ANDROİD APPLICATION LIFECYCLE

AND

PROBLEMS

A class that holds information about a component's lifecycle, such as an activity, and allows other components to see this information.

Uses two main enumerations to monitor lifecycle state;

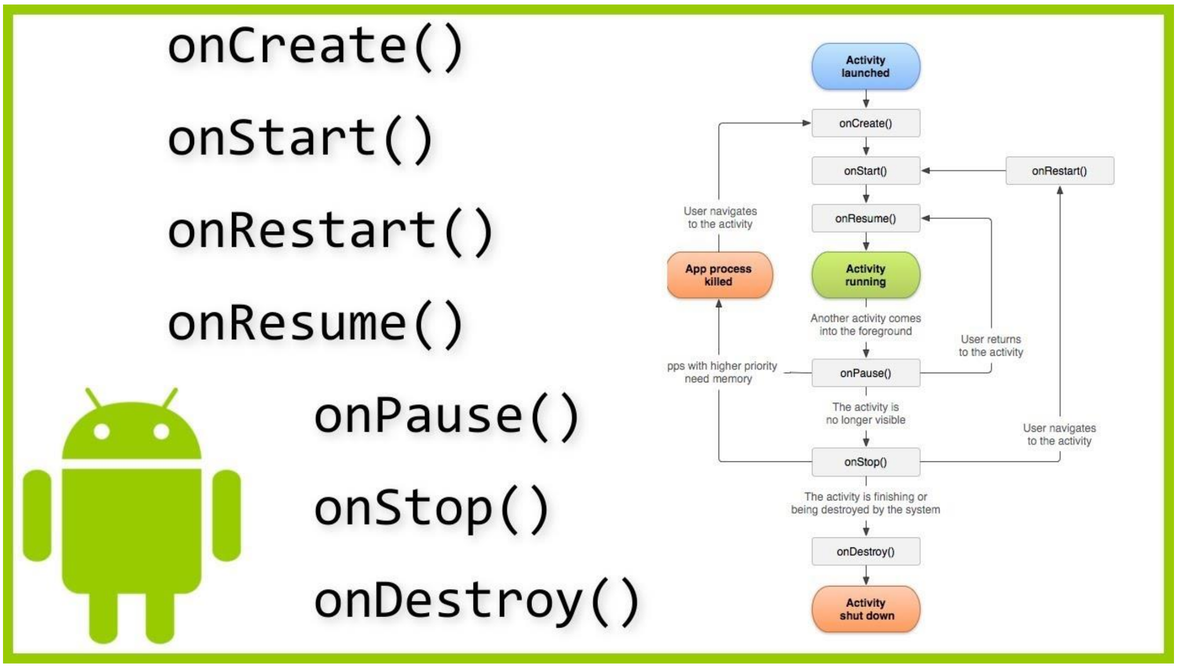
Event

The lifecycle events that are dispatched from the framework and the Lifecycle class. These events map to the callback events in activities and fragments.

State

The current state of the component tracked by the Lifecycle object.

States that make up the Android activity lifecycle;


onCreate()
onStart()
onRestart()
onResume()
onPause()
onStop()
onDestroy()
Activity launched
onCreate()
onStart()
onRestart()
User navigates to the activity
onResume()
App process killed
Activity running
Another activity comes into the foreground
User returns to the activity
pps with higher priority need memory
onPause()
The activity is no longer visible
User navigates to the activity
onStop()
The activity is finishing or being destroyed by the system
onDestroy()
Activity shut down

***

The Android lifecycle diagram was one of the first mobile architecture decisions ever announced by Google. Initially, developers like Square noticed the difficulties and bugs attributed to problems with the Activity lifecycle. Over the years it has become clear that the Activity lifecycle was designed before Google fully understood its Application Architecture. To avoid these problems, use try-catch blocks for any code you think might be an error.

In the onDestroy() or onStop() methods, it is not possible to see the errors that occur when our activity crashes. We can use Firebase Crashlytics or ACRA to view and analyze the errors that occur.These helper systems give us a lot of context data, allowing us to understand the errors.

Some situations where we may experience crashes in the application are as follows;

1-) Crashing if the user receives a phone call or switches to another app while using your app.

2-) Consuming valuable system resources when the user is not actively using it.

3-) Losing the user's progress if they leave your app and return to it at a later time.

4-) Crashing or losing the user's progress when the screen rotates between landscape and portrait orientation.

Considering the errors mentioned above, designing and creating the necessary data operations using MVVM architecture will provide a very effective solution. Data loss will be minimized and ANR errors will be cleared.