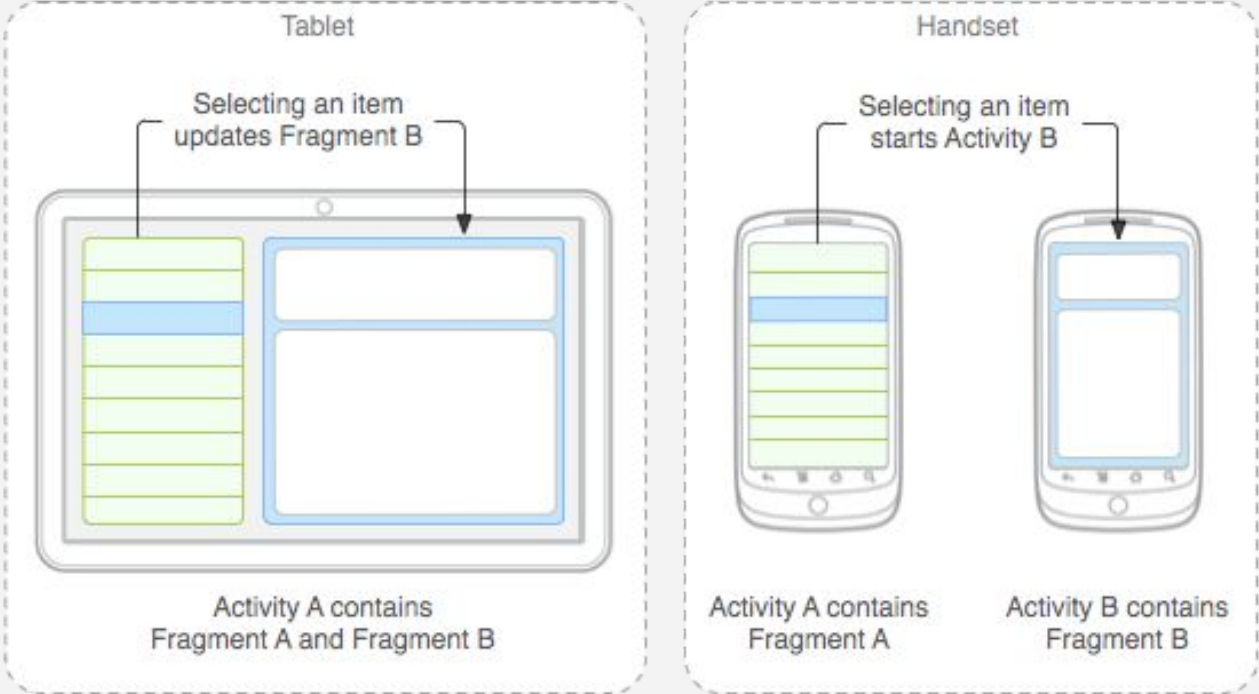# CSc 317
Fragments

Fragments

A Basic Fragment

SomeFragment.java

```java
public static class SomeFragment extends Fragment {
  @Override
  public View onCreateView(LayoutInflater inflater,
                           ViewGroup container,
                           Bundle savedInstanceState) {
    return inflater.inflate(
            R.layout.example_fragment,
            container, false);
  }
}
```

fragment_some.xml

```xml
<?xml version="1.0" encoding="utf-8"?>

<LinearLayout
  android:layout_width="match_parent"
  android:layout_height="match_parent"
  android:orientation="vertical"
  tools:context=".SomeFragment">

    <TextView
    android:id="@+id/article_content"
    . . .
    android:text="News Reader"/>

    <Button
    android:id="@+id/go_to_article_webpage"
    . . .
    android:text="Read on . . ." />

</LinearLayout>
```

Add Fragment to Activity

From somewhere in MainActivity.java

```java
SomeFragment someFragment = new SomeFragment();
FragmentTransaction transaction =
        getSupportFragmentManager().beginTransaction();

transaction.replace(R.id.main_layout_container,
                    someFragment);
transaction.addToBackStack(null);
transaction.commit();
```

activity_main.xml

```xml
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout . . .
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:orientation="vertical"
    android:id="@+id/main_layout_container"
    tools:context=".MainActivity">

</LinearLayout>
```

Update VideoGameCharacters

- Add a button to toggle between the two fragments
- The button can go in activity_main.xml

Update VideoGameCharacters

- Make the app change layout based on the size of the screen
- If bigger than 5x5 (inches), lay out the ListViews side-by-side