

Enabling the Back Button with Backstack



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Why Back Navigation?





Default Case

Problem Statement?

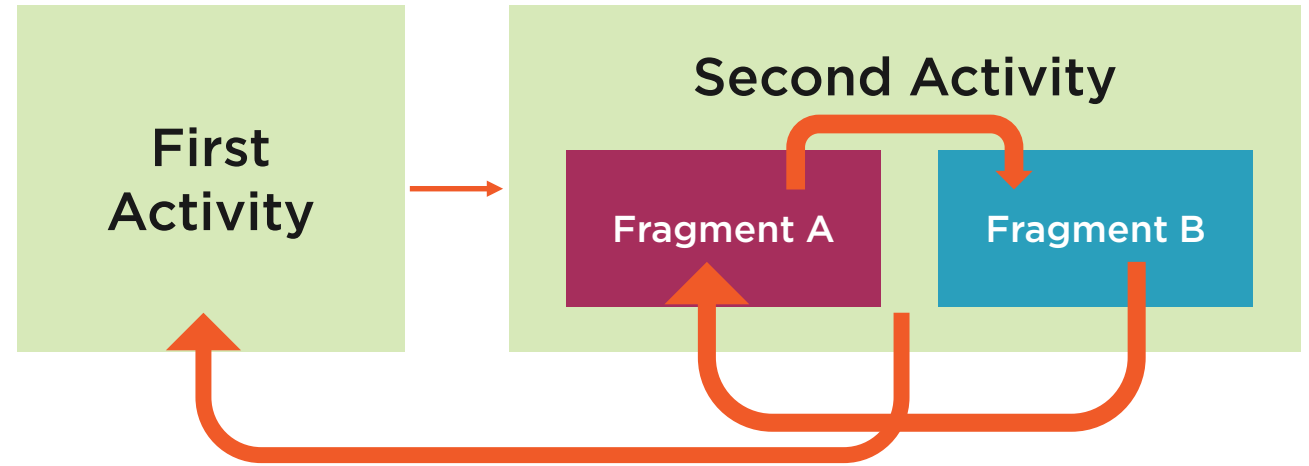
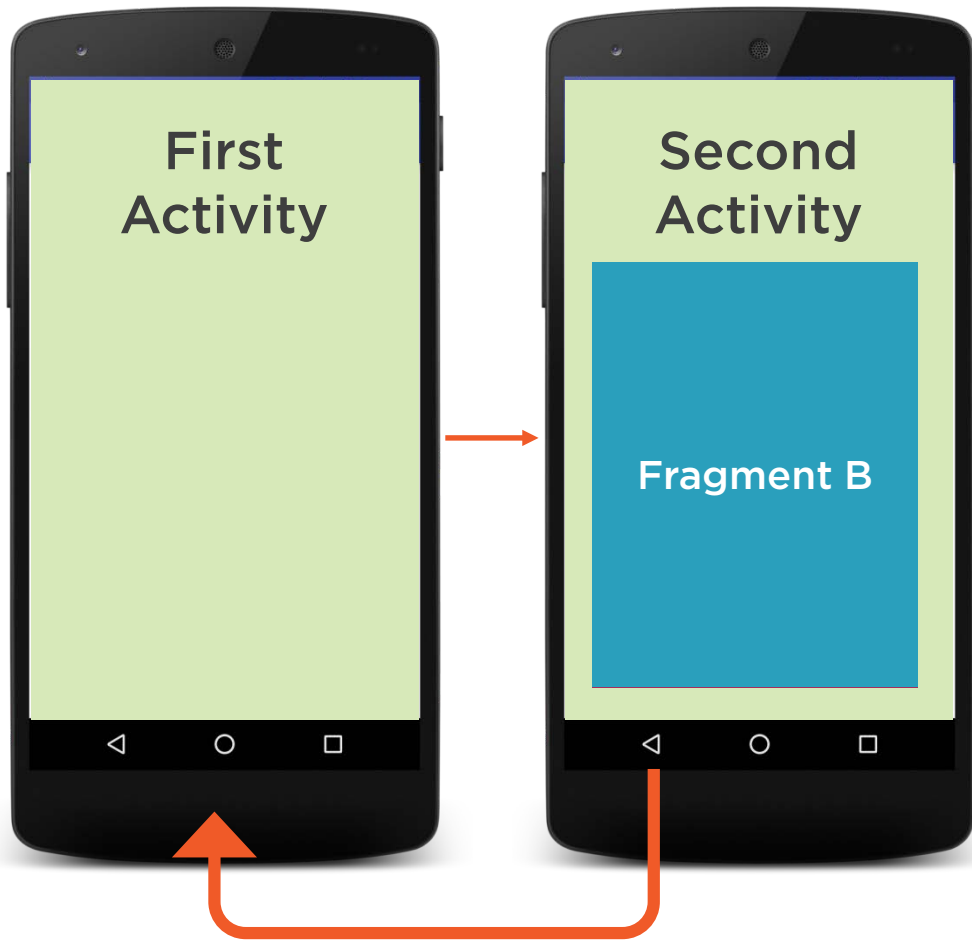
Default Case

- Activity responds to Back Button
- Fragments are not aware of Back Button
 - Fragments do not respond to Back Press

How to make Fragments respond to Back Button Press?



Solution : Use Back Stack



- Fragments by default do not respond to Back Button of Android Device
- If we use Back Stack concept
 - Then we can enable back press for Fragments
 - And we can switch back to our previous desired Fragment

Objective



Understand FragmentTransaction and BackStack

How to Add a Transaction to Back Stack

- addToBackStack(**null**)
- addToBackStack(**String TAG**)

How to Pop the Back Stack

- popBackStack()
- popBackStack(**String TAG**, **int FLAG**)
 - **int FLAG**
 - 0
 - POP_BACK_STACK_INCLUSIVE

Using Back Android Button to Undo the Transaction or Pop the Back Stack



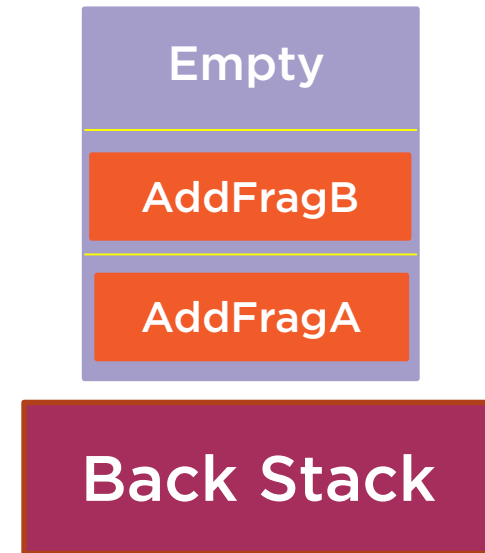
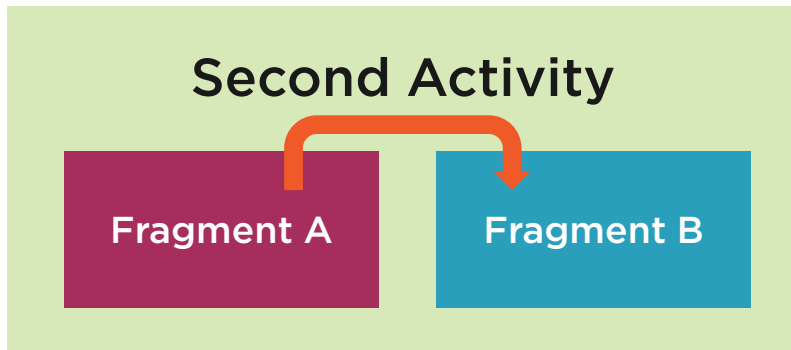
Initial Project Setup



```
FragmentA fragmentA = new FragmentA();  
FragmentManager fm = getFragmentManager();  
FragmentTransaction tn = fm.beginTransaction();  
tn.add(R.id.container, fragmentA, "fragA");  
tn.addToBackStack("AddFragA");  
tn.commit();
```

```
FragmentB fragmentB = new FragmentB();  
FragmentManager fm = getFragmentManager();  
FragmentTransaction tn = fm.beginTransaction();  
tn.add(R.id.container, fragmentB, "fragB");  
tn.addToBackStack("AddFragB");  
tn.commit();
```

FragmentTransaction and Back Stack

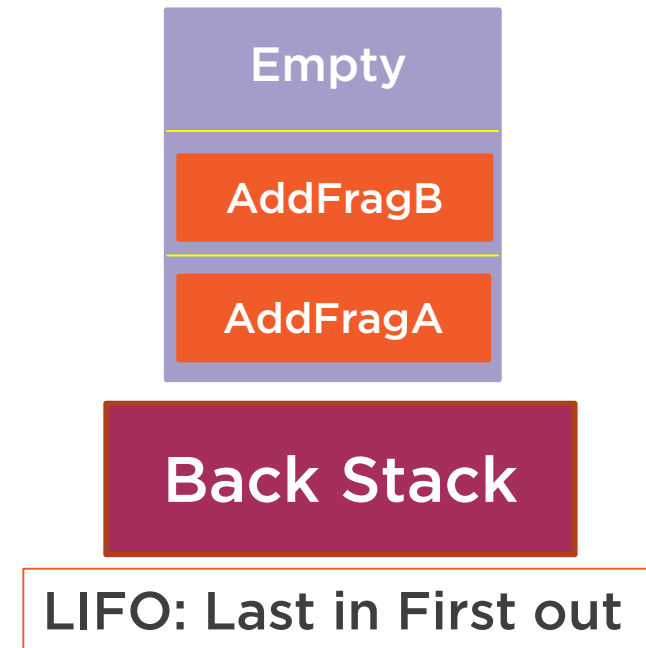
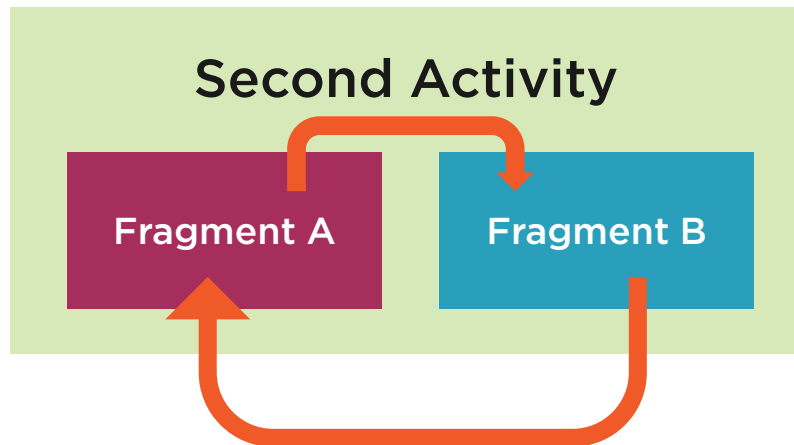


LIFO: Last in First out



```
FragmentManager manager = getSupportFragmentManager();  
manager.popBackStack();  
manager.popBackStack();
```

FragmentManager Transaction and Back Stack




```

FragmentManager fm = getFragmentManager();
fm.popBackStack("AddFragD", 0);
fm.popBackStack("RemFragC", POP_BACK_STACK_INCLUSIVE);
fm.popBackStack("AddFragA", 0);
fm.popBackStack();

```

```

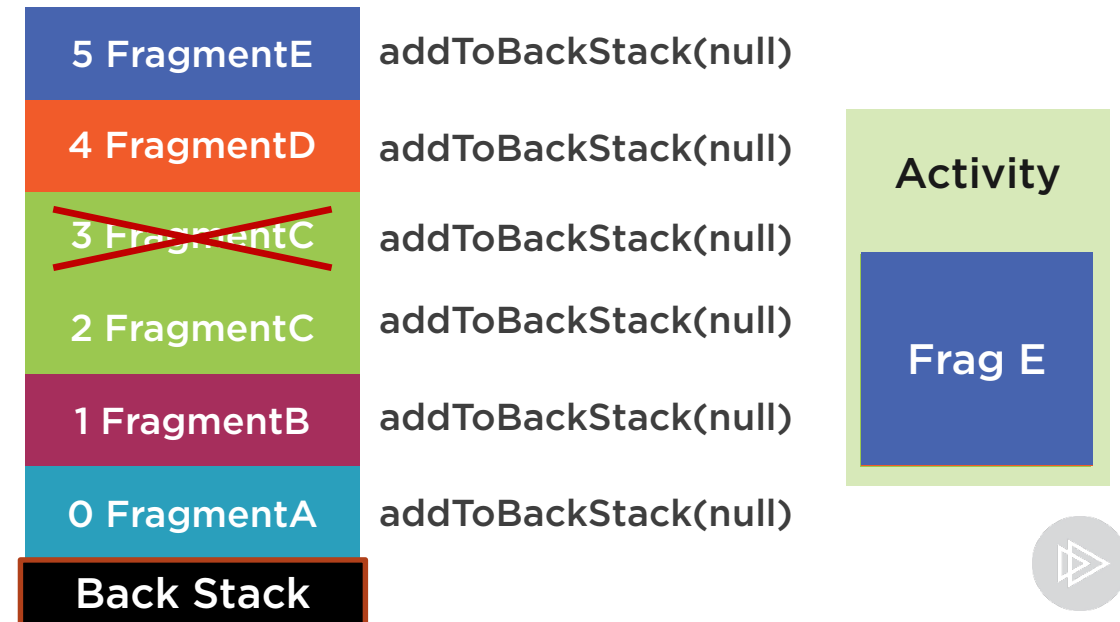
FragmentManager fm = getFragmentManager();
fm.popBackStack();
fm.popBackStack();
fm.popBackStack();
fm.popBackStack();
fm.popBackStack();
fm.popBackStack();

```

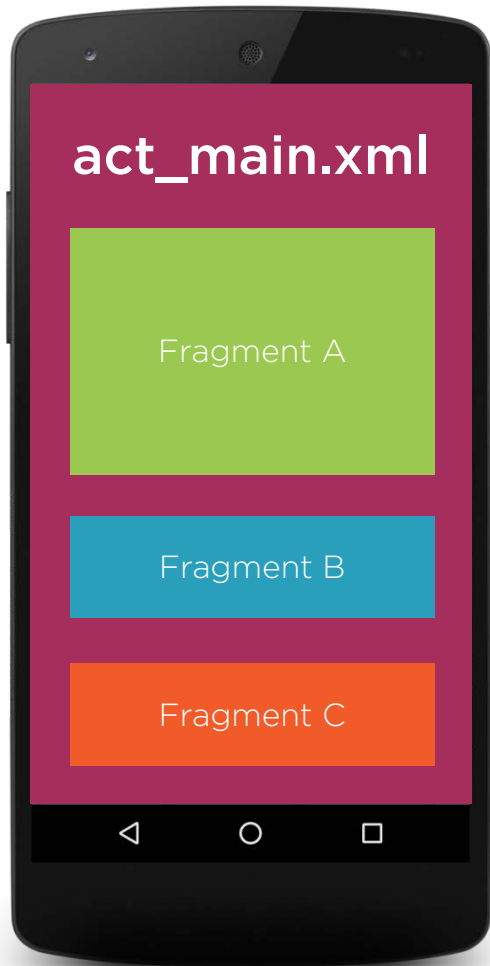
Case 1



Case 2



Multiple Changes in Single FragmentTransaction



MainActivity

```
FragmentManager fm = getFragmentManager();  
FragmentTransaction tn = fm.beginTransaction();  
tn.add(R.id.container1, fragmentA);  
tn.add(R.id.container2, fragmentB);  
tn.replace(R.id.container3, fragmentC);  
tn.addToBackStack("AddThreeFrag");  
tn.commit();  
  
fm.popBackStack("AddThreeFrag");
```



Conclusion



We can perform multiple changes to different Fragments in a single Transaction

When Back Stack is popped

- All the changes in the Transaction are undone



Summary



FragmentTransaction and Back Stack

Interface `OnBackStackChangeListener`

- `onBackStackChanged()`

Back Navigation

- `addToBackStack(...)`
- `popBackStack(...)`

Customised the Navigation of a Fragment similar to an Activity

