Overview

• The role of Context
• Context sources
Context

• Context represents (provides a handle to) the application environment

• Can be obtained from several sources, but capabilities vary
Context

● Uses for context include
  – Loading activities and other components
  – Creating views
  – Accessing application resources
  – Accessing a shared/system service
Context

• You can get context from
  – an activity
  – a service
  – the application
  – Android
Application Context

- Global context that persists across all activities
- Implemented as a *Singleton*
## Context Capabilities

<table>
<thead>
<tr>
<th></th>
<th>Application</th>
<th>Activity</th>
<th>Service</th>
<th>ContentProvider</th>
<th>BroadcastReceiver</th>
</tr>
</thead>
<tbody>
<tr>
<td>Start an activity</td>
<td>No&lt;sup&gt;1&lt;/sup&gt;</td>
<td>Yes</td>
<td>No&lt;sup&gt;1&lt;/sup&gt;</td>
<td>No&lt;sup&gt;1&lt;/sup&gt;</td>
<td>No&lt;sup&gt;1&lt;/sup&gt;</td>
</tr>
<tr>
<td>Show a dialog</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Layout inflation</td>
<td>No&lt;sup&gt;2&lt;/sup&gt;</td>
<td>Yes</td>
<td>No&lt;sup&gt;2&lt;/sup&gt;</td>
<td>No&lt;sup&gt;2&lt;/sup&gt;</td>
<td>No&lt;sup&gt;2&lt;/sup&gt;</td>
</tr>
<tr>
<td>Start a service</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Bind to a service</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Send a broadcast</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Register BroadcastReceiver</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No&lt;sup&gt;3&lt;/sup&gt;</td>
</tr>
<tr>
<td>Load resource values</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

1 - An application CAN start an Activity from here, but it requires that a new task be created. This may fit specific use cases, but can create non-standard back stack behaviors in your application and is generally not recommended or considered good practice.

2 - This is legal, but inflation will be done with the default theme for the system on which you are running, not what’s defined in your application.

3 - Allowed if the receiver is null, which is used for obtaining the current value of a sticky broadcast, on Android 4.2 and above.

Source: [http://possiblemobile.com/2013/06/context/](http://possiblemobile.com/2013/06/context/)