Interview QA LINUX KURIOSITY

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Android: Interview QA

Learn in a Simple & Smart way

1. What is Android?

Ans: Android is an open source and Linux-based operating system for mobile devices such as smartphones and tablet computers. Android was developed by the Open Handset Alliance, led by Google, and other companies.

Android programming is based on Java programming language On June 27, 2012, at the Google I/O conference, Google announced the next Android version, 4.1 Jelly Bean. Jelly Bean is an incremental update, with the primary aim of improving the user interface, both in terms of functionality and performance.

2. What are the two basic features of Android?

Ans: Features of Android

Beautiful UI Multi-tasking

3. What is API Level?

Ans: API Level is an integer value that uniquely identifies the framework API revision offered by a version of the Android platform.

4. What are the two technologies to develop android applications?

Ans: There are so many sophisticated Technologies are available to develop android applications, the familiar technologies, which are predominantly using tools as follows

- Android Studio
- Eclipse IDE(Deprecated)

5. Which layer provides many higher-level services to applications in the form of Java classes?

Ans: The Application Framework layer provides many higher-level services to applications in the form of Java classes.

6. What is the role of Android.app?

Ans: android.app – Provides access to the application model and is the cornerstone of all Android applications.

7. What is the role of Android runtime?

Ans: The Android runtime also provides a set of core libraries which enable Android application developers to write Android applications using standard Java programming language.

8. What is the name of the file which describes each component of the application and how they interact?

Ans: The application manifest file *AndroidManifest.xml* that describes each component of the application and how they interact.

9. What are the four main components that can be used within an Android application?

Ans: There are following four main components that can be used within an Android application

a. Activities

They dictate the UI and handle the user interaction to the smart phone screen.

b. Services

They handle background processing associated with an application.

c. Broadcast Receivers

They handle communication between Android OS and applications.

d. Content Providers

They handle data and database management issues.

10. What is MainActivity.java?

Ans: The main activity code is a Java file MainActivity.java. This is the actual application file which ultimately gets converted to a Dalvik executable and runs your application.

11. What is strings.xml file?

Ans: The strings.xml file is located in the *res/values* folder and it contains all the text that your application uses.

12. What is activity_main.xml?

Ans: The activity_main.xml is a layout file available in *res/layout* directory, that is referenced by your application when building its interface.

13. What is an activity?

Ans: An activity represents a single screen with a user interface just like window or frame of Java. Android activity is the subclass of ContextThemeWrapper class.

14. What is a service?

Ans: A service is a component that runs in the background to perform long-running operations without needing to interact with the user and it works even if application is destroyed. A service can essentially take two states

Started

Bound

15. What is events or intents?

Ans: Broadcast Receivers simply respond to broadcast messages from other applications or from the system itself. These messages are sometime called events or intents.

16. What are two important steps to make broadcastreceiver works for the system broadcasted intents?

Ans: There are following two important steps to make BroadcastReceiver works for the system broadcasted intents –

- Creating the Broadcast Receiver.
- Registering Broadcast Receiver

17. What is a content provider component?

Ans: A content provider component supplies data from one application to others on request. Such requests are handled by the methods of the ContentResolver class. A content provider can use different ways to store its data and the data can be stored in a database, in files, or even over a network.

18. What is a fragment?

Ans: A Fragment is a piece of an activity which enable more modular activity design. It will not be wrong if we say, a fragment is a kind of sub-activity.

19. What are the three stages of fragment?

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

- <u>Single frame fragments</u> Single frame fragments are using for hand hold devices like mobiles, here we can show only one fragment as a view.
- <u>List fragments</u> fragments having special list view is called as list fragment
- <u>Fragments transaction</u> Using with fragment transaction. we can move one fragment to another fragment.

20. What is an android Intent?

Ans: An Android Intent is an abstract description of an operation to be performed. It can be used with startActivity to launch an Activity,

21. What is an Intent object?

Ans: An Intent object is a bundle of information which is used by the component that receives the intent as well as information used by the Android system.

22. What are two types of intents supported by Android?

Ans: There are following two types of intents supported by Android:

Explicit Intents

Implicit Intents

23. What is view object?

Ans: The basic building block for user interface is a View object which is created from the View class and occupies a rectangular area on the screen and is responsible for drawing and event handling. View is the base class for widgets, which are used to create interactive UI components like buttons, text fields, etc

24. What is Viewgroup?

Ans: The ViewGroup is a subclass of View and provides invisible container that hold other Views or other ViewGroups and define their layout properties.

25. What are Input controls?

Ans: Input controls are the interactive components in your app's user interface. Android provides a wide variety of controls you can use in your UI, such as buttons, text fields, seek bars, check box, zoom buttons, toggle buttons, and many more.

26. What are the three concepts related to android event management?

Ans: There are following three concepts related to Android Event Management:

Event Listeners
Event Listeners Registration
Event Handlers

27. What is a style resource?

Ans: A style resource defines the format and look for a UI. A style can be applied to an individual View (from within a layout file) or to an entire Activity or application (from within the manifest file).

28. What is Android drag/drop framework?

Ans: Android drag/drop framework allows your users to move data from one View to another View in the current layout using a graphical drag and drop gesture.

29. What is DragEvent?

Ans: The DragEvent represents an event that is sent out by the system at various times during a drag and drop operation.

30. What is Android Toast class?

Ans: Android Toast class provides a handy way to show users alerts but problem is that these alerts are not persistent which means alert flashes on the screen for a few seconds and then disappears.

31. What is location object?

Ans: The Location object represents a geographic location which can consist of a latitude, longitude, time stamp, and other information such as bearing, altitude and velocity.