

INTRODUCTION TO ACTIVITY

A single, focused thing that the user can do.

Overview 1/2

- provides a screen with which users can interact in order to do something
- user interface for an activity is provided by a hierarchy of views
- "main activity" is presented to the user when the app is first started

Overview 2/2

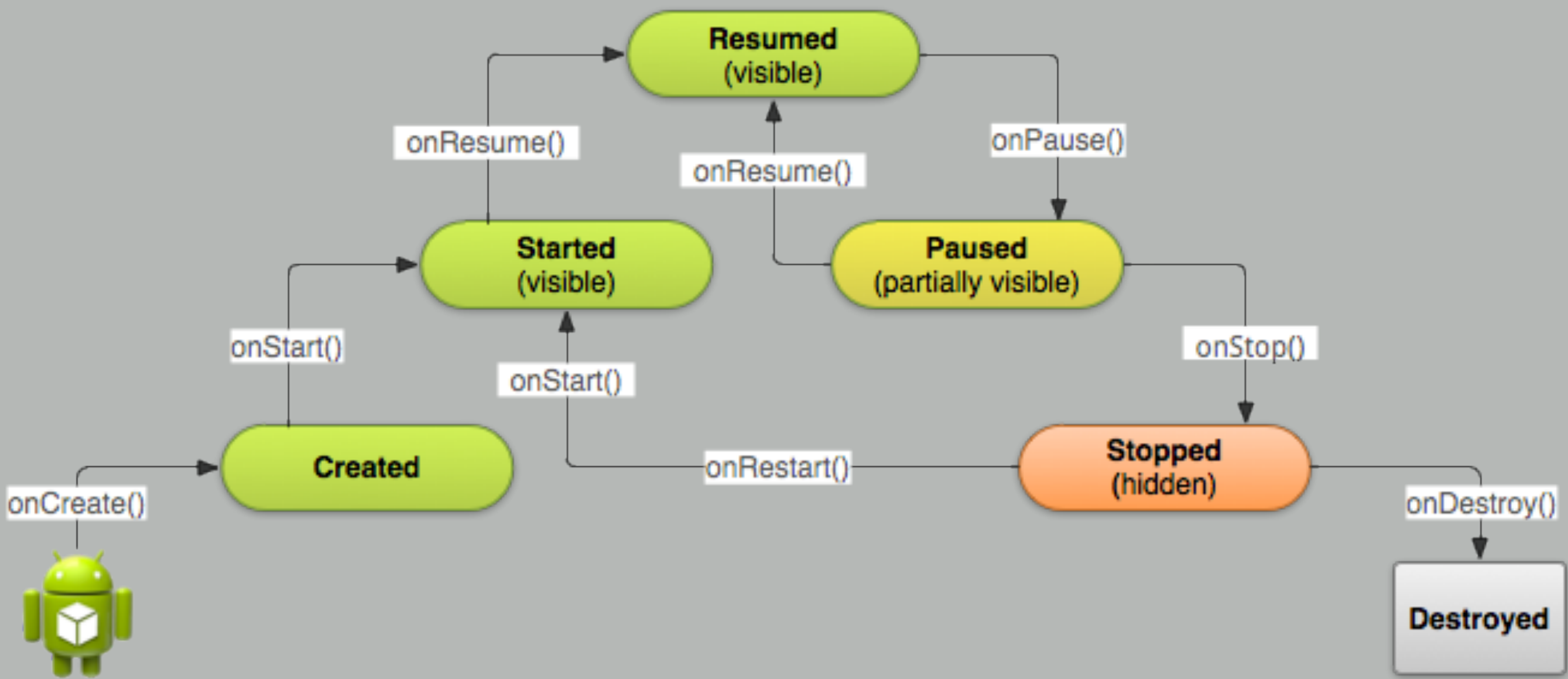
- activities can start other activities
- the "back stack" preserves all the started activities with a "last in first out" mechanism
- often presented to the user as full-screen windows

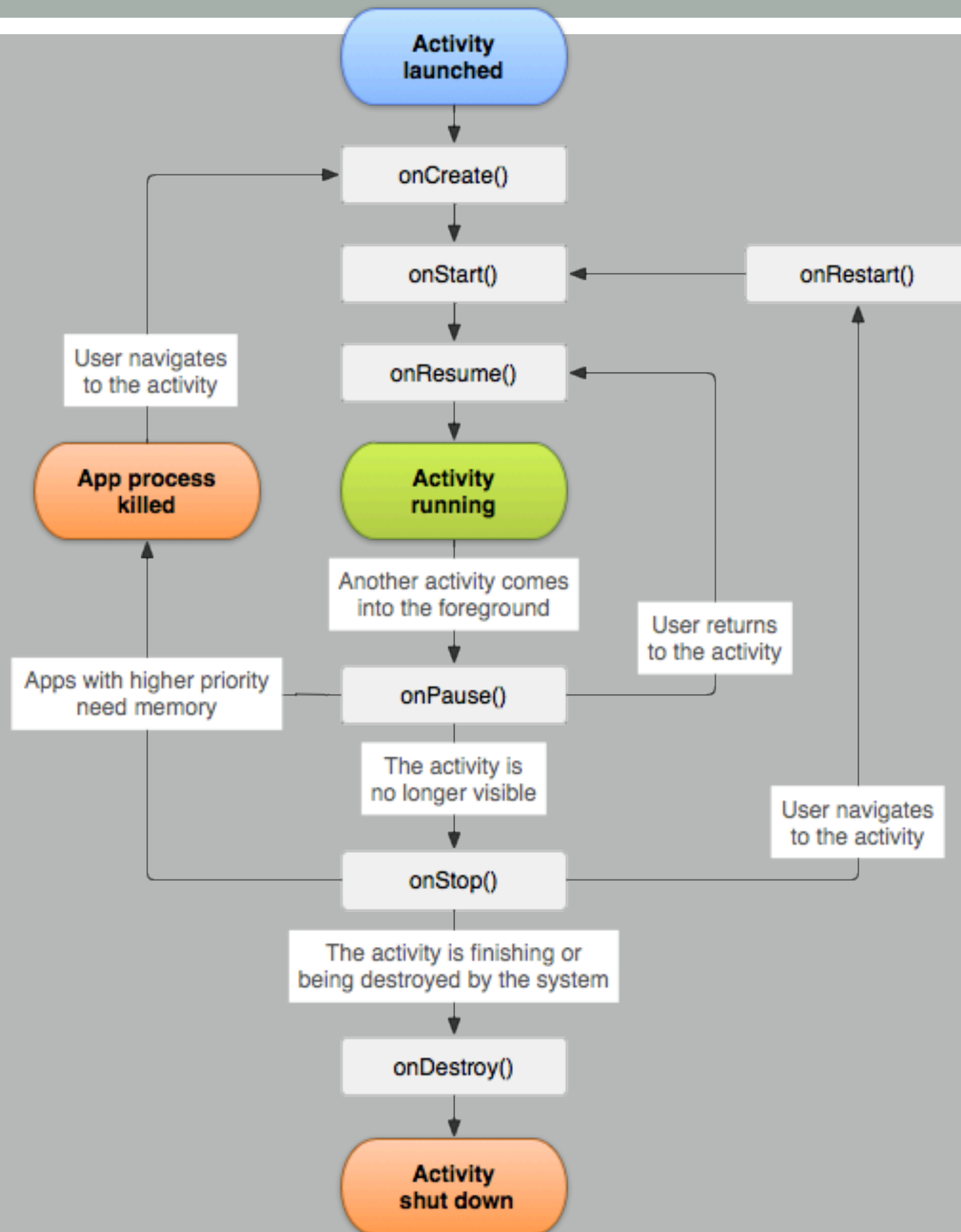
Lifecycle Methods

- onCreate()
The activity is being created.
- onStart()
The activity is about to become visible.
- onResume()
The activity is in focus (it is now "resumed").

Lifecycle Methods

- onPause()
Another activity is taking focus (this activity is about to be "paused").
- onStop()
The activity is no longer visible (it is now "stopped")
- onDestroy()
The activity is about to be destroyed





Layouts

- A layout defines the visual structure for a user interface, such as the UI for an activity or app widget

ConstraintLayout 1/2

- Every view must have at least two constraints: one horizontal and one vertical
- Parent constraint: Connects the side of a view to the corresponding edge of the layout.
- Position constraint: Define the order of appearance for two views, either vertically or horizontally.
- Alignment constraint: Aligns the edge of a view to the same edge of another view

ConstraintLayout 2/2

- Wrap Content: The view expands exactly as needed to fit its contents
- Any Size: The view expands exactly as needed to match the constraints
- Fixed: You specify the dimension

Live Coding

- Create an app with 2 activities, the 1st Activity has a button which when pressed takes you to the 2nd Activity.

Task

- Please extend the previous app with a Toast at every Activity lifecycle method for the 1st activity.
- Please add a separate button to show an AlertDialog from the 1st activity.

Questions ???

Sources

- <https://developer.android.com/training/basics/firstapp/index.html>
- <https://developer.android.com/training/basics/activity-lifecycle/index.html>