

Android Training

Activity and Fragments

What are fragments?

A fragment is an independent Android component which can be used by an activity. A fragment encapsulates functionality so that it is easier to reuse within activities and layouts.

A fragment runs in the context of an activity, but has its own life cycle and typically its own user interface. It is also possible to define fragments without an user interface, i.e., headless fragments.

Fragments and Context access

Fragments don't subclass the Context class. Therefore you have to use the `getActivity()` method to get the parent activity.

Creating Fragment

```
public class DetailFragment extends Fragment {
```

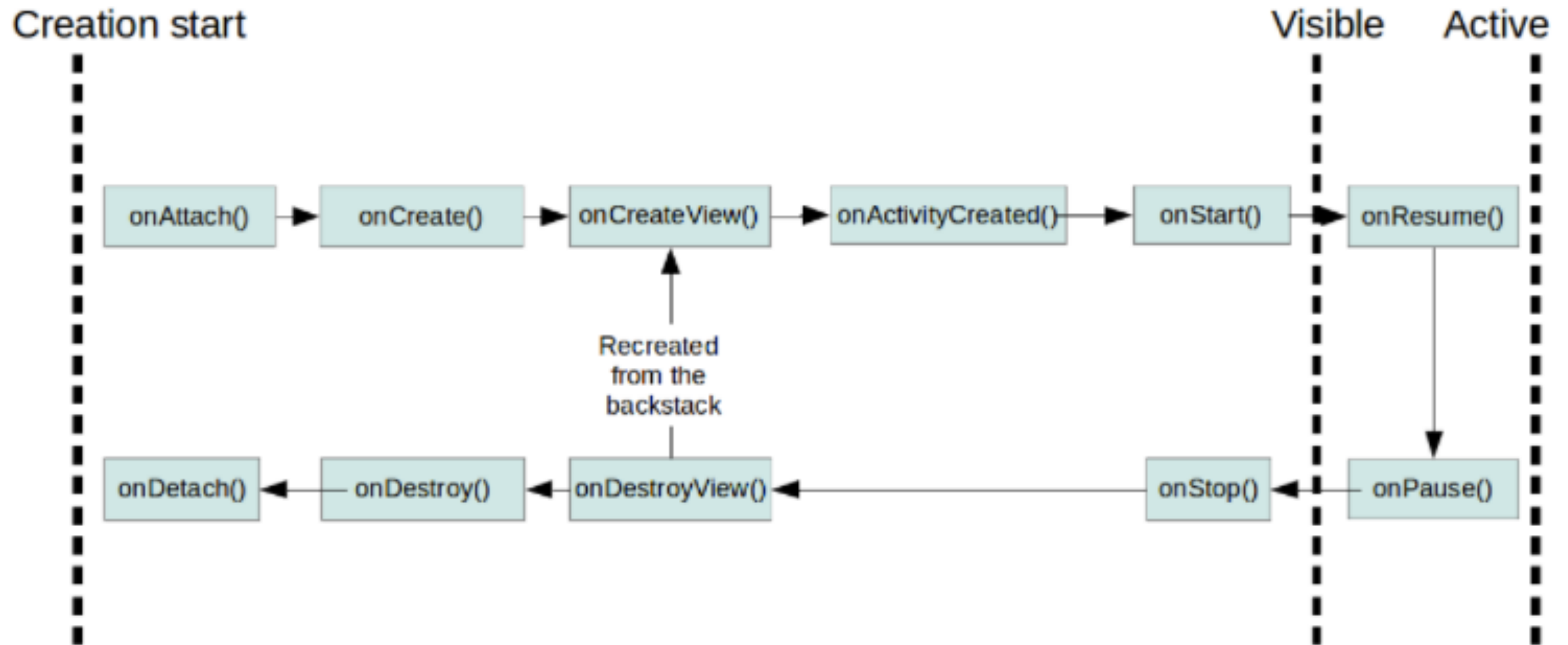
Include Fragment in XML

```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="fill_parent"
    android:layout_height="fill_parent"
    android:baselineAligned="false"
    android:orientation="horizontal" >

    <fragment
        android:id="@+id/listFragment"
        android:layout_width="0dp"
        android:layout_weight="1"
        android:layout_height="match_parent"
        class="com.example.android.rssreader.MyListFragment"
        tools:layout="@layout/fragment_rsslist_overview">
    </fragment>
    <fragment
        android:id="@+id/detailFragment"
        android:layout_width="0dp"
        android:layout_weight="2"
        android:layout_height="match_parent"
        class="com.example.android.rssreader.DetailFragment"
        tools:layout="@layout/fragment_rssitem_detail">
    </fragment>

</LinearLayout>
```

Fragment Life cycle



Attaching Fragment Dynamically

```
// get fragment manager
FragmentManager fm = getFragmentManager();

// add
FragmentManager ft = fm.beginTransaction();
ft.add(R.id.your_placehodler, new YourFragment());
// alternatively add it with a tag
// trx.add(R.id.your_placehodler, new YourFragment(), "detail");
ft.commit();

// replace
FragmentManager ft = fm.beginTransaction();
ft.replace(R.id.your_placehodler, new YourFragment());
ft.commit();

// remove
Fragment fragment = fm.findFragmentById(R.id.your_placehodler);
FragmentManager ft = fm.beginTransaction();
ft.remove(fragment);
ft.commit();
```