

ANDROID CLUB

ACTIVITY 4

QUIZ QUESTIONS ON ANDROID STUDIO

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Q 1 - What is a context in android ?

A - It is an interface to store global information about an application

B - It is used to create new components.

C - Android has two contexts, those are getContext() and getApplicationContext()

D - All of Above

E - None of Above

Answer : D

Explanation

Context is used to create new components or objects like views and it is used to start activity and services. Android has two kinds of contexts and those are getContext() and getApplicationContext().

Q 2 - What is the difference between margin and padding in android layout?

A - Margin is specifying the extra space left on all four sides in layout

B - Padding is used to offset the content of a view by specific px or dp

C - Both A and B are correct

D - None of the above

Answer : C

Explanation

Margin specifies the space left on four sides in the layout and padding specifies the exact position where the element going to be taking place in the layout.

Q 3 -How to stop the services in android?

A - finish()

B - system.exit().

C - By manually

D - stopSelf() and stopService()

Answer : D

Explanation

We can stop the services by stopSelf() and stopService(), in some cases android will kill the services due to the low memory problem.

Q 4 - How to access the context in android content provider?

A - Using getContext() in onCreate()

B - Using intent()

C - Using getApplicationContext() at anywhere in an application

D - A & C

E - A & B

Answer : D

Explanation

The getContext() method is used in onCreate() method and getApplicationContext() can be used anywhere in an application.

Q 5 - How to get current location in android?

A - Using with GPRS

B - Using location provider

C - A & B

D - SQLite

E - Network servers

Answer : C

Explanation

GPRS and Location provider is used to fetch the current location of a phone as longitude and latitude.

Q 6 - What is breakpoint in android?

A - Breaks the application

B - Breaks the development code

C - Breaks the execution.

D - None of the above.

Answer : C

Breaks the execution to find the debug value, It is one of the debugging techniques.

Q 7 - Data can be read from local source XML in android through

A - XML resource parser

B - XML pull parsing

C - DOM parsing

D - None of the above

Answer : A

Using with XML resource parser, we can read local resource XML in android.

Q 8 - What is fragment life cycle in android?

A - onReceive()

B - onCreate()

C - onAttach()->onCreate() -> onCreateView() -> onActivityCreated() -> onStart() -> onResume()

D - None of the above

Answer : C

Fragment life cycle is as shown below –

```
onAttach()  
OnCreate()  
onCreateView()  
onActivityCreated()  
onStart()  
onResume()  
onPause()  
onStop()  
onDestroyView()  
onDestroy()  
onDetach()
```

Q 9 - Why don't we give MIN SDK as 1 in android?

A - Android deprecated version

B - There is no value for 1

C - Android doesn't allow min version 1

D - None of the above

Answer : A

Android version 2.2 is deprecated so we don't need to call MIN version to be 1

Q 10 - What are the main components in android?

A - Activity

B - Services

C - Broadcast Receiver

D - Content provider

Answer : A,B,C and D

The main components in android are Activity, services, Broadcast Receiver and content providers.

Q 11 - What is an activity in Android?

A - Activity performs the actions on the screen

B - Manage the Application content

C - Screen UI

D - None of the above

Answer : A

Explanation

Activity is a single screen in an application, Activity performs the actions on the screen(UI)

Q 12 - On which thread services work in android?

A - Worker Thread

B - Own Thread

C - Main Thread

D - None of the above.

Answer : C

Explanation

Services, by default, work on Main thread. You can start services from any thread, but if you want to update the UI, you need to call Main thread.

Q 13 -What are the functionalities of Binder services in android?

A - Binder is responsible to manage the thread while using aidl in android

B - Binder is responsible for marshalling and un-marshalling of the data

C - A & B

D - Binder is a kind of interface

E - None of the above

Answer : C

Explanation

Binder is responsible to manage the thread while creating aidl and is responsible to do marshalling and un-marshalling of the data. Binders have sub functionalities and interface for clients

Q 14 - What is sleep mode in android?

A - Only Radio interface layer and alarm are in active mode

B - Switched off

C - Air plane mode

D - None of the Above

Answer : A

Explanation

CPU will be in sleeping mode and it does not take any commands except radio interface layer and alarm from mobile.

Q 15 - Persist data can be stored in Android through

A - Shared Preferences

B - Internal/External storage

C - SQLite

D - Network servers.

E - All of above

Answer : E

Explanation

We can store persist data in android in shared preferences, internal/external storage, SQLite, and Network servers.

Q 16 - What is log message in android?

A - Log message is used to debug a program.

B - Same as printf()

C - Same as Toast().

D - None of the above.

Answer : A

The log message is used to debug a program. Some of log messages are shown below

```
log.d-Debugging log  
log.i Informative log  
log.e-Error log  
log.w-Warning log  
log.v-verbose log
```

Q 17 - What are the functionalities of HTTP Client interface in android?

A - Connection management

- B - Cookies management
- C - Authentication management
- D - All of the above
- E - None of the above

Answer : D

HTTP Client has the capabilities to manage connections, cookies and Authentication.

Q 18 - What is sandbox in android?

- A - Each application runs securely in sandbox without interrupting another process
- B - Android Box
- C - Android development tool kit
- D - None of the above

Answer : A

Each application runs securely in sandbox without interrupting another process. If an application is running in a sandbox, outside application can't touch sandbox application

Q 19 - How many protection levels are available in the android permission tag?

- A - There are no permission tags available in android
- B - Normal, kernel, application
- C - Normal, dangerous, signature, and signatureOrsystem
- D - None of the above

Answer : C

Android is having four levels of protection in android permission tag. They are normal, dangerous, signature, and signatureOrsystem

Q 20 - What is off-line synchronization in android?

- A - Synchronization with internet
- B - Background synchronization
- C - Synchronization without internet
- D - None of the above

Answer : C

Synchronization without internet in which we can take the application data without internet.

21) What Is the Google Android SDK?

The Google Android SDK is a toolset that developers need in order to write apps on Android enabled devices. It contains a graphical interface that emulates an Android driven handheld environment, allowing them to test and debug their codes.

22) What is the Android Architecture?

Android Architecture is made up of 4 key components:

- Linux Kernel
- Libraries
- Android Framework
- Android Applications

23 What is AAPT?

AAPT is short for Android Asset Packaging Tool. This tool provides developers with the ability to deal with zip-compatible archives, which includes creating, extracting as well as viewing its contents.

24 What is the importance of having an emulator within the Android environment?

The emulator lets developers “play” around an interface that acts as if it were an actual mobile device. They can write and test codes, and even debug. Emulators are a safe place for testing codes especially if it is in the early design phase.

25) What is the use of an activityCreator?

An activityCreator is the first step towards the creation of a new Android project. It is made up of a shell script that will be used to create new file system structure necessary for writing codes within the Android IDE.

26) Describe Activities.

Activities are what you refer to as the window to a user interface. Just as you create windows in order to display output or to ask for an input in the form of dialog boxes, activities play the same role, though it may not always be in the form of a user interface.

27) What are Intents?

Intents displays notification messages to the user from within the Android enabled device. It can be used to alert the user of a particular state that occurred. Users can be made to respond to intents.

28) Differentiate Activities from Services.

Activities can be closed, or terminated anytime the user wishes. On the other hand, services are designed to run behind the scenes, and can act independently. Most services run continuously, regardless of whether there are certain or no activities being executed.

29) What items are important in every Android project?

These are the essential items that are present each time an Android project is created:

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

30) What is the importance of XML-based layouts?

The use of XML-based layouts provides a consistent and somewhat standard means of setting GUI definition format. In common practice, layout details are placed in XML files while other items are placed in source files.

31) What are containers?

Containers, as the name itself implies, holds objects and widgets together, depending on which specific items are needed and in what particular arrangement that is wanted. Containers may hold labels, fields, buttons, or even child containers, as examples.

32) What is Orientation?

Orientation, which can be set using `setOrientation()`, dictates if the `LinearLayout` is represented as a row or as a column. Values are set as either `HORIZONTAL` or `VERTICAL`.

33) What is the function of an intent filter?

Because every component needs to indicate which intents they can respond to, intent filters are used to filter out intents that these components are willing to receive. One or more intent filters are possible, depending on the services and activities that is going to make use of it.

34) Enumerate the three key loops when monitoring an activity

- Entire lifetime – activity happens between `onCreate` and `onDestroy`
- Visible lifetime – activity happens between `onStart` and `onStop`
- Foreground lifetime – activity happens between `onResume` and `onPause`

35) When is the `onStop()` method invoked?

A call to `onStop` method happens when an activity is no longer visible to the user, either because another activity has taken over or if in front of that activity.

36) Is there a case wherein other qualifiers in multiple resources take precedence over locale?

Yes, there are actually instances wherein some qualifiers can take precedence over locale. There are two known exceptions, which are the MCC (mobile country code) and MNC (mobile network code) qualifiers.

37) What are the different states wherein a process is based?

There are 4 possible states:

- foreground activity
- visible activity
- background activity
- empty process

38) How can the ANR be prevented?

One technique that prevents the Android system from concluding a code that has been responsive for a long period of time is to create a child thread. Within the child thread, most of the actual workings of the codes can be placed, so that the main thread runs with minimal periods of unresponsive times.

39) What role does Dalvik play in Android development?

Dalvik serves as a virtual machine, and it is where every Android application runs. Through Dalvik, a device is able to execute multiple virtual machines efficiently through better memory management.

40) What is the AndroidManifest.xml?

This file is essential in every application. It is declared in the root directory and contains information about the application that the Android system must know before the codes can be executed.

41) What is the proper way of setting up an Android-powered device for app development?

The following are steps to be followed prior to actual application development in an Android-powered device:

- Declare your application as “debuggable” in your Android Manifest.
- Turn on “USB Debugging” on your device.
- Set up your system to detect your device.

42) Enumerate the steps in creating a bounded service through AIDL.

1. create the .aidl file, which defines the programming interface
2. implement the interface, which involves extending the inner abstract Stub class as well as implanting its methods.
3. expose the interface, which involves implementing the service to the clients.

43) What is the importance of Default Resources?

When default resources, which contain default strings and files, are not present, an error will occur and the app will not run. Resources are placed in specially named subdirectories under the project res/ directory.

44) When dealing with multiple resources, which one takes precedence?

Assuming that all of these multiple resources are able to match the configuration of a device, the 'locale' qualifier almost always takes the highest precedence over the others.

45) When does ANR occur?

The ANR dialog is displayed to the user based on two possible conditions. One is when there is no response to an input event within 5 seconds, and the other is when a broadcast receiver is not done executing within 10 seconds.

46) What is AIDL?

AIDL, or Android Interface Definition Language, handles the interface requirements between a client and a service so both can communicate at the same level through interprocess communication or IPC. This process involves breaking down objects into primitives that Android can understand. This part is required simply because a process cannot access the memory of the other process.

47) What data types are supported by AIDL?

AIDL has support for the following data types:

- string
- charSequence
- List
- Map
- all native Java data types like int,long, char and Boolean

48) What is a Fragment?

A fragment is a part or portion of an activity. It is modular in a sense that you can move around or combine with other fragments in a single activity. Fragments are also reusable.

49) What is a visible activity?

A visible activity is one that sits behind a foreground dialog. It is actually visible to the user, but not necessarily being in the foreground itself.

50) When is the best time to kill a foreground activity?

The foreground activity, being the most important among the other states, is only killed or terminated as a last resort, especially if it is already consuming too much memory. When a memory paging state has been reached by a foreground activity, then it is killed so that the user interface can retain its responsiveness to the user.