

# Android Development

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## Tasks and Back Stack

- Standart
- SingleTop
- SingleTask
- SingleInstance

"standard" (the default mode)

Default. The system creates a new instance of the activity in the task from which it was started and routes the intent to it. The activity can be instantiated multiple times, each instance can belong to different tasks, and one task can have multiple instances.

"singleTop"

If an instance of the activity already exists at the top of the current task, the system routes the intent to that instance through a call to its [onNewIntent\(\)](#) method, rather than creating a new instance of the activity. The activity can be instantiated multiple times, each instance can belong to different tasks, and one task can have multiple instances (but only if the activity at the top of the back stack is *not* an existing instance of the activity)

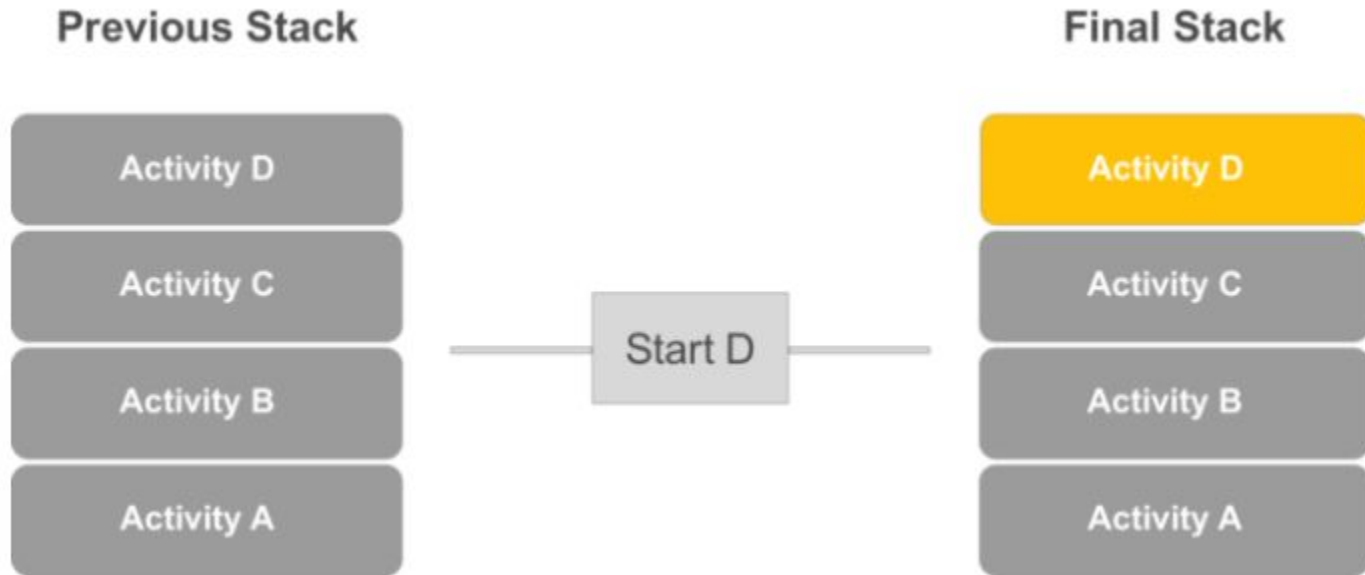
"singleTask"

The system creates a new task and instantiates the activity at the root of the new task. However, if an instance of the activity already exists in a separate task, the system routes the intent to the existing instance through a call to its [onNewIntent\(\)](#) method, rather than creating a new instance. Only one instance of the activity can exist at a time.

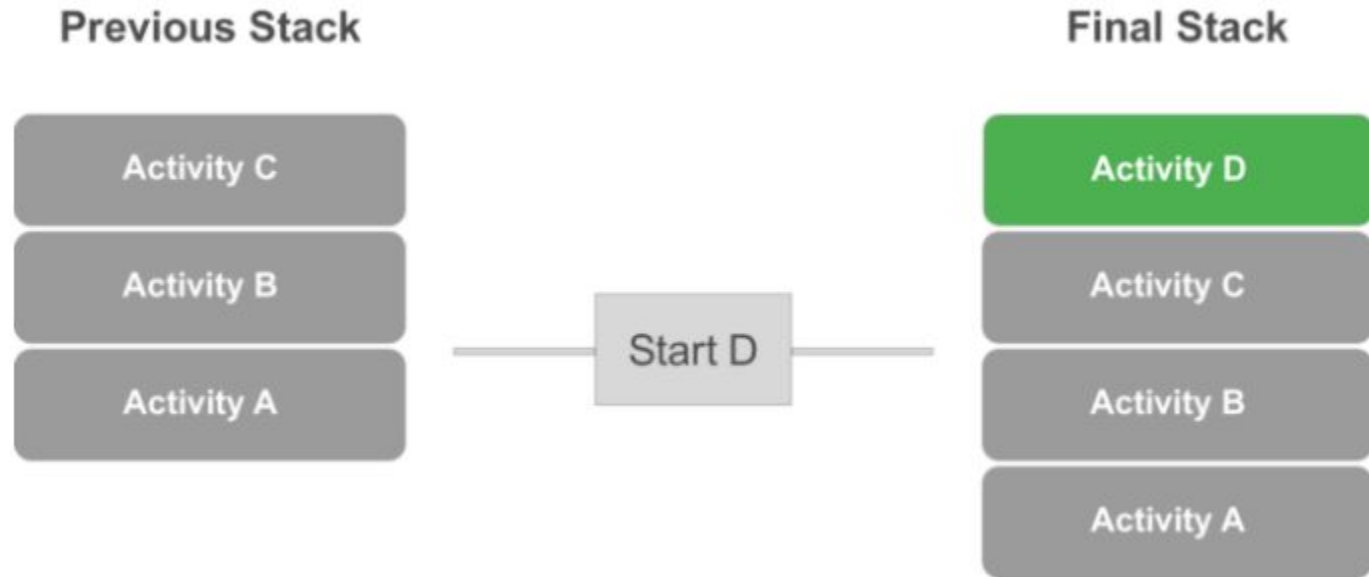
"singleInstance".

Same as "singleTask", except that the system doesn't launch any other activities into the task holding the instance. The activity is always the single and only member of its task; any activities started by this one open in a separate task.

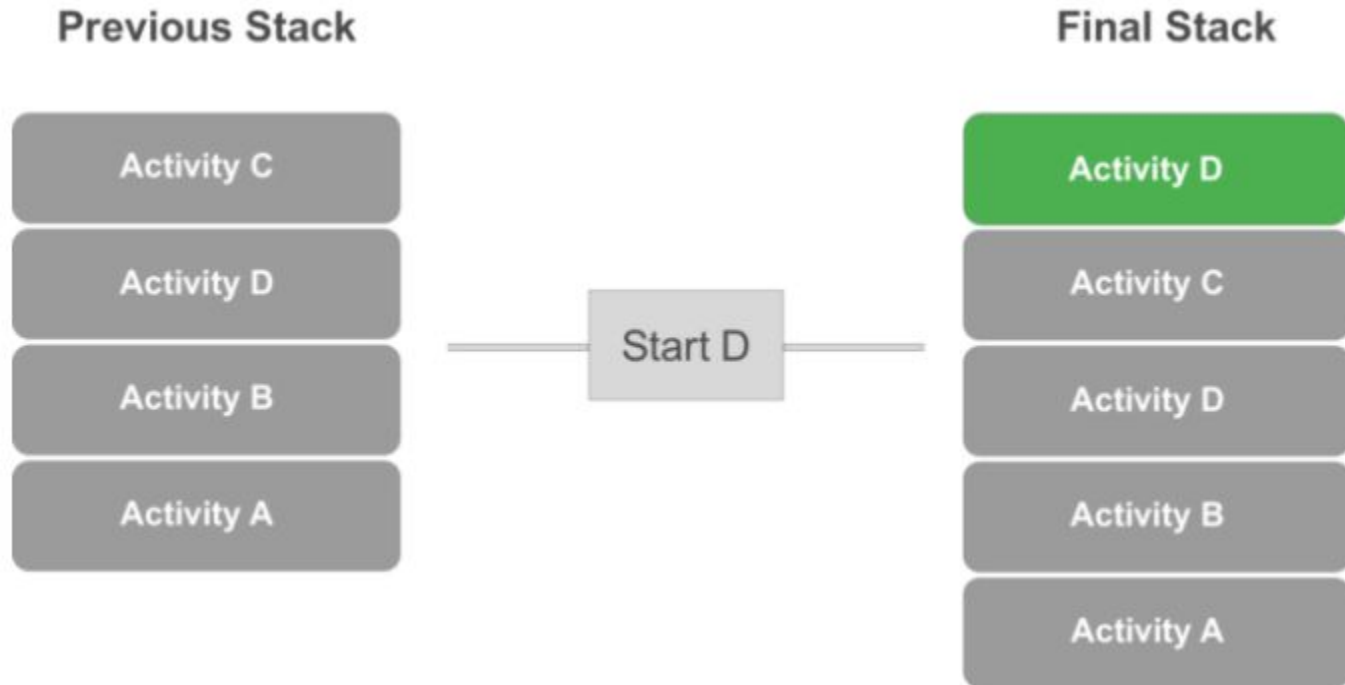
SingleTop



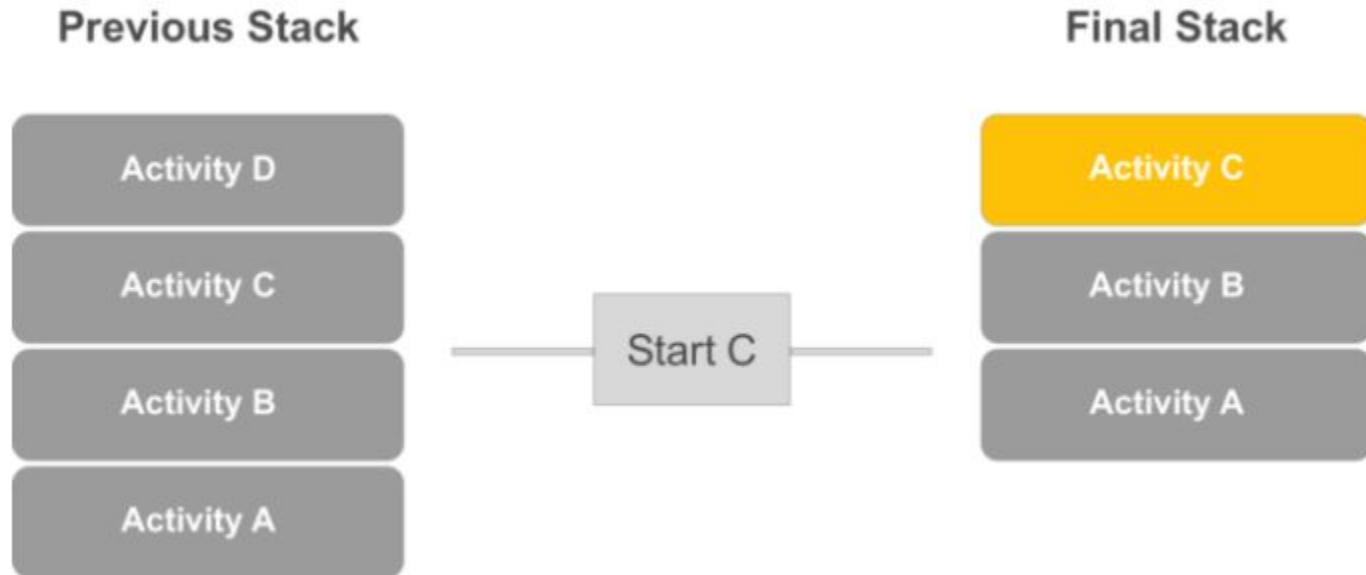
SingleTop



SingleTop

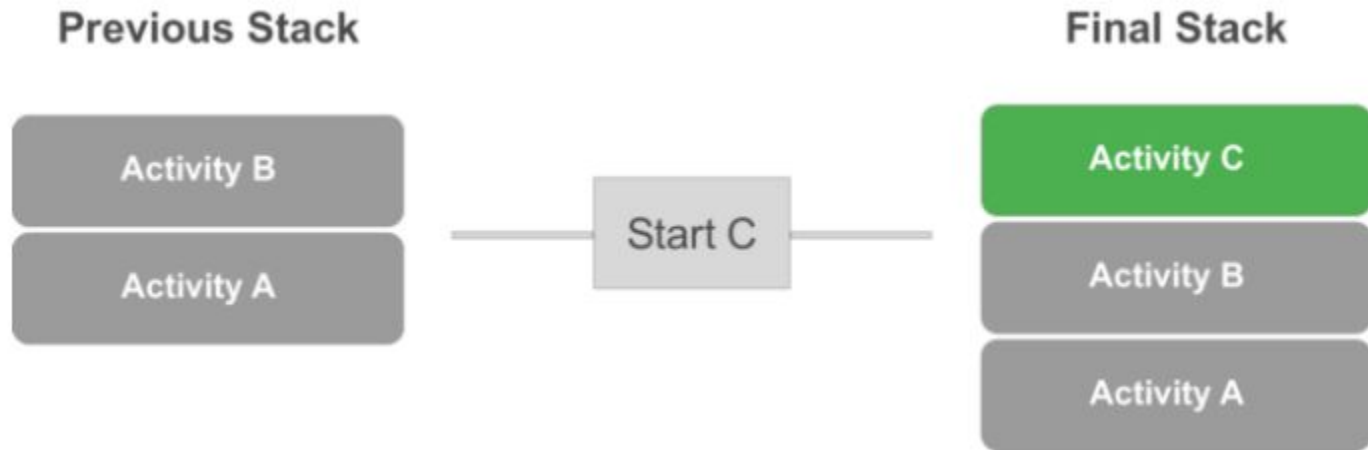


## SingleTask

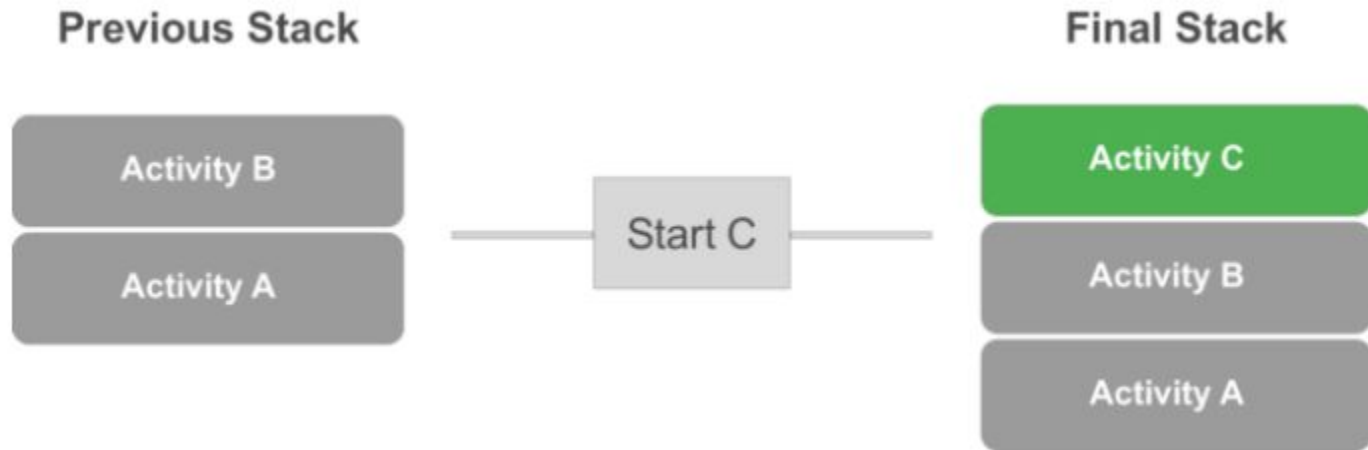




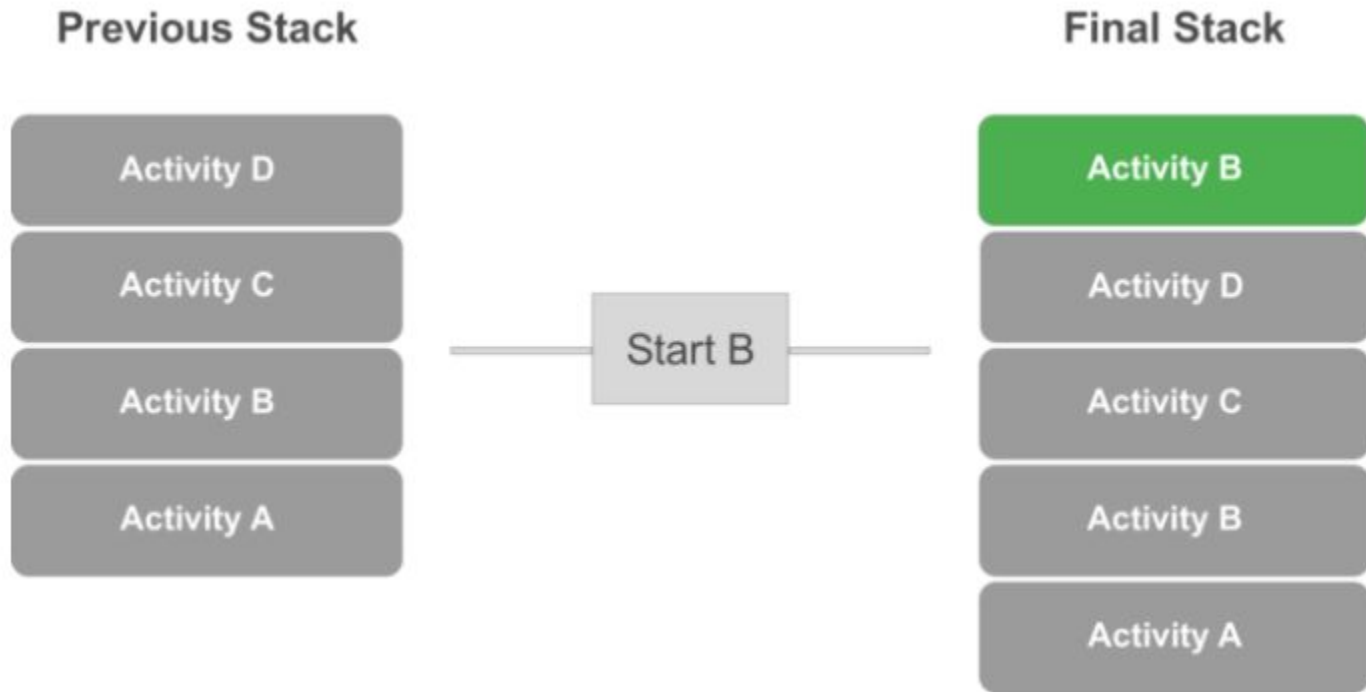
## SingleTask



## SingleInstance



standard



# Links

<https://developer.android.com/guide/components/activities/tasks-and-back-stack>

# Challenge

Create a complex model (Eg, Person, Car, etc)

Using

- Classes
- Inheritance
- Interfaces
- Lists/Mutablelist
- Loops
- When