Android Services & Broadcast Receivers

1. **Which type of Android service can run indefinitely in the background?**
   - o a) Bound Services
   - o b) Started Services
   - o c) Intent Service
   - o d) Foreground Services
2. **Which method is used to bind an Android service to a component?**
   - o a) startService()
   - o b) bindService()
   - o c) stopService()
   - o d) startForeground()
3. **What mechanism is commonly used for service communication in Android?**
   - o a) Intents
   - o b) Activities
   - o c) Fragments
   - o d) Handlers
4. **Which of the following is a best practice for using Android services?**
   - o a) Keep the service running indefinitely
   - o b) Optimize services to use minimal resources
   - o c) Use services for UI-intensive tasks
   - o d) Avoid releasing resources
5. **What is the purpose of a Broadcast Receiver in Android?**
   - o a) To run background tasks
   - o b) To receive system-wide or app-specific broadcast messages
   - o c) To handle intents between components
   - o d) To manage services
6. **Which Broadcast Receiver is declared in the AndroidManifest.xml file?**
   - o a) Dynamic Broadcast Receiver
   - o b) Static Broadcast Receiver
   - o c) Intent Receiver
   - o d) Foreground Receiver

Android Features

7. **Which Android feature allows devices to communicate directly via Wi-Fi without needing an access point?**
   - o a) NFC
   - o b) Wi-Fi Direct
   - o c) Bluetooth
   - o d) Android Beam
8. **What feature allows multiple touches on the screen at once?**
   - o a) Multi-tasking
   - o b) Multi-language support
   - o c) Multi-touch
   - o d) Resizable widgets

9. **Which of the following is a feature that allows background messaging between Android apps using Google services?**
   - o a) Wi-Fi Direct
   - o b) Android Beam
   - o c) Google Cloud Messaging (GCM)
   - o d) Multi-touch

10. **What Android feature allows resizing of UI elements like widgets?**

   - a) Multi-tasking
   - b) Resizable widgets
   - c) Messaging
   - d) Multi-language support

11. **Which Android feature allows devices to exchange information using NFC (Near Field Communication)?**

   - a) Wi-Fi Direct
   - b) Android Beam
   - c) GCM
   - d) Bluetooth

12. **What Android feature supports simultaneous running of multiple apps?**

   - a) Multi-tasking
   - b) Multi-touch
   - c) Android Beam
   - d) Multi-language support

Android Platform Architecture

13. **Which component of the Android platform architecture provides an abstraction between the hardware and the software layers?**

   - a) Libraries
   - b) Application Framework
   - c) Linux Kernel
   - d) Applications

14. **What is the purpose of the Dalvik Virtual Machine in Android?**

   - a) To manage memory
   - b) To optimize Java applications for Android
   - c) To manage UI rendering
   - d) To handle network connections

15. **Which of the following libraries is responsible for database management in Android?**

- a) WebKit
- b) SSL Libraries
- c) SQLite
- d) Content Providers

16. **Which component manages activities and resources within the Android environment?**

- a) Resource Manager
- b) Activity Manager
- c) Notifications Manager
- d) View System

17. **Which layer in the Android architecture provides higher-level services to apps using Java classes?**

- a) Libraries
- b) Linux Kernel
- c) Application Framework
- d) Applications

18. **Which part of the Android architecture handles low-level interactions between hardware and software?**

- a) Application Framework
- b) Libraries
- c) Linux Kernel
- d) Runtime

19. **Which of the following is a native Android app store?**

- a) Mobango
- b) SlideME
- c) Opera Mobile Store
- d) Google Play

Android Application Project Structure

20. **What is the purpose of the AndroidManifest.xml file in an Android project?**

- a) To store resources like images
- b) To define the build configuration
- c) To describe the application's components

- d) To handle user interface layouts

21. **Which directory in an Android project contains non-code resources like images and XML files?**

- a) src
- b) res
- c) java
- d) build.gradle

22. **What type of files are stored in the 'drawable' directory in an Android project?**

- a) XML files that define layouts
- b) Java code files
- c) Bitmap images and XML drawable files
- d) Configuration files

23. **Which file is automatically generated by the AAPT tool in Android projects?**

- a) build.gradle
- b) AndroidManifest.xml
- c) R.java
- d) gradle.properties

24. **Which of the following is NOT a sub-directory within the 'res' folder in an Android project?**

- a) drawable
- b) mipmap
- c) src
- d) values

25. **What is the role of the 'gradle' file in an Android project?**

- a) To define project dependencies and build configurations
- b) To store resource files
- c) To manage activity lifecycles
- d) To describe application permissions

26. **Where in an Android project are Java code sources stored?**

- a) src
- b) res
- c) java
- d) drawable

Android Runtime & Libraries

27. **Which component is responsible for managing memory and multithreading in Android applications?**

- a) Content Providers
- b) Dalvik Virtual Machine
- c) Activity Manager
- d) Linux Kernel

28. **Which libraries in Android are responsible for providing SSL (Secure Socket Layer) support?**

- a) SQLite Libraries
- b) SSL Libraries
- c) WebKit
- d) Core Libraries

29. **What enables Android apps to access a lightweight database system?**

- a) Content Providers
- b) Dalvik Virtual Machine
- c) SQLite
- d) SSL Libraries

Activity & Activity Life Cycle

30. **What is an Activity in Android?**

- a) A background task manager
- b) A component that represents a single screen with a user interface
- c) A file manager for Android projects
- d) A network handling tool

31. **Which of the following is NOT part of the Android Activity lifecycle?**

- a) onCreate()
- b) onPause()
- c) onResume()
- d) onStopService()

32. **What is the first method called when an Activity is created in Android?**

- a) onCreate()
- b) onStart()
- c) onResume()

- d) onPause()

33. Which method is called when an activity is no longer visible to the user?

- a) onCreate()
- b) onPause()
- c) onStop()
- d) onDestroy()

34. Which method is called when an activity is restarted after it was stopped?

- a) onPause()
- b) onRestart()
- c) onCreate()
- d) onDestroy()

Android Miscellaneous

35. Which Android feature is designed to handle multiple user touches on a device?

- a) Multi-language support
- b) Resizable widgets
- c) Multi-tasking
- d) Multi-touch

36. Which feature allows devices to send messages without the need for continuous connectivity?

- a) Google Cloud Messaging (GCM)
- b) Wi-Fi Direct
- c) Android Beam
- d) Multi-touch

37. What Android feature allows apps to run multiple processes or tasks simultaneously?

- a) Multi-touch
- b) Multi-tasking
- c) Resizable widgets
- d) Messaging

38. Which Android feature allows resizing of widgets on the home screen?

- a) Resizable widgets
- b) Multi-touch
- c) Multi-tasking

- d) GCM

39. **Which component manages notifications in Android?**

- a) Activity Manager
- b) Content Providers
- c) Notification Manager
- d) Resource Manager

40. **What is the role of the View System in Android?**

- a) To manage app resources
- b) To handle user interactions and UI components
- c) To manage background services
- d) To handle notifications

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