

EDU



mobile



Android development

The activity life cycle



Activity life cycle

- Each activity in an app has its own life cycle.
- There are five running **states** for an activity. A sixth state (Destroyed) is entered when the app is fully exited by the user or the system reclaims its memory. Each state transition is signaled by a callback method:
- **onCreate()** – the activity is first invoked, and transitions to the **Created** state.
- **onStart()** – the activity becomes visible, but no interaction is possible. The activity transitions to the **Started** state.



Activity life cycle

- **onResume()** – the activity is visible and can be interacted with. It enters the **Resumed** state. This is the “running” state of the activity.
- **onPause()** – the activity is either partially hidden or becoming entirely hidden. It is non-interactive, and is entering the **Paused** state.
- **onStop()** – the activity is entirely hidden and in the background. It is entering the **Stopped** state, but may be restarted.

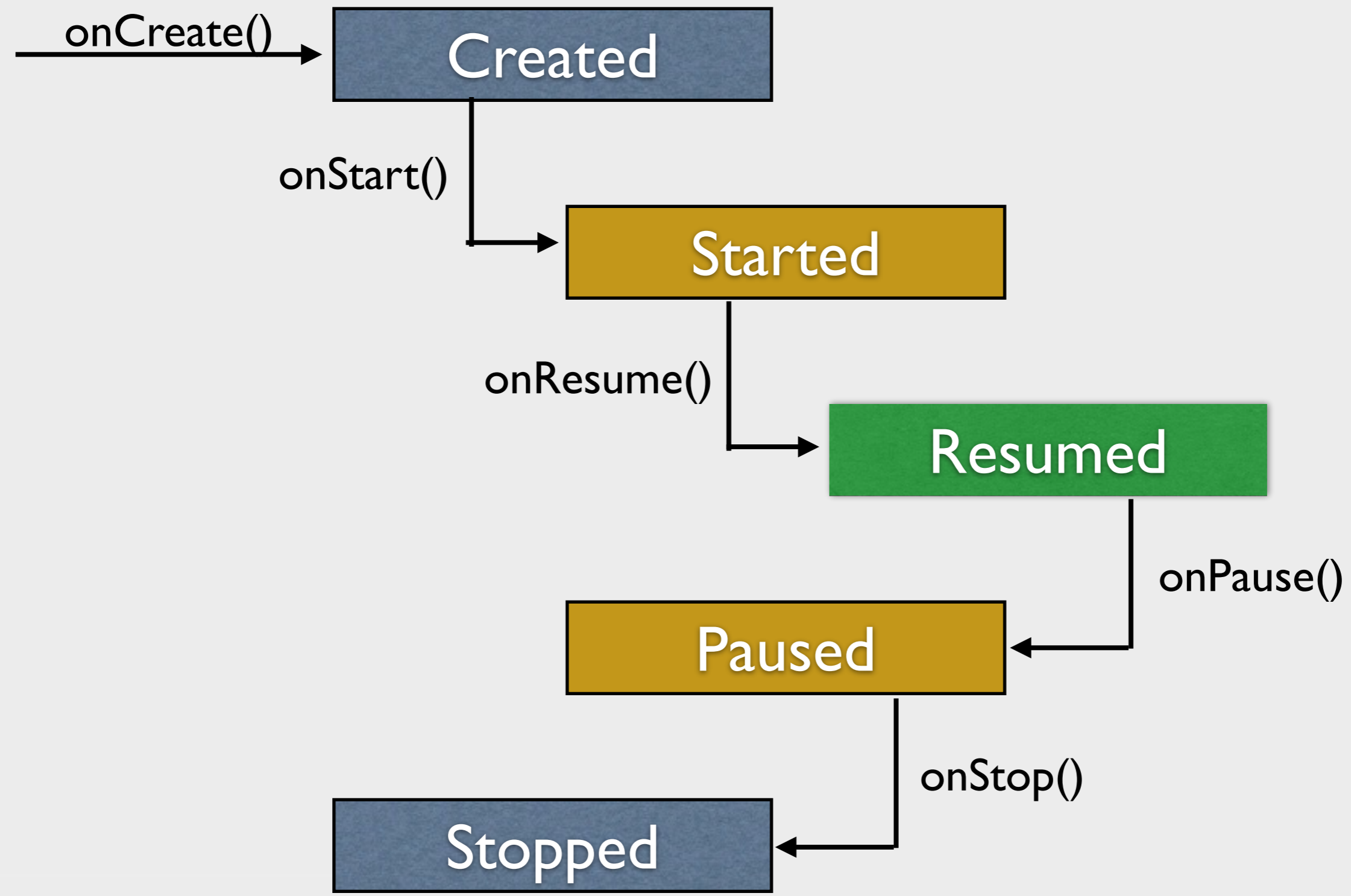


Activity life cycle

- **onDestroy()** – the activity is entering the **Destroyed** state, either as a result of the user exiting the app or the system reclaiming memory.

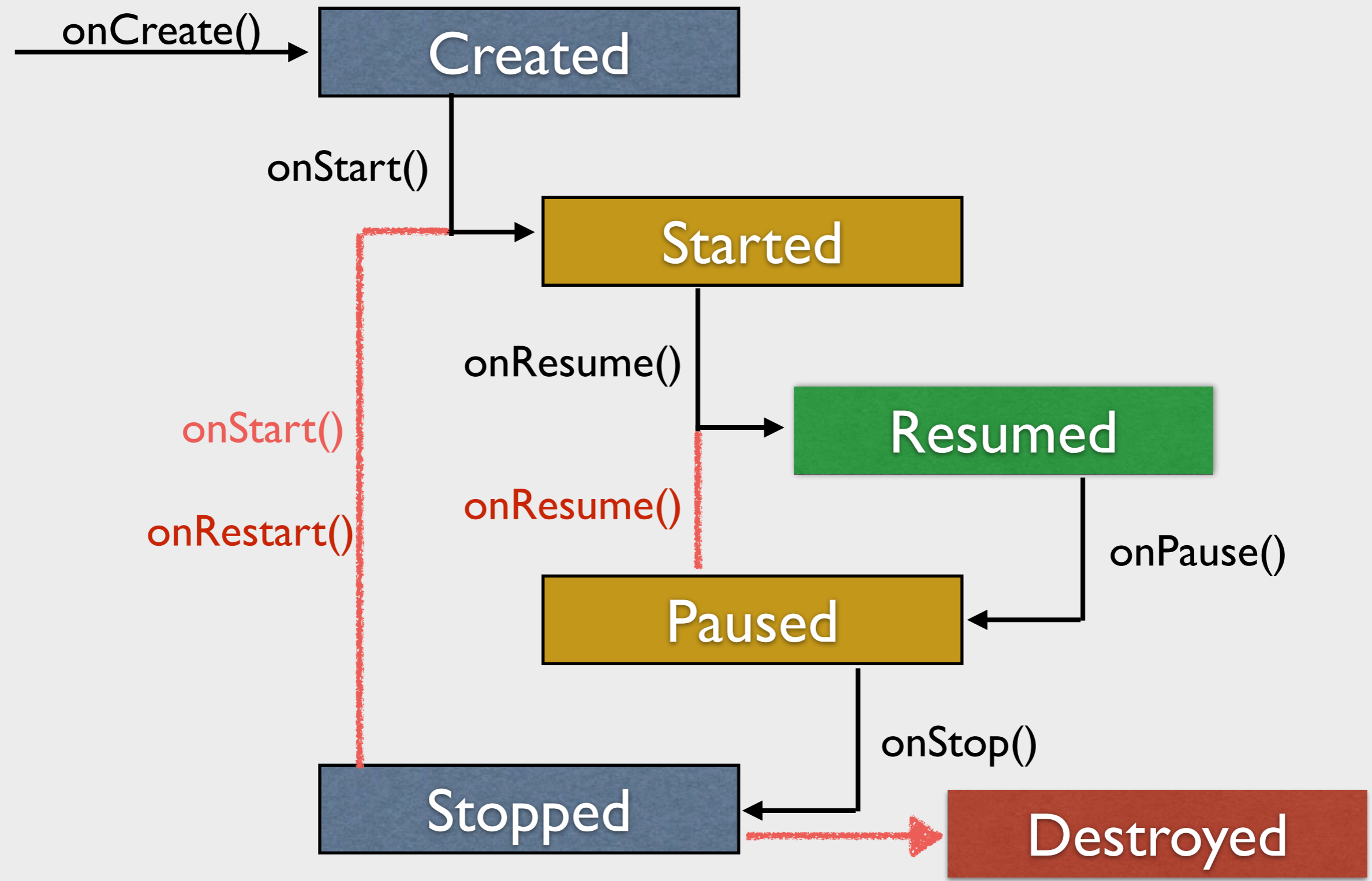


State transitions





State transitions





onDestroy()

- The system normally calls onDestroy only after it has called onPause() and onStop(), even if the user quits the app (from the resumed state).
- If an activity is intended only to transition to another activity, **finish()** can be called in onCreate() to immediately destroy the activity, without transitioning through the paused and stopped states.

