



# Fragment Lifecycle

Fragment  
Fundamentals

# Goals

- ❑ Fragment Lifecycle in Android
- ❑ What are the different methods called in the fragment lifecycle?
- ❑ What are the different methods involved in the activity lifecycle?
- ❑ How does the activity notified of the events in the fragment lifecycle?
- ❑ How does the fragment communicate its messages to the activity?



# How to make a Fragment?

1

→ Extend Fragment class

2

→ Provide appearance in XML/Java

3

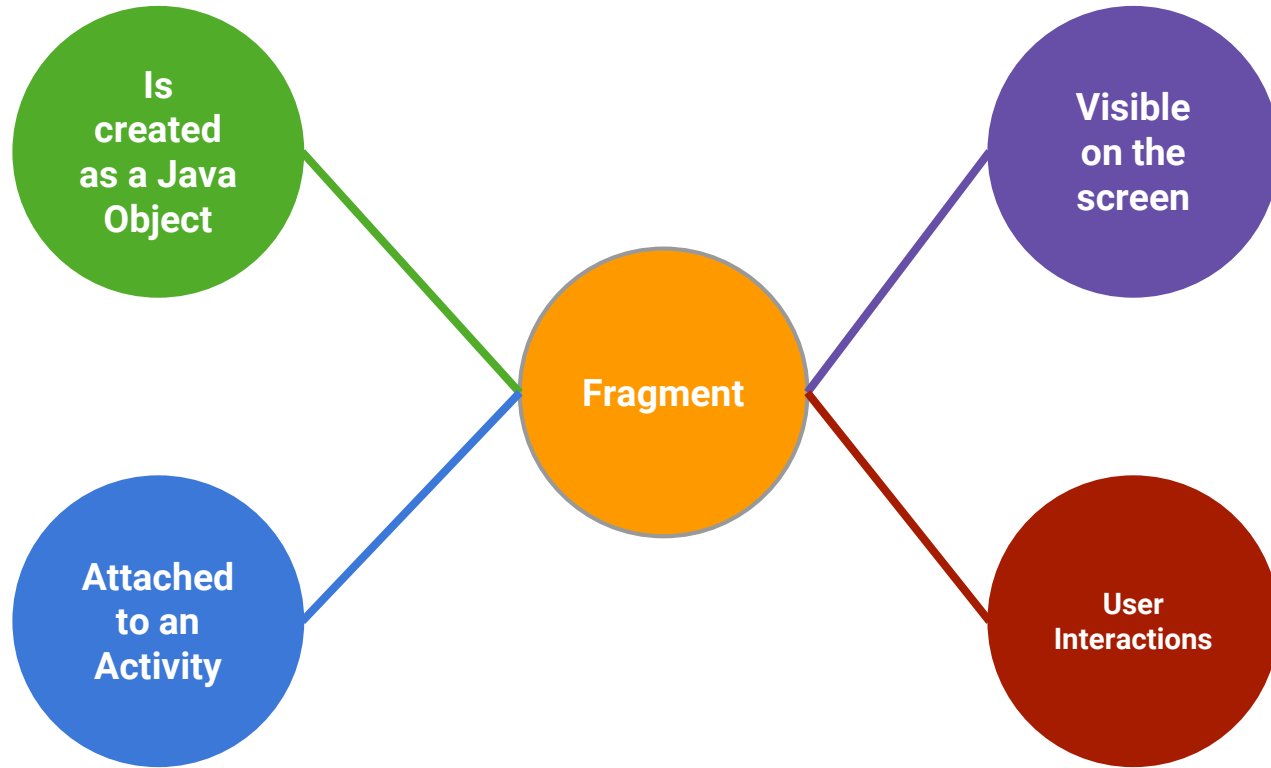
→ Override onCreateView to link the appearance

4

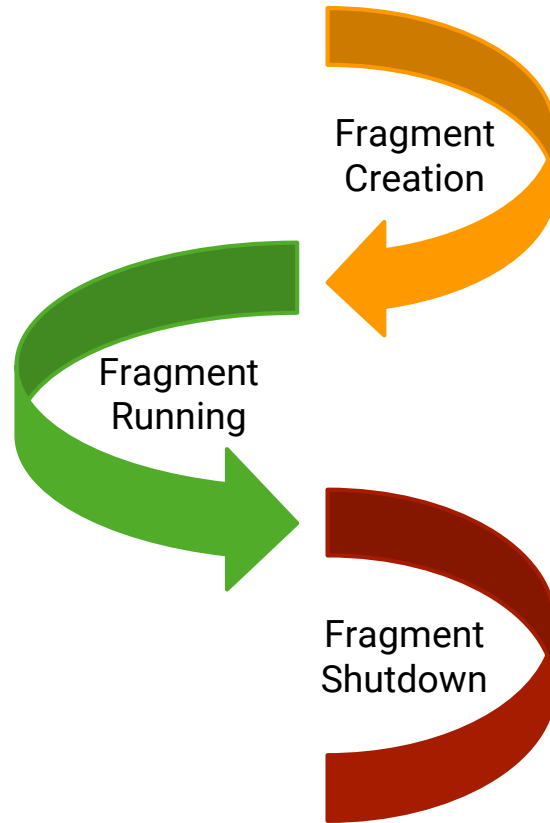
→ Use the Fragment in XML/Java



# Fragment Object States



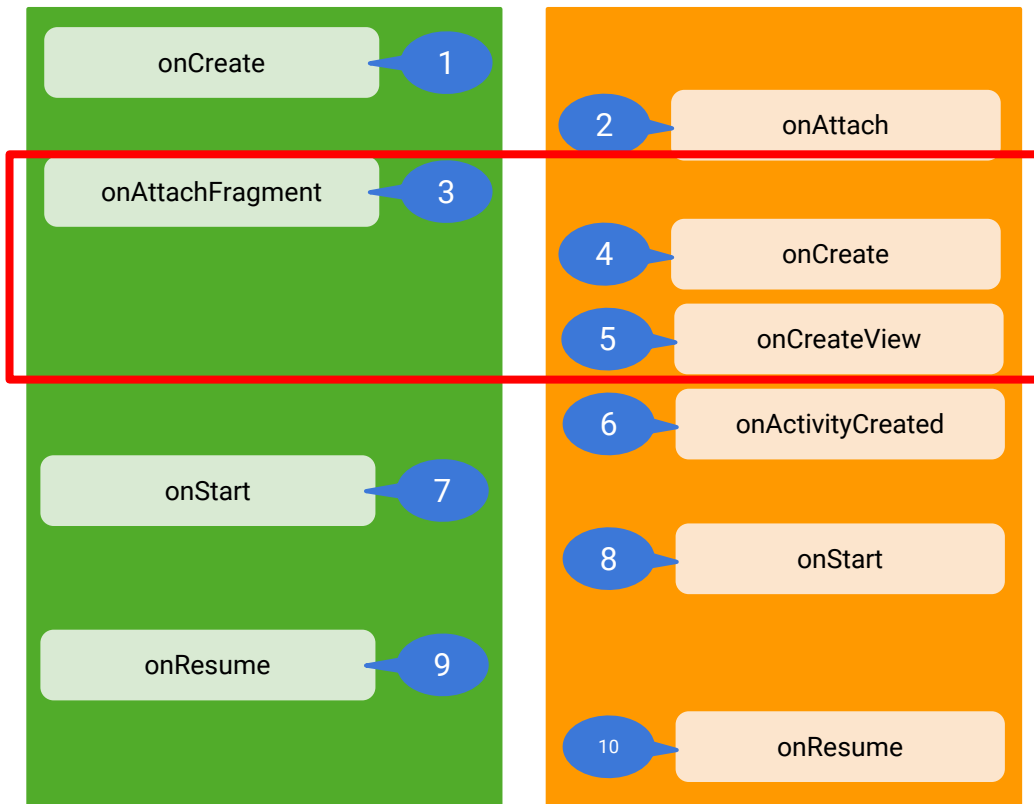
# Fragment Lifecycle - Major Stages



# Lifecycle - Fragment Creation

Activity

Fragment



**onAttach** is called after Fragment is associated with its Activity. Gets a reference to the Activity object which can be used as a Context.

**onCreate** Don't use `onCreate` to access View hierarchy because Activity's `onCreate` may/may not be finished. Create background threads here for long running operations.

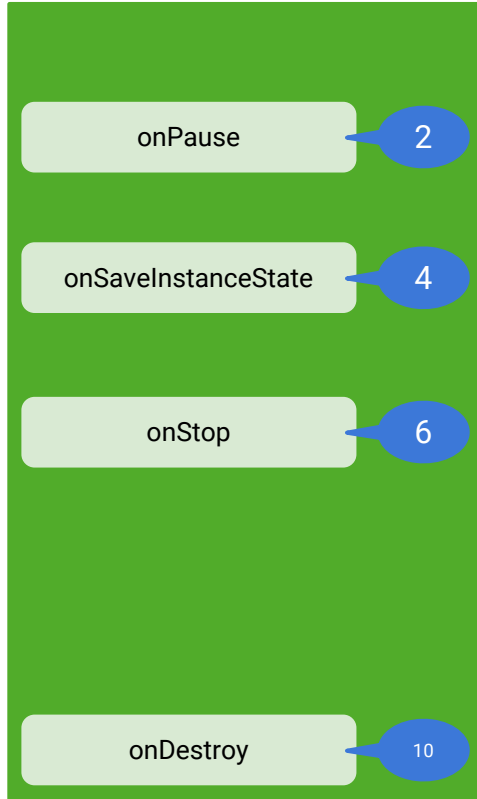
**onCreateView** You are expected to return a View Hierarchy for your fragment.

**onActivityCreated** Called after Activity `onCreate` has completed execution. Use this method to access/modify UI elements.



# Lifecycle - Fragment Shutting Down

Activity



Fragment



**onSaveInstanceState** Use this to save information inside a Bundle object.

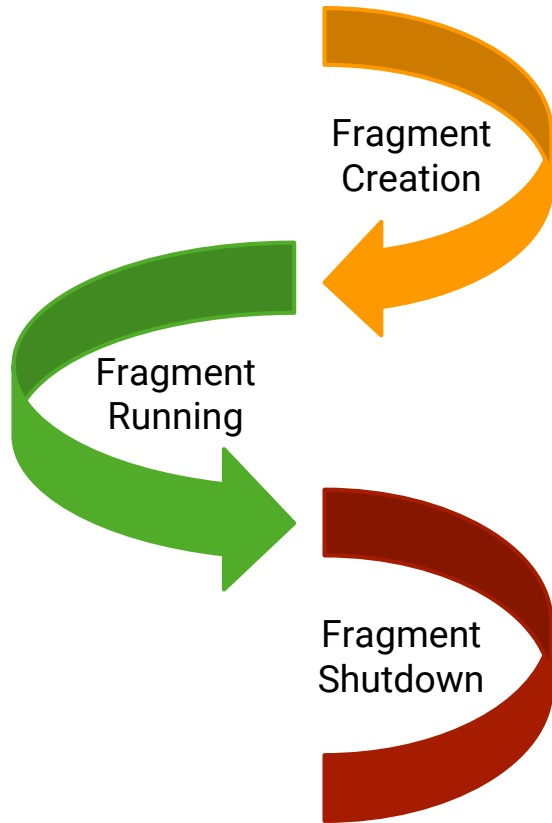
**onDestroyView** Called after the Fragment's View Hierarchy is no longer accessible.

**onDestroy** Called after fragment is not used. It still exists as a Java object attached to the Activity.

**onDetach** Fragment is not tied to the Activity and does not have a View hierarchy.



# Fragment Lifecycle



## NOTE:

- The Fragment's Lifecycle methods with the same name execute after the Activity's lifecycle methods during creation and before the Activity's lifecycle methods during destruction.
- The order of the methods being called slightly varies based on whether your Fragment was attached to the Activity using XML or Java.
- There is no `onRestart` or `onRestoreInstanceState` inside a Fragment, you receive the Bundle in `onCreate`, `onCreateView` and `onActivityCreated` when it comes to a Fragment.





