



# **Android Pre-requisites 2**

# Unix commands

## ■ Getting help

- Use “—help” flag when running command
- Type “man command”

## ■ Hidden files

- Begin with .

*touch updates timestamp  
or creates file if  
no file exists*

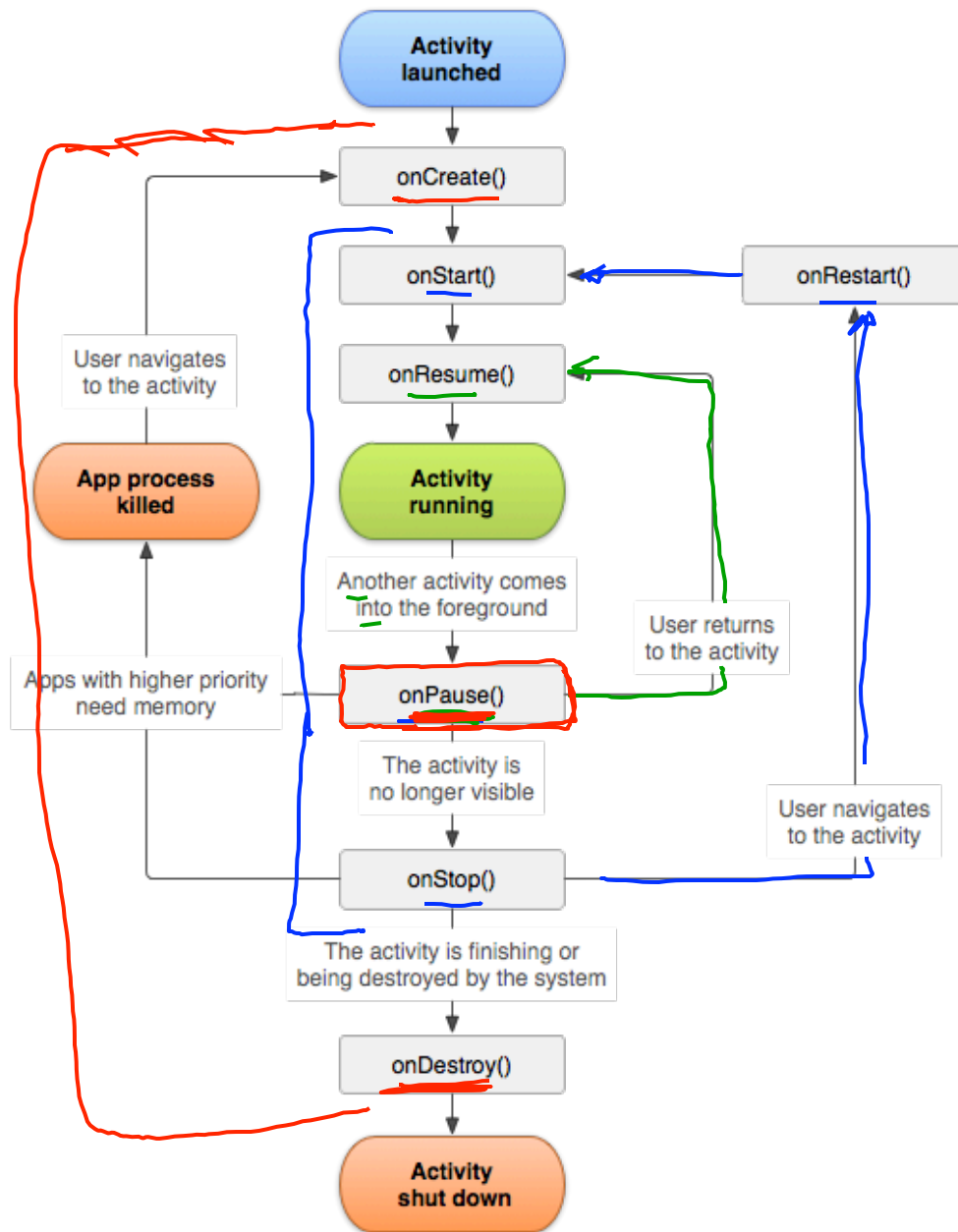
## ■ Globbing

- You can use an asterisk (\*) in file names as a wild card
- You can use square brackets for possible options
  - [abc]\* is all files that begin with a, b, or c

# Activity Lifecycle

- **Android devices are resource constrained**
  - Limited memory, limited battery
- **Use a fundamentally different than normal programs**
  - At any time, phone can kill “running” applications
  - Later, restart them where they left off
- ***Activities* are the building block of applications**
  - Every screen of a mobile app is a different activity
  - Only one activity is active is running at a time

# Activity Lifecycle



## 3 Lifetimes:

### ■ Entire

- onDestroy: Free resources

### ■ Visible

- onStop: Stop updating screen

### ■ Foreground

- Has user input focus
- onPause called on device sleep or when dialog appears

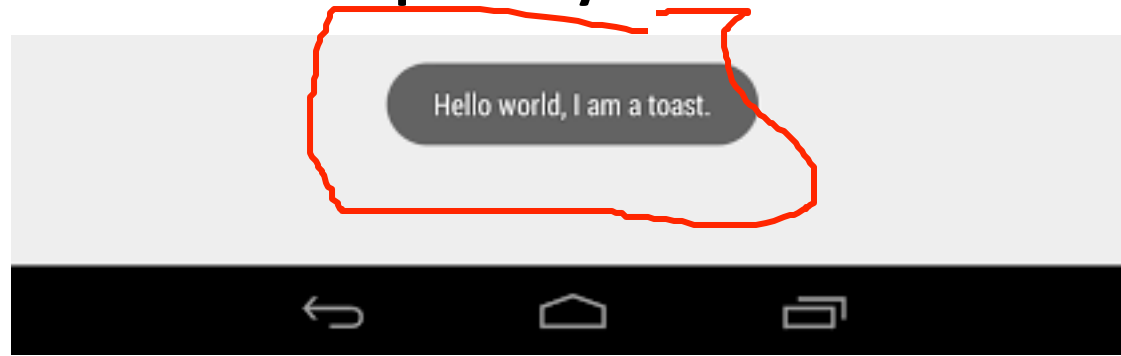
- Note: onPause is the last call you are guaranteed to receive before being destroyed.

# Context Object

- **An app has application state/environment data and resources**
  - E.g., assets, resources, package manager, preferences
  - It needs access to these to perform some operations
- **Android organizes these in a *Context* object**
  - Context is an abstract base class
  - Activity, Service, etc. **isA** Context
  - You will mostly use the Context indirectly
    - E.g., pass it as an argument to other function calls

# Toasts

- Messages that are temporarily drawn over the UI



- Useful for user notifications and during development

- `Toast.makeText(view.getContext(),`

`"Hello world, I am a toast",`

`Toast.LENGTH_LONG).show();`

*easy to forget*