

2. Android Activity Life Cycle

- The steps that an application goes through from **starting to finishing**
- Slightly **different than normal Java life cycle** due to :
 - The difference in the **way Android application are defined**
 - The **limited resources** of the Android hardware platform

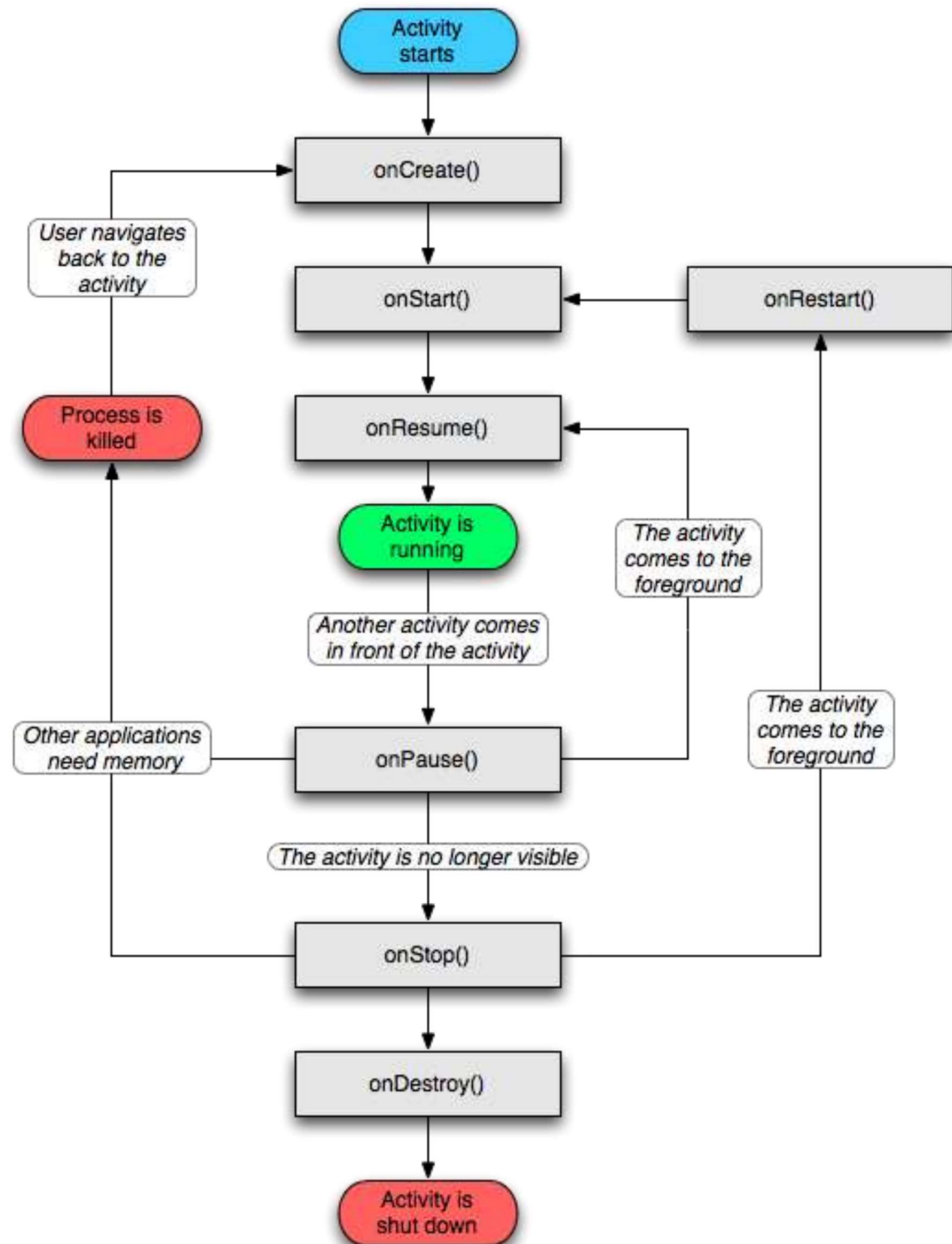
Activity Life Cycle (con...)

- Each application runs in its **own process**.
- Each activity of an app is run in the **apps process**
- **Processes are started and stopped as needed** to run an apps components.
- **Processes may be killed** to reclaim needed resources.
- **Killed apps may be restored** to their last state when requested by the user

Activity Life Cycle(con...)

- Management of the life cycle is done automatically by the system via the **activity stack**.
- The activity class has the **following method callbacks** to help you manage the app:
 - onCreate()
 - onStart()
 - onResume()
 - onPause()
 - onStop()
 - onRestart()
 - onDestroy()

Activity Life Cycle



Example

```
public class MainActivity extends Activity {  
    @Override  
    protected void onCreate(Bundle  
        savedInstanceState) {  
        super.onCreate(savedInstanceState);  
        setContentView(R.layout.activity_main);  
        Toast.makeText(getApplicationContext(), "I am  
onCreate() Method",  
            Toast.LENGTH_SHORT).show();  
    }  
}
```

Example (con...)

@Override

```
protected void onStart() {  
    Toast.makeText(getApplicationContext(), "I am  
    onStart() method", Toast.LENGTH_SHORT).show();  
    super.onStart();  
}
```

@Override

```
protected void onResume() {  
    Toast.makeText(getApplicationContext(), " I am  
    onResume() method ", Toast.LENGTH_SHORT).show();  
    super.onResume();  
}
```

Example (con...)

@Override

```
protected void onPause() {  
    Toast.makeText(getApplicationContext(), " I am  
    onPause() method ", Toast.LENGTH_SHORT).show();  
    super.onPause();  
}
```

@Override

```
protected void onStop() {  
    Toast.makeText(getApplicationContext(), " I am  
    onStop() method ", Toast.LENGTH_SHORT).show();  
    super.onStop();  
}
```

Example (con...)

@Override

```
protected void onRestart() {  
    Toast.makeText(getApplicationContext(), " I am  
    onRestart() method ", Toast.LENGTH_SHORT).show();  
    super.onRestart();  
}
```

@Override

```
protected void onDestroy() {  
    Toast.makeText(getApplicationContext(), " I am  
    onDestroy() method ", Toast.LENGTH_SHORT).show();  
    super.onDestroy();  
} }
```