

Mobile Application Development

Higher Diploma in Science in Computer Science

Produced
by

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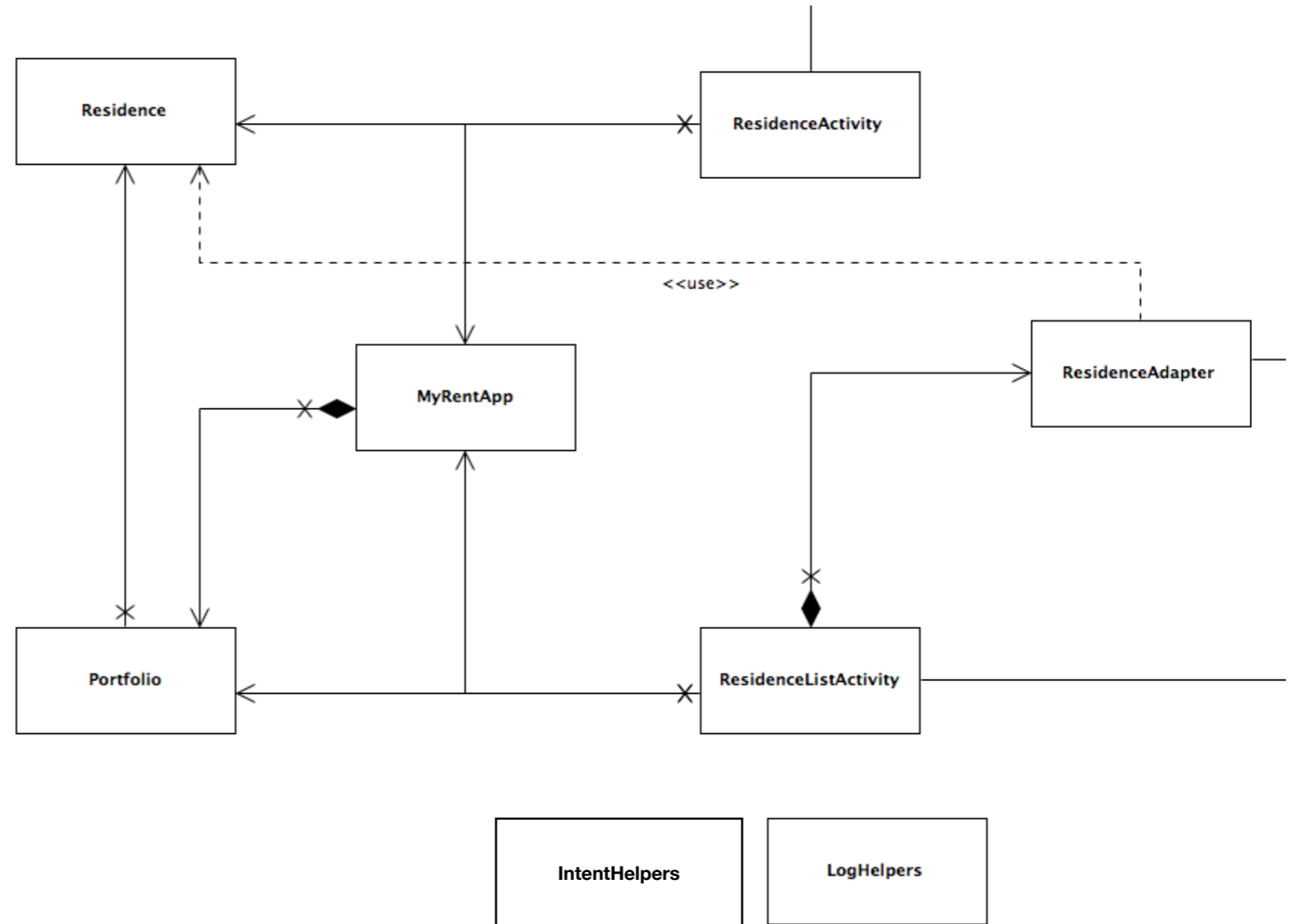
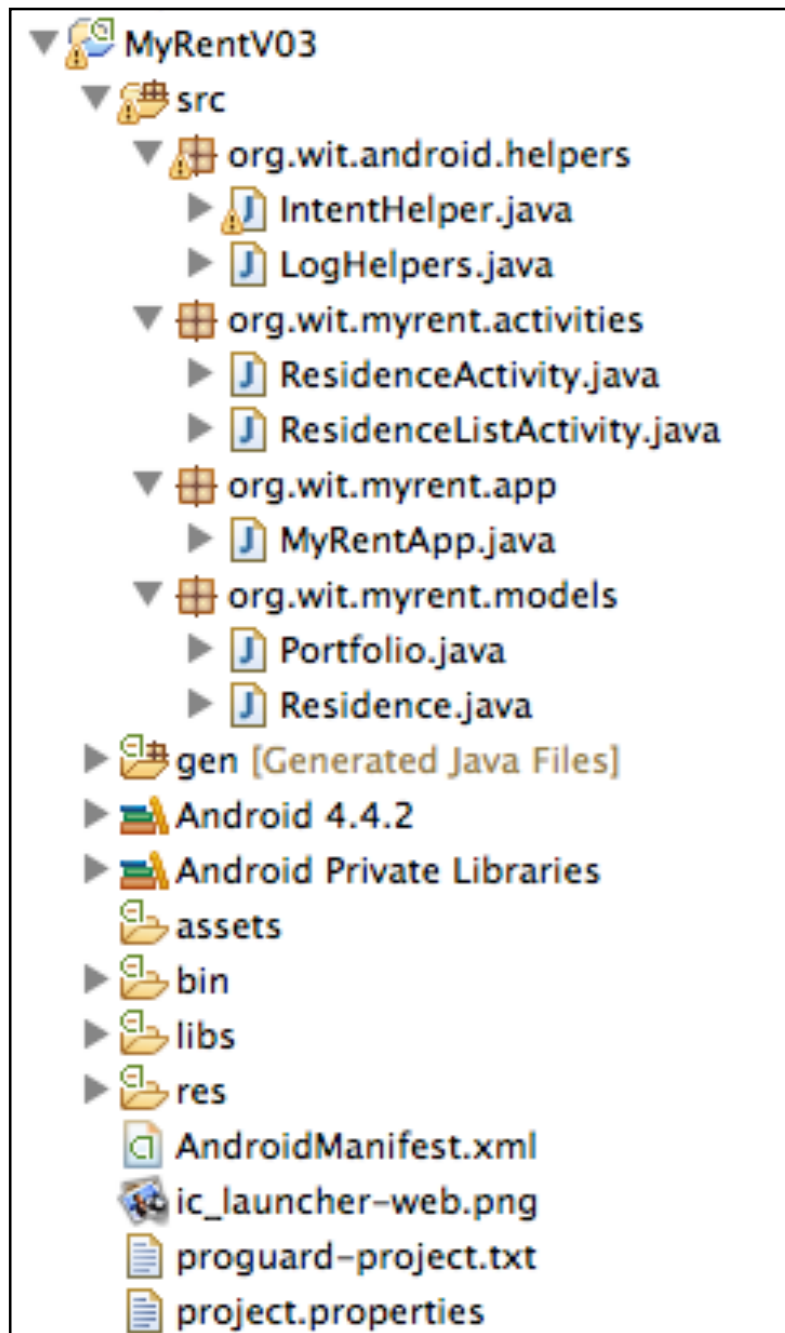


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MyRent v03

MyRentV03





Registered: Oct 6, 2014 3:00:11 PM



34.4, 23.3



Registered: Oct 6, 2014 3:00:24 PM

LOCATION

52.253456,-7.187162

STATUS

Registered: Oct 6, 2014 3:00:50 PM

Rented?

Mon, Oct 6, 2014

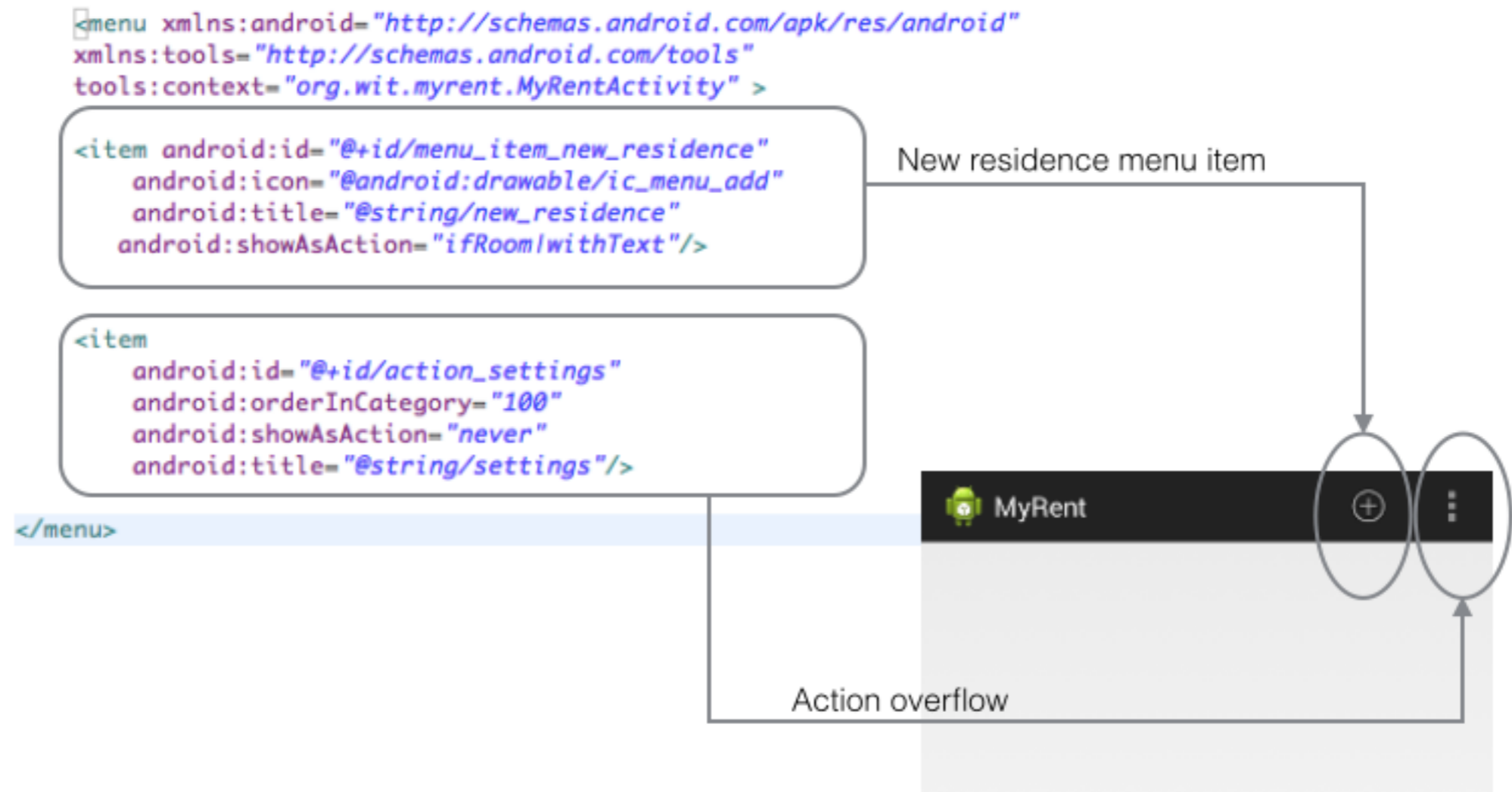
Sep 05 2013

Oct 06 2014

Nov 07 2015

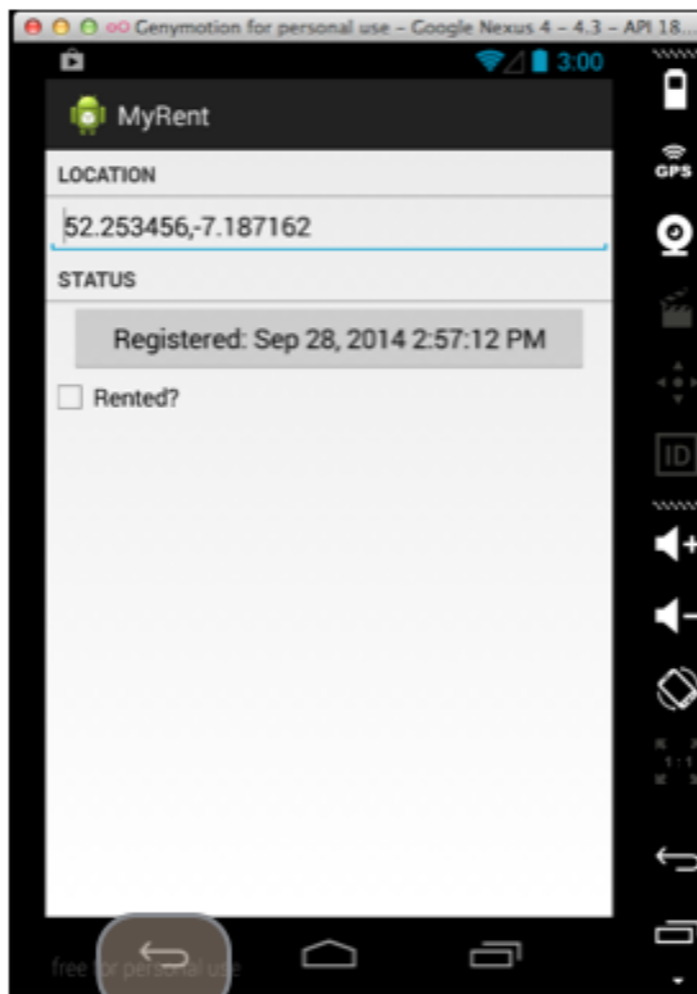
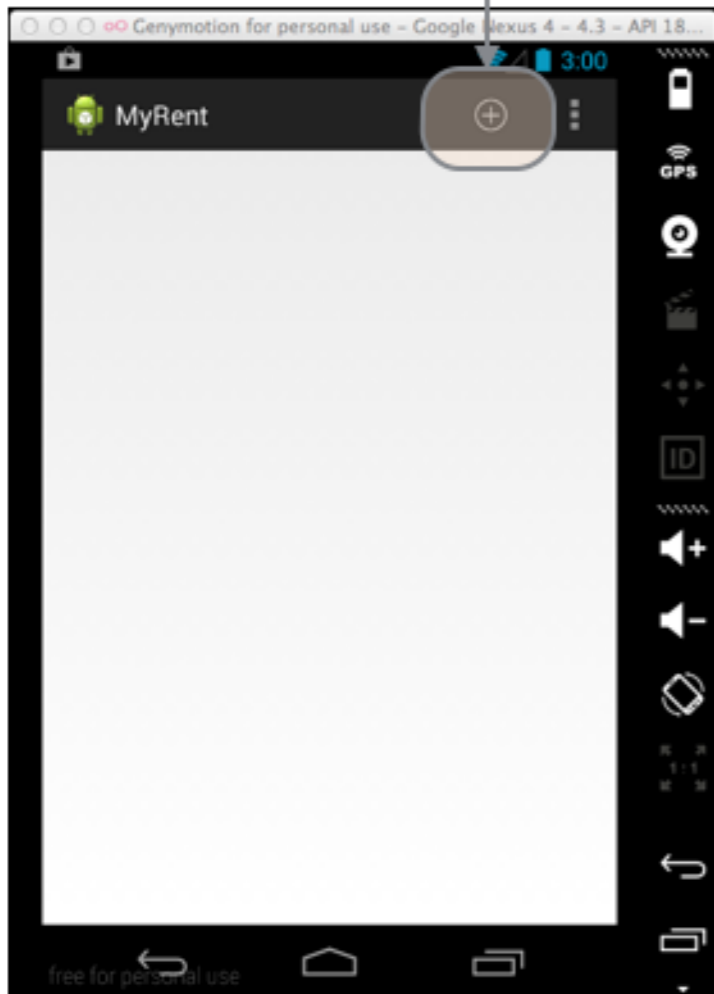
Done

residencelist.xml

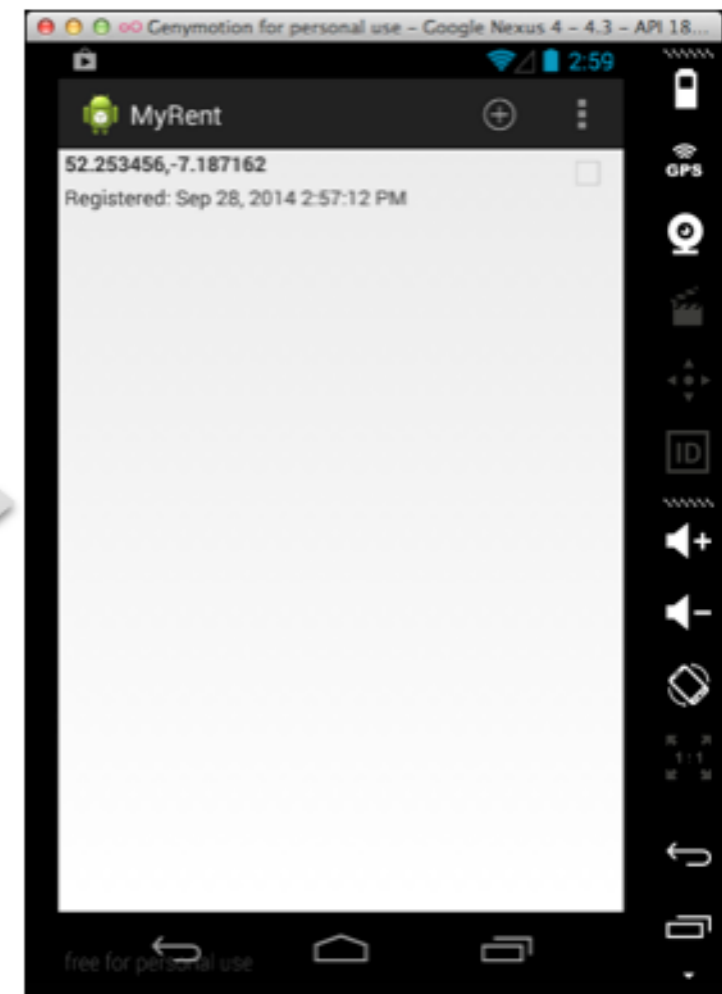


- XML files not just for activities or activity components
- Can also represent Menus

Press to switch to detail view



Press back-button for list view



ResidenceList



```
public class ResidenceListActivity extends Activity implements OnItemClickListener
{
    //...

    @Override
    public boolean onCreateOptionsMenu(Menu menu)
    {
        MenuInflater inflater = getMenuInflater();
        inflater.inflate(R.menu.residencelist, menu);
        return true;
    }

    @Override
    public boolean onOptionsItemSelected(MenuItem item)
    {
        switch (item.getItemId())
        {
            case R.id.menu_item_new_residence: Residence residence = new Residence();
                portfolio.addResidence(residence);
                startActivityWithDataForResult(this, ResidenceActivity.class, "RESIDENCE_ID", residence.id, 0);
                return true;

            default:
                return super.onOptionsItemSelected(item);
        }
    }
}
```

- Activity class already has ‘hooks’ for loading and receiving events from menus
- We just ‘override’ the appropriate event handlers...

ResidenceList

```
Residence residence = new Residence();  
portfolio.addResidence(residence);  
startActivityWithDataForResult(this, ResidenceActivity.class, "RESIDENCE_ID", residence.id, 0);
```

- Create a Residence Object
- Add it to our portfolio
- Start the ResidenceActivity:
 - Passing the ID of the new Residence Object
 - Specifically request to be notified when the user finishes with the ResidenceActivity Screen

IntentHelper

- Encapsulate different ways of starting an Intent

```
public class IntentHelper
{
    public static void startActivity (Activity parent, Class classname)
    {
        Intent intent = new Intent(parent, classname);
        parent.startActivity(intent);
    }

    public static void startActivityWithData (Activity parent, Class classname,
                                             String extraID, Serializable extraData)
    {
        Intent intent = new Intent(parent, classname);
        intent.putExtra(extraID, extraData);
        parent.startActivity(intent);
    }

    public static void startActivityWithDataForResult (Activity parent, Class classname,
                                                       String extraID, Serializable extraData, int idForResult)
    {
        Intent intent = new Intent(parent, classname);
        intent.putExtra(extraID, extraData);
        parent.startActivityForResult(intent, idForResult);
    }
}
```

ResidenceList Event Handlers

```
@Override
public boolean onOptionsItemSelected(MenuItem item)
{
    switch (item.getItemId())
    {
        case R.id.menu_item_new_residence: Residence residence = new Residence();
        portfolio.addResidence(residence);
        startActivityWithDataForResult(this,
                                     ResidenceActivity.class,
                                     "RESIDENCE_ID",
                                     residence.id, 0);

        return true;
        default: return super.onOptionsItemSelected(item);
    }
}

@Override
public void onActivityResult(int requestCode, int resultCode, Intent data)
{
    adapter.notifyDataSetChanged();
}

@Override
public void onItemClick(AdapterView<?> parent, View view, int position, long id)
{
    Residence residence = adapter.getItem(position);
    startActivityWithData(this, ResidenceActivity.class, "RESIDENCE_ID", residence.id);
}
```

- The User Selected '+' from action bar to create a new Residence

- ResidenceActivity has finished, having created a new activity

- The user tapped on an existing Activity

ResidenceActivity

- DateDialog

The screenshot shows the MyRent app interface. At the top, there is a header with the Android logo and the text "MyRent". Below the header, there are two main sections. The first section is titled "LOCATION" and contains a text input field with the coordinates "52.253456,-7.187162". The second section is titled "STATUS" and contains a button labeled "Registered: Oct 6, 2014 3:00:50 PM". Below the button, there is a checkbox labeled "Rented?". To the right of the app interface, there is a date picker dialog showing the date "Mon, Oct 6, 2014". The date picker has three columns for month, day, and year. The current date is highlighted in blue. The date picker also has a "Done" button at the bottom.

```
public class ResidenceActivity extends Activity implements TextWatcher,
    OnCheckedChangeListener,
    OnClickListener,
    DatePickerDialog.OnDateSetListener

//...
{
    @Override
    public void onClick(View v)
    {
        switch (v.getId())
        {
            case R.id.registration_date : Calendar c = Calendar.getInstance();
                                         DatePickerDialog dpd = new DatePickerDialog (this, this,
                                                                                   c.get(Calendar.YEAR),
                                                                                   c.get(Calendar.MONTH),
                                                                                   c.get(Calendar.DAY_OF_MONTH));

                                         dpd.show();
                                         break;
        }
    }
}

@Override
public void onDateSet(DatePicker view, int year, int monthOfYear, int dayOfMonth)
{
    Date date = new GregorianCalendar(year, monthOfYear, dayOfMonth).getTime();
    residence.date = date;
    dateButton.setText(residence.getDateString());
}
}
```

Public Constructors

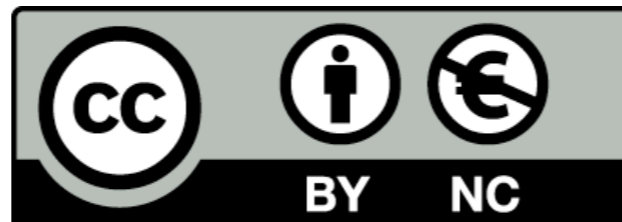
`DatePickerDialog` (`Context` context, `DatePickerDialog.OnDateSetListener` callBack, int year, int monthOfYear, int dayOfMonth)

```
public class ResidenceActivity extends Activity implements TextWatcher,
    OnCheckedChangeListener,
    OnClickListener,
    DatePickerDialog.OnDateSetListener

//...
{
    @Override
    public void onClick(View v)
    {
        switch (v.getId())
        {
            case R.id.registracion_date
                : Calendar c = Calendar.getInstance();
                  DatePickerDialog dpd = new DatePickerDialog (this, this,
                                                              c.get(Calendar.YEAR),
                                                              c.get(Calendar.MONTH),
                                                              c.get(Calendar.DAY_OF_MONTH));
                  dpd.show();
                  break;
        }
    }
}

@Override
public void onDateSet(DatePicker view, int year, int monthOfYear, int dayOfMonth)
{
    Date date = new GregorianCalendar(year, monthOfYear, dayOfMonth).getTime();
    residence.date = date;
    dateButton.setText(residence.getDateString());
}
}
```

Event Handling



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