

# Exploring Activity Lifecycle

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**Sriyank Siddhartha**

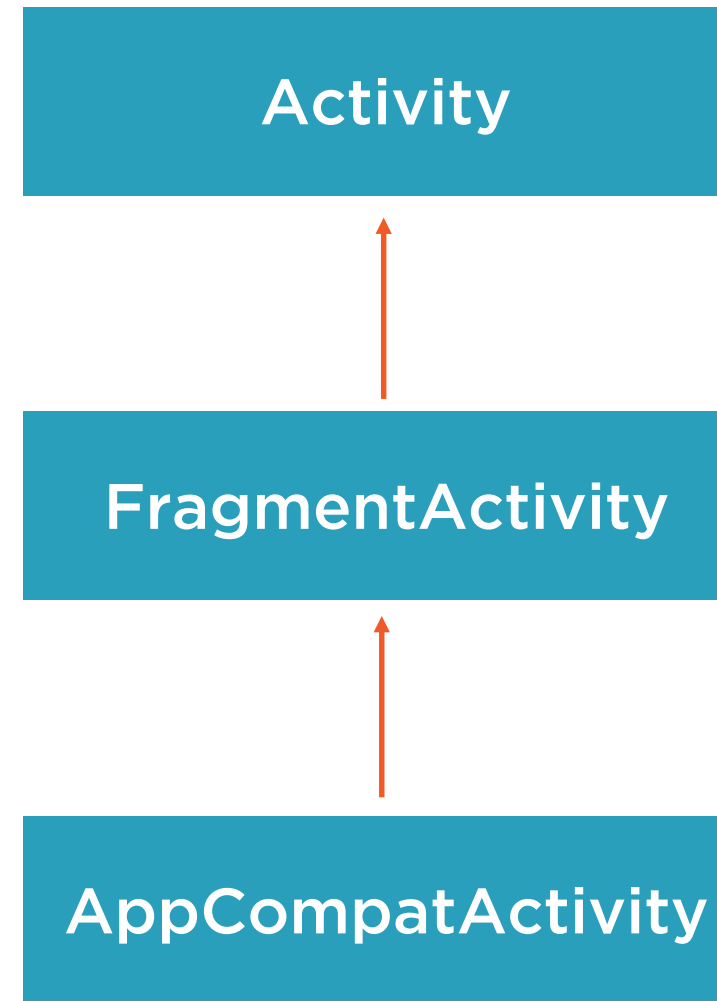
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# Overview



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**For App with Minimum SDK – API 15-16**

## **AppCompatActivity**

- If **Material Design** implementation needed

## **FragmentActivity**

- If nested  **Fragments** needed

## **Activity**

- None of the above needed



# Lifecycle Methods

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```
public class MainActivity extends Activity {  
    protected void onCreate(Bundle savedInstanceState) {  
    }  
    // Rest of the codes .....  
}
```

## Other Important Methods

**onCreate**

**onPause**

**onStart**

**onStop**

**onResume**

**onDestroy**

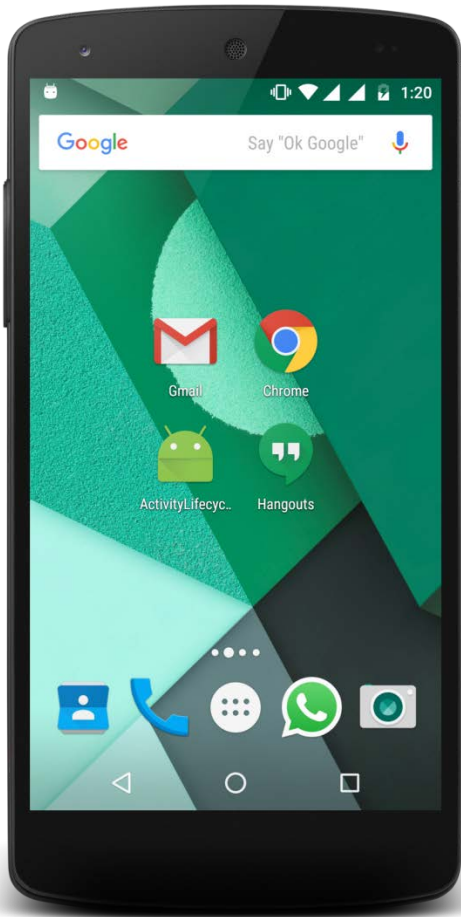
**onRestart**



# Activity Lifecycle

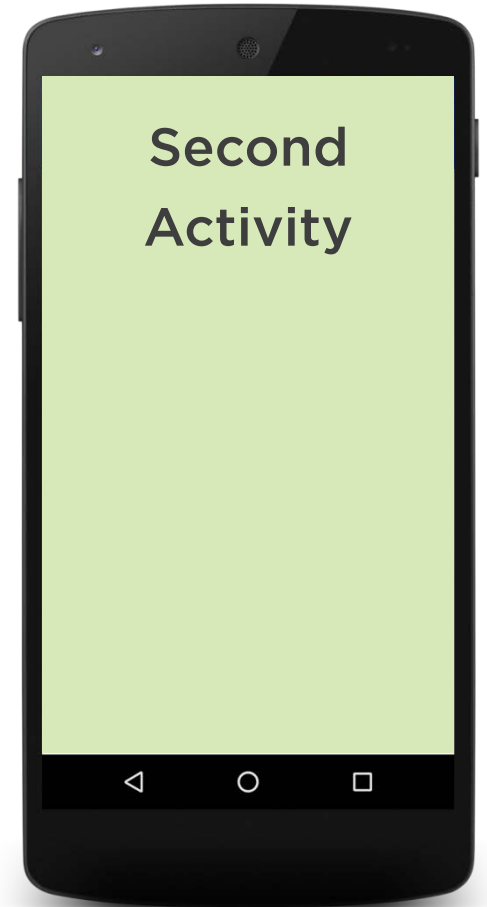
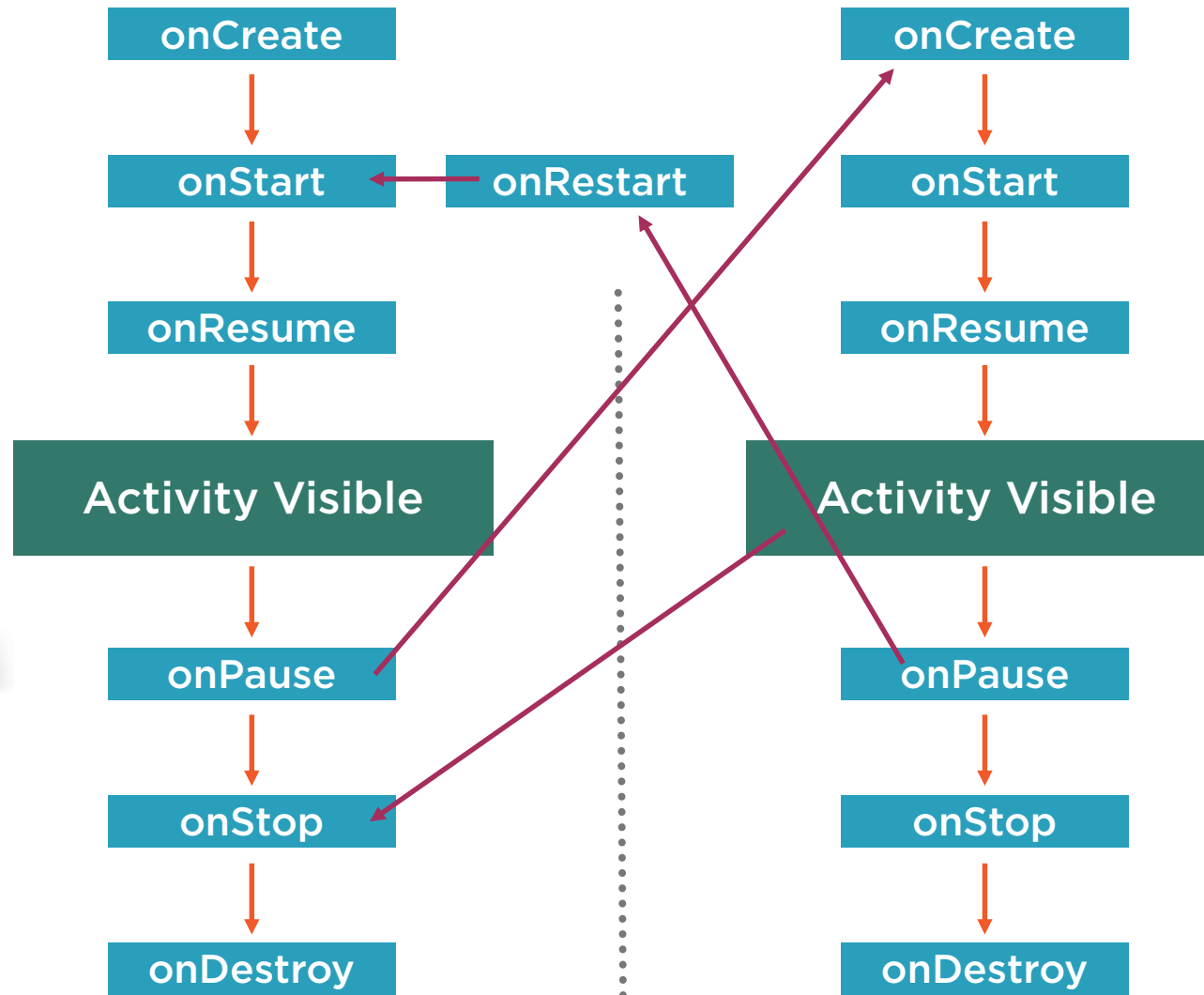
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onDestroy

## Explicit Intent



onDestroy



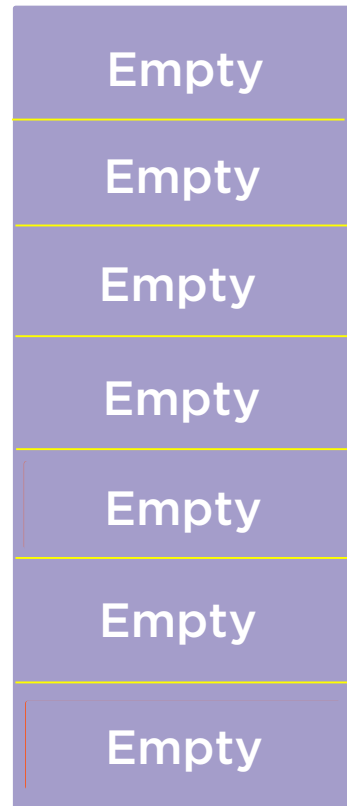
# Stack and Activity

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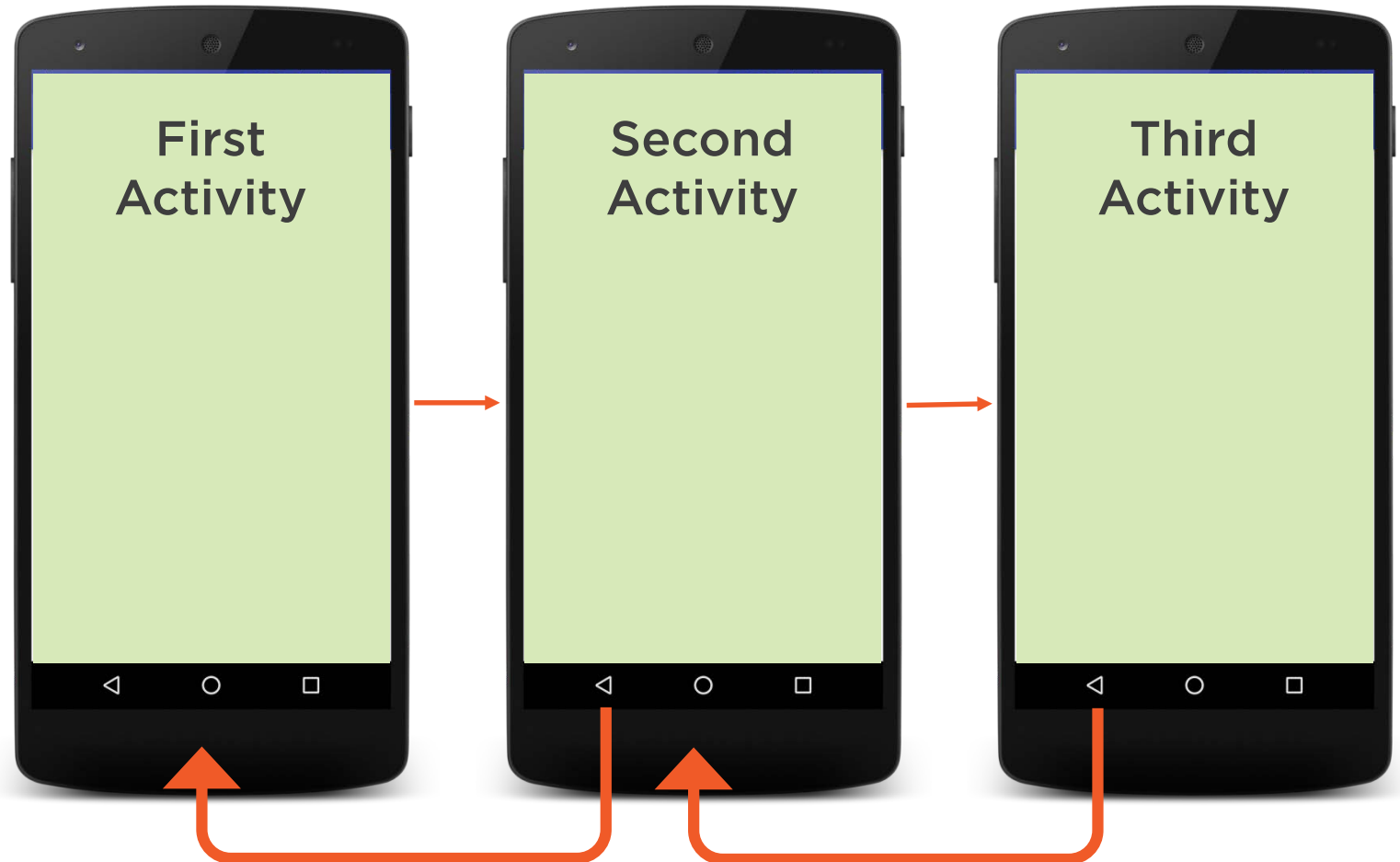


# Activity Stack



**Stack**

**LIFO: Last in First out**



# Summary



## onCreate()

- Called when Activity is first created.
- Create views
- Attach layouts ( `setContentView` )
- Initialize field variables and Widgets
- Make use of Bundle parameter to retrieve previous frozen state
- Always followed by `onStart()`

## onRestart()

- Called after Activity has been stopped
- Always followed by `onStart()`



# Summary



## onStart()

- Called when Activity is becoming **visible** to user
- User interaction **not** allowed

## onResume()

- User Interaction enabled
- Activity appears at top of Activity Stack
- Always followed by **onPause()**
- Activity is completely in **Foreground**



# Summary



## onPause()

- Activity starts to go into Background
- Manually, save the Persistent data

## onStop()

- User Interaction Stops
- Activity completely in Background

## onDestroy()

- After this, the Activity is Destroyed

