Week 5 Lecture

Fragments

01

Project Demo

What are we building this week?

02

Fragments

Building composable UI using Fragments

Project Demo

What are we building
this week?

Week 5 Project Updates

- Create a LocationEntryFragment
- Create a CurrentForecastFragment
- Create an AppNavigator interface to navigate between fragments
- Add a FloatingActionButton to show LocationEntryFragment after forecast data is displayed

Fragments

Building composable UI
using Fragments

How to reuse pieces of UI?

Fragments

Reusable portions of UI that can be composed together within a single Activity
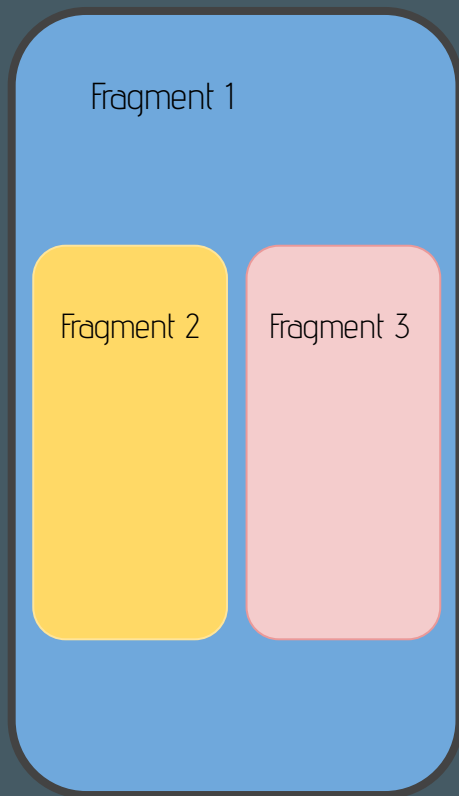
Fragments

Fragment

Has its own layout and lifecycle. Can be defined in XML or added/removed programmatically

FragmentManager

Manages what Fragments are currently showing on the screen. Use the FragmentManager to add/remove a Fragment.

FragmentTransaction

Represents the addition or removal of a single Fragment from its container.

Fragment 1

Fragment 2

Fragment 3

Composable UI

Add & remove multiple fragments in a single screen
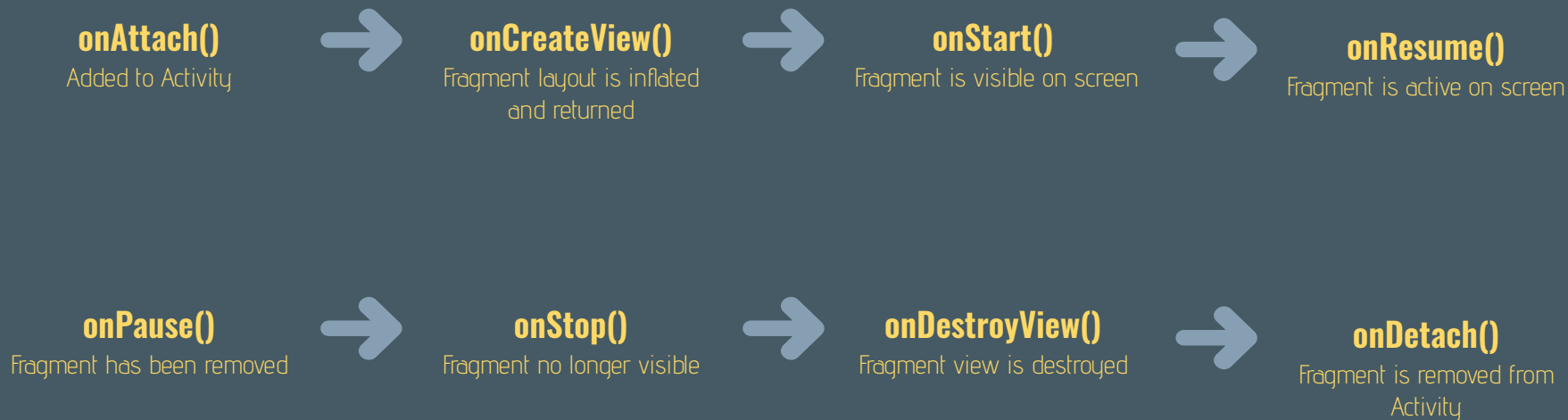
Adding a Fragment Using XML

```xml
<fragment
    android:id="@+id/locationEntryFragment"

android:name="com.goobar.io.ad340.location.LocationEntryFragment"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    />
```

Adding a Fragment Programmatically

```
supportFragmentManager
    .beginTransaction()
    .add(R.id.root, Fragment())
    .commit()
```

Fragment Lifecycle

Fragment lifecycle is very similar to Activity lifecycle

Fragment Lifecycle

onAttach()
Added to Activity

➡️

onCreateView()
Fragment layout is inflated
and returned

➡️

onStart()
Fragment is visible on screen

➡️

onResume()
Fragment is active on screen

onPause()
Fragment has been removed

➡️

onStop()
Fragment no longer visible

➡️

onDestroyView()
Fragment view is destroyed

➡️

onDetach()
Fragment is removed from
Activity

Check Canvas For Additional Resources & Assignments