network traffic tracking
5. Location data spoofing

46) Define Android Architecture?

The Android architecture consists of 4 components:

1. Linux Kernal
2. Libraries

3. Android Framework
4. Android Applications

47) What is a portable wi-fi hotspot?

The portable wi-fi hotspot is used to share internet connection to other wireless devices.

48) Name the dialog box which is supported by Android?

- Alert Dialog
- Progress Dialog
- Date Picker Dialog
- Time picker Dialog

49) Name some exceptions in Android?

- Inflate Exception
- Surface.OutOfResourceException
- SurfaceHolder.BadSurfaceTypeException
- WindowManager.BadTokenException

50) What are the basic tools used to develop an Android app?

- JDK
- Eclipse+ADT plugin
- SDK Tools