3. Android fundamental concepts

1. What programming languages you can use for Android app development?

- Android applications can be developed in; Kotlin, Java and C++ -languages.

2. What is .apk file?

- .apk is a suffix for Android Package. Android Package is an archive file which contains application contents. Your android device will detect this file and install the app with it.

3. How Android system runs apps?

- Android runs apps by creating separate VM instances, each app gets their own user ID.

4. Name four types of Android components. Describe each.

- Androids 4 components are; Activities, Services, Broadcast Receivers, Content Providers.

Activities display a single view of information to user, it’s also interaction entry point for user.

Service component can be used if user’s application needs to execute operations in the background, and when the application is not being interacted with. Services helps the user by allowing data-sync in the background.

Broadcast receiver allows the application to send specific messages. For example, with broadcast receiver you can set a notification when battery saver is enabled, or network is disconnected.

Content Providers lets the app send data between applications. These kinds of requests are handled by methods of ContentResolver -class.

5. What is manifest file and what is its purpose?

- The manifest file describes all main components in the project.

6. What are resources? Why they are needed?

- Resources contain everything else than code, they are images, sound files, view XML, color strings etc..