Context in android.

What exactly context is?

Context

Added in API level 1

Summary: Constants | Ctors | Methods | Inherited Methods | [Expand All]

```
public abstract class Context
extends Object
```

java.lang.Object

↳ android.content.Context

Known Direct Subclasses

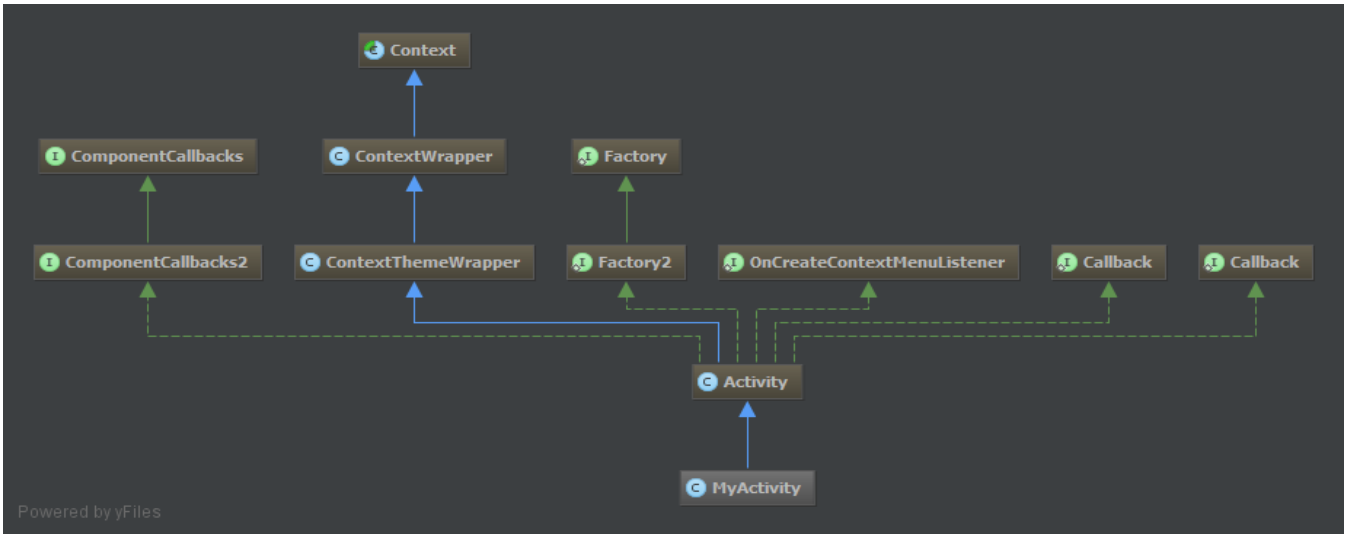
ContextWrapper, MockContext

Known Indirect Subclasses

AbstractInputMethodService, AccessibilityService, AccountAuthenticatorActivity, ActionBarActivity, Activity, ActivityGroup, AliasActivity, AppCompatActivity, Application, BackupAgent, BackupAgentHelper, CallScreeningService, CameraPrewarmService, and 45 others.

Interface to global information about an application environment. This is an abstract class whose implementation is provided by the Android system. It allows access to application-specific resources and classes, as well as up-calls for application-level operations such as launching activities, broadcasting and receiving intents, etc.

Activity is also inherited from context, so you can always use any method related to Context by passing **this** in any Activity. And can simply call method related to context like getResources() without need of context Object.



Context of current state of the application/object. It lets newly created objects understand what has been going on. And it's abstract class.

This is one of most useful answer for introduction of context, what it really is and all.

Various methods for getting context.

For Activities just use **this** [As activities itself own context] **or getContext()**

getApplicationContext() – This is context for whole application lifecycle and it's attached to whole application [**Activity.getApplication**]

getBaseContext() is also a method but Developer documentation suggest not to use it. It's used to getContext from another context.

What is difference between Activity and Application Context?

Activity context is tied to Lifecycle of Activity and Application context is available for whole Application.

When to use which?

getApplicationContext() – Use it when implementation is going to affect at whole application level and if any event that is related to activity life cycle then prefer Activity context instead.

Examples:

- Getting resources value, because all resources are accessible at Application level.
- Show Toast messages, you can use it.
- Service related tasks as they are not dependent on Activities lifecycles
- Broadcast receivers registering,sending

Activity Context

- Always for loading views
- Call another activity if you wanna manage Lifecycle
- Dialog creation.

	Application	Activity	Service	ContentProvider	BroadcastReceiver
Show a Dialog	NO	YES	NO	NO	NO
Start an Activity	NO[1]	YES	NO[1]	NO[1]	NO[1]
Layout Inflation	NO[2]	YES	NO[2]	NO[2]	NO[2]
Start a Service	YES	YES	YES	YES	YES
Bind to a Service	YES	YES	YES	YES	NO
Send a Broadcast	YES	YES	YES	YES	YES
Register BroadcastReceiver	YES	YES	YES	YES	NO[3]
Load Resource Values	YES	YES	YES	YES	YES

Example of usage of Context

Use Application context everywhere in App the static way

http://stackoverflow.com/questions/14057273/android-singleton-with-global-context

Why we can't access activity context in OnClickListner:

http://stackoverflow.com/questions/2002288/static-way-to-get-context-on-android?rq=1

Memory leaks post:

https://android-developers.googleblog.com/2009/01/avoiding-memory-leaks.html

Different methods to get contexts and difference between all:

http://stackoverflow.com/questions/10641144/difference-between-getcontext-getapplicationcontext-getbasecontext-and/15175006#15175006