1. Explain the order of lifecycle changes in activity a and activity b as activity a starts activity b.

First, Activity A is created and started. Once A reaches onResume B is created and started. Once B is now onResume, then A is stopped. Once activity B is finishes executing its code or when the app is put into the background, Activity A would be restarted and run through its execution. During this time, B is still stopped, until Activity A is brought into the foreground, then Activity B will be stopped. Activity B and A can be destroyed by closing the application.

1. How does serialization work?

Serialization is the process of turning an objects current internal state into a stream of bytes. In Java, classes must implement the serializable interface to be serialized. It takes a snapshot of the object and its current position.

1. How does parcels work?

A parcel is a container for a message that holds data. In Android, parcels are used to pass data between two different activities. For an object to be passed into a parcel, its class must implement the parcable interface.

1. What is the difference in an implicit intent and an explicit intent?

The difference between an implicit intent and an explicit intent is how the action is passed. In an explicit intent, the action is not known, but component to pass the intent to is known. For an implicit intent, the component is not known but the action is.

1. What is the standard software development lifecycle?

The standard software development lifecycle parts are divided into multiple phases, most notably planning, identifying requirements, implementation, testing and deployment.

During the planning stage, information is gathered from multiple sources around the project. During this stage, the project has a base layout, with research being gathered on the feasibility on the project. Once the feasibility of the project is approved, the project moves onto the requirements phase.

In the requirements phase, information is gathered from the stakeholders and subject matter experts to identify the needs of the end product. This is where the scope of the project is identified, listing the main necessary components that are approved by the client. During this phase, key design choices, such as the programming language are defined here.

Next is the implementation phase. In this phase, the software code is written with respect to requirements. The requirements are divided into smaller units, which are then worked on by teams and constrained by the requirements.

Aftwards comes the testing and deployment phase. Each piece of the end product is put into a testing environment, where each section of the software is tested to ensure the system is entirely functional. Once the software passes testing, it will be ready for deployment.

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