

Study Jam

Session 5

17.3.2015

Robolectric

- ▶ Test-Drive Your Android Code

```
// Test class for MyActivity
@RunWith(RobolectricTestRunner.class)
public class MyActivityTest {

    @Test
    public void clickingButton_shouldChangeResultsViewText() throws Exception {
        Activity activity = Robolectric.buildActivity(MyActivity.class).create().get();

        Button pressMeButton = (Button) activity.findViewById(R.id.press_me_button);
        TextView results = (TextView) activity.findViewById(R.id.results_text_view);

        pressMeButton.performClick();
        String resultsText = results.getText().toString();
        assertThat(resultsText, equalTo("Testing Android Rocks!"));
    }
}
```

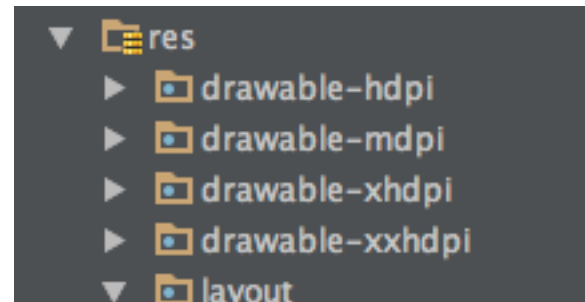
Android Study Jam – Lesson 5

- ▶ Responsive Design
- ▶ View Groups: `FrameLayout` (one child), `LinearLayout`, `RelativeLayout`, `GridLayout`
- ▶ `ViewHolder`
- ▶ Hierarchy Viewer
- ▶ Fragments
- ▶ `onSaveInstanceState`

Responsive Design

// Android is more of a continuum of devices than any set of carefully defined form categories”

- ▶ Bestimmen der Auflösung:
 - ▶ App: WhatsMySize



Fragments

- ▶ Sparsamer Gebrauch, oft reichen ViewController oder Container View aus

Pros	Cons
Wiederverwendbarkeit	Datenaustausch
Gut geeignet um sowohl Tablets als auch Smartphones zu unterstützen	

Fragments

```
private int id;
private String title;

public static MyFragment newInstance(int id, String title) {
    MyFragment f = new MyFragment();
    Bundle b = new Bundle();
    b.putInt(KEY_ID, id);
    b.putString(KEY_TITLE, title);
    f.setArguments(b);
    return f;
}
```

@Override

```
public void onCreate(Bundle savedInstanceState) {
    // onCreate it's a good point to read the arguments
    Bundle b = getArguments();
    this.id = b.getInt(KEY_ID);
    this.title = b.getString(KEY_TITLE);
}
```

FragmentArgs

```
@Arg
int id;

@Arg
String title;

@Override
public void onCreate(Bundle savedInstanceState){
    super.onCreate(savedInstanceState);
    FragmentArgs.inject(this); // read @Arg fields
}
```

Links

- ▶ Robolectric

- ▶ <http://robolectric.org/>

- ▶ Supporting Multiple Screens

- ▶ <http://www.computerworld.com/article/2879074/android-tablet-app.html>

- ▶ http://developer.android.com/guide/practices/screens_support.html

- ▶ Android Holo Colors Generator

- ▶ <http://android-holo-colors.com/>

- ▶ Fragment

- ▶ <https://andytsui.wordpress.com/2011/10/23/to-fragment-or-not-to-fragment/>

- ▶ FragmentArgs: <http://hannesdorfmann.com/android/fragmentargs/>

Vielen Dank!

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