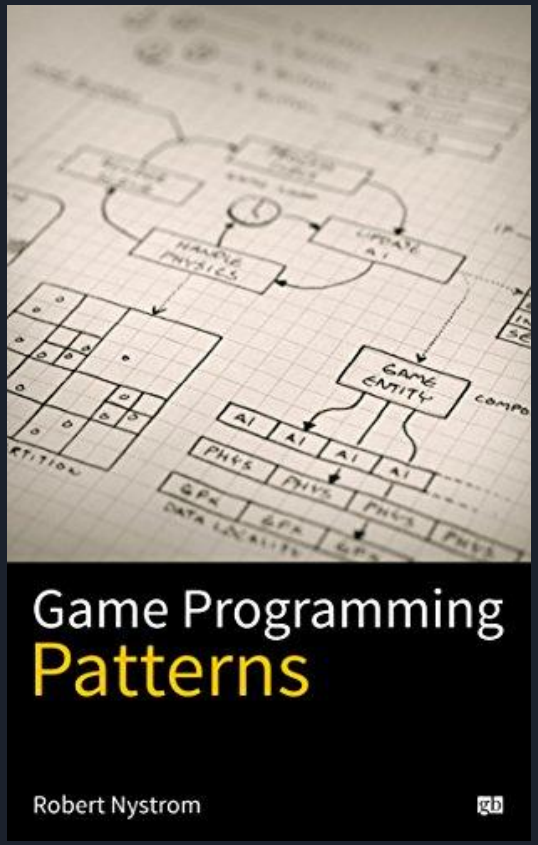
Kotlin Android Fragments

CS 402: Mobile Development

Book Recommendation

Game Programming Patterns

https://amzn.to/2Xd6fU3



Fragments

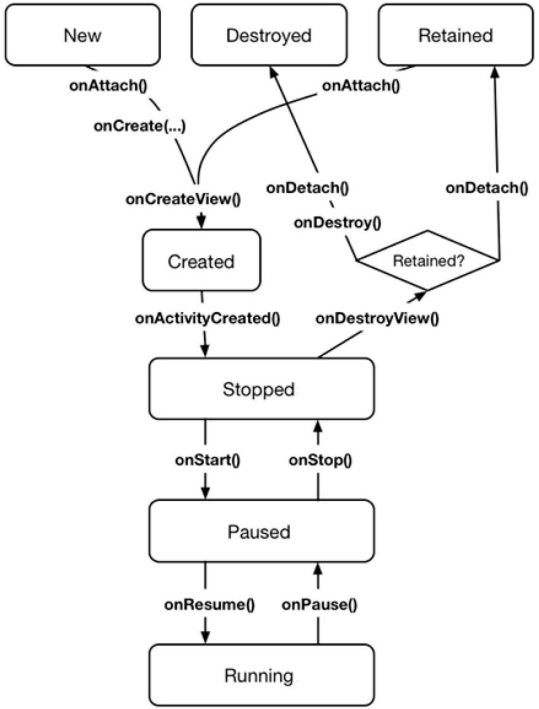
Implemented in Honeycomb (3.0)

All Activity class implementations before that don't know how to handle Fragments.

Fragments allow different layouts to be used in an Activity

Android Fragment Lifecycle

Figure 7.18 The fragment lifecycle, again



Android Fragments Class

```
class SomeFragment: Fragment
```

Android Fragments

```
override fun onCreate(savedInstanceState: Bundle?)
```

Activity's onCreate method is `protected`

Fragment's is `public`

onCreateView

```
override fun onCreateView(inflater: LayoutInflater?,
    container: ViewGroup?,
    savedInstanceState: Bundle?): View?
```

Inflate the Layout

```
val viewToReturn = inflater!!.inflate(R.layout.fragment_gallery,
container, false)


return viewToReturn
```

Get a UI Element Reference

```
val someFragment =
fragmentManager.findFragmentById(R.id.fragmentContainer)
```

Get Fragment Manager

```
// In parent Activity

supportFragmentManager

    .beginTransaction()

    .replace(R.id.frameContainer, galleryFragment)

    .addToBackStack(galleryFragment.toString())

    .setTransition(FragmentTransaction.TRANSIT_FRAGMENT_OPEN)

    .commit()
```

Create Fragment

```
val newFragment = AFragmentClass.newInstance()
```

Android Fragment Lifecycle

Figure 7.18 The fragment lifecycle, again