

CSC 4360 / CSC 6360

Adding functionality to your application using Intents

What's an Intent??

- Formally, an Intent “provides a facility for performing late runtime binding between the code in different applications. Its most significant use is in the launching of activities, where it can be thought of as the glue between activities. It is basically a passive data structure holding an abstract description of an action to be performed.”

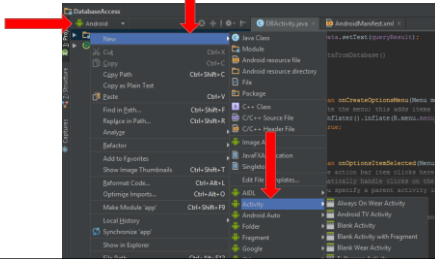
Definition courtesy of: <http://developer.android.com/reference/android/content/Intent.html>

Add a second activity/screen

- Open your DBAccess project
 - Make sure that it works, if you haven't already!
- Add a new Activity to create a new screen

So how do I make different screens?

- Choose Android context from the dropdown, then Choose app > New > Activity



New Blank Activity

- Call your new activity, "FirstQuery"
- Add a textView to the screen, and a button.
- Name the textView something like "queryResults2" and give its text a value like "queryResults for First Query"
- Name the button something like "goBackButton" and give its text a value like "Go Back to Main Screen"

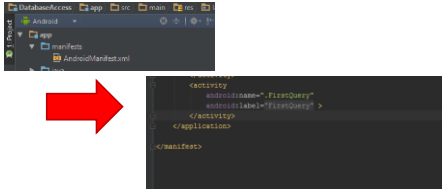
FirstQuery Activity

- Something like this:



Android Manifest

- Check that the new activity was automatically added to your android manifest:



FirstQuery Activity Java File

- Add the lines that we added to DBActivity.java, to FirstQuery.java
- Modify to use the textView from activity_first_query.xml
- Change the onCreate to immediately pull the data, versus waiting for a button click

```
getData = (TextView) findViewById(R.id.queryResults2);
new getDataFromDatabase().execute();
```

FirstQuery Activity Java File

- Change the query in doInBackground to a different table

– EXAMPLE:

String queryString =

```
"select * from csc360_class.actor limit 10";
```

On the activity_db xml file

- Add a new button to the activity_db xml file underneath the “Gimme Data” button
- Call it “firstQueryButton” (id) and give it the text “Actor Query”



DBActivity Java file

- Now, go find the button in your DBActivity java file, just like we have previously, and configure its activity to be FirstQuery.class

```
Button firstQueryButton = (Button) findViewById(R.id.firstQueryButton);
firstQueryButton.setOnClickListener(new View.OnClickListener()
{
    @Override
    public void onClick(View v){
        startActivity(new Intent(getApplicationContext(), FirstQuery.class));
    }
});
```

Find the old button and add the new
onClick information underneath ...

```
public class DBActivity extends AppCompatActivity {
    private static final String database_url = "jdbc:mysql://localhost:3306/actor499db";
    private static final String database_user = "root@499db.com";
    private static final String database_pass = "root@499db.com";
    // Remember that you will be updating with the database data
    private TextView textView;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_db);
        // Find the screen element that you need
        textView = (TextView) findViewById(R.id.textView);
        Button loadDatabase = (Button) findViewById(R.id.loadDatabase);
        // Add the onClick listener for the button
        loadDatabase.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick() {
                new GetDataFromDatabase().execute();
            }
        });
        // Add the onClick listener
        Button firstQueryButton = (Button) findViewById(R.id.firstQueryButton);
        firstQueryButton.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick() {
                startActivity(new Intent(getApplicationContext(), FirstQuery.class));
            }
        });
    }
}
```



Test your button!



Troubleshooting

- Make sure that every reference in FirstQuery.java refers to something related to the FirstQuery activity...
 - For example, make sure that activity_db is replaced by activity_first_query....

More reading about Intent

- <http://developer.android.com/reference/android/content/Intent.html>

Want to see it all again?

- Adding a second activity in Android Studio
(courtesy of Prof. Scott Vanselow)

https://www.youtube.com/watch?v=KhSM_CRC_LRo
