

```
1: package com.delta.bookshelf;
2:
3: import android.app.Activity;
4: import android.app.ListActivity;
5: import android.graphics.Color;
6: import android.os.Bundle;
7: import android.view.Menu;
8: import android.view.MenuItem;
9: import android.widget.ListView;
10:
11: import java.util.ArrayList;
12:
13: /*
14: 15: Originally inspired by Dmytro Titov's demo on GitHub:
16: 17: https://github.com/dtitov/SpinList
18: 18: */
19: public class BookshelfActivity extends ListActivity {
20:
21:
22:     ArrayList<String> entitiesToDisplay = new ArrayList<String>();
23:
24:     @Override
25:     protected void onCreate(Bundle savedInstanceState) {
26:         super.onCreate(savedInstanceState);
27:
28:         //sample data
29:         entitiesToDisplay.add("startrek");
30:         entitiesToDisplay.add("thegreatgatsby");
31:         entitiesToDisplay.add("goodnightmoonbook");
32:         entitiesToDisplay.add("afarewelltoarms");
33:         entitiesToDisplay.add("atlasshrugged");
34:         entitiesToDisplay.add("schwem");
35:         entitiesToDisplay.add("thedeltaprogram");
36:         entitiesToDisplay.add("adamlupu");
37:         entitiesToDisplay.add("YETspaceATX");
38:         entitiesToDisplay.add("Philosophical-Investigations");
39:         entitiesToDisplay.add("A-Light-in-the-Attic");
40:         entitiesToDisplay.add("adventuretime");
41:         entitiesToDisplay.add("The-Power-of-Myth");
42:         entitiesToDisplay.add("Cryptonomicon");
43:         entitiesToDisplay.add("SweetRitual");
44:         entitiesToDisplay.add("ChicagoBears");
45:         entitiesToDisplay.add("androidislife");
46:         entitiesToDisplay.add("theiliad");
47:
48:         ListView l = getListView();
```

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49:         l.setBackgroundColor(Color.argb(200,34,119,147));
50:
51:         //display it
52:         LazyAdapter lazyAdapter = new LazyAdapter(this, entitiesToDisplay);
53:         setListAdapter(lazyAdapter);
54:
55:
56:
57:
58:
59:     }
60:
61:
62:     @Override
63:     public boolean onCreateOptionsMenu(Menu menu) {
64:
65:         // Inflate the menu; this adds items to the action bar if it is present.
66:         getMenuInflater().inflate(R.menu.bookshelf, menu);
67:         return true;
68:     }
69:
70:     @Override
71:     public boolean onOptionsItemSelected(MenuItem item) {
72:         // Handle action bar item clicks here. The action bar will
73:         // automatically handle clicks on the Home/Up button, so long
74:         // as you specify a parent activity in AndroidManifest.xml.
75:         int id = item.getItemId();
76:         if (id == R.id.action_settings) {
77:             return true;
78:         }
79:         return super.onOptionsItemSelected(item);
80:     }
81:
82: }
```

```
1: package com.delta.bookshelf;
2:
3: import android.graphics.Bitmap;
4:
5: import org.apache.http.HttpResponse;
6: import org.apache.http.HttpStatus;
7: import org.apache.http.StatusLine;
8: import org.apache.http.client.HttpClient;
9: import org.apache.http.client.methods.HttpGet;
10: import org.apache.http.impl.client.DefaultHttpClient;
11: import org.json.JSONObject;
12: import org.json.JSONTokener;
13:
14: import java.io.ByteArrayOutputStream;
15:
16: /**
17:  * Created by spawrks on 2/22/14.
18:  */
19: public class FacebookEntity {
20:     private final String GRAPH_API_URL = "https://graph.facebook.com/user?fields=picture,name";
21:     private String name;
22:     private String picture;
23:     private Bitmap bitmap;
24:
25:     public FacebookEntity(String id) {
26:
27:         try {
28:             HttpClient httpClient = new DefaultHttpClient();
29:             String queryString = GRAPH_API_URL.replace("user", id);
30:             HttpResponse httpResponse = httpClient.execute(new HttpGet(queryString));
31:
32:             StatusLine statusLine = httpResponse.getStatusLine();
33:             if (statusLine.getStatusCode() == HttpStatus.SC_OK) {
34:                 ByteArrayOutputStream out = new ByteArrayOutputStream();
35:                 httpResponse.getEntity().writeTo(out);
36:                 out.close();
37:                 String responseString = out.toString();
38:
39:                 JSONObject object = (JSONObject) new JSONTokener(responseString).nextValue();
40:
41:                 this.picture = object.getJSONObject("picture")
42:                     .getJSONObject("data")
43:                     .getString("url");
44:
45:                 this.name = object.getString("name");
46:             } else {
47:                 httpResponse.getEntity().getContent().close();
48:             }
49:         }
50:     }
51: }
```

```
49:         } catch (Exception e) {
50:         }
51:     }
52:
53:     public String getName() {
54:         return name;
55:     }
56:
57:     public String getPicture() {
58:         return picture;
59:     }
60:
61:     public Bitmap getBitmap() {
62:         return this.bitmap;
63:     }
64:
65:     public void setBitmap(Bitmap bitmap) {
66:         this.bitmap = bitmap;
67:     }
68: }
```

```
1: package com.delta.bookshelf;
2:
3: /**
4:  * Created by spawrks on 2/22/14.
5:  */
6:
7: import android.graphics.Bitmap;
8: import android.graphics.BitmapFactory;
9: import android.os.AsyncTask;
10:
11: import java.io.BufferedInputStream;
12: import java.io.IOException;
13: import java.io.InputStream;
14: import java.net.HttpURLConnection;
15: import java.net.MalformedURLException;
16:
17: public class FetchDataTask extends AsyncTask<Void, Void, FacebookEntity> {
18:
19:     private LazyAdapter adapter;
20:     private int position;
21:     private String id;
22:
23:     public FetchDataTask(LazyAdapter adapter, int position) {
24:         this.adapter = adapter;
25:         this.position = position;
26:         this.id = (String) adapter.getItem(position);
27:     }
28:
29:     @Override
30:     protected FacebookEntity doInBackground(Void... params) {
31:
32:         //first get the user data
33:         FacebookEntity user = new FacebookEntity(id);
34:
35:         //then bitmap
36:         Bitmap bitmap = null;
37:         try {
38:             HttpURLConnection httpURLConnection;
39:             httpURLConnection = (HttpURLConnection) new java.net.URL(
40:                 user.getPicture()).openConnection();
41:             httpURLConnection.setReadTimeout(10000);
42:             httpURLConnection.setConnectTimeout(10000);
43:             InputStream inputStream = httpURLConnection.getInputStream();
44:             BufferedInputStream bufferedInputStream = new BufferedInputStream(
45:                 inputStream);
46:             bitmap = BitmapFactory.decodeStream(bufferedInputStream);
47:             bufferedInputStream.close();
48:             inputStream.close();
```

```
49:         httpURLConnection.disconnect();
50:
51:     } catch (MalformedURLException e) {
52:     } catch (IOException e) {
53:     }
54:
55:     user.setBitmap(bitmap);
56:
57:     return user;
58: }
59:
60: @Override
61: protected void onPostExecute(FacebookEntity result) {
62:     super.onPostExecute(result);
63:     adapter.saveEntity(result);
64:     //recursion!
65:     if (position < adapter.getCount() - 1) {
66:         new FetchDataTask(adapter, ++position).execute();
67:     }
68: }
69: }
```

```
1: package com.delta.bookshelf;
2:
3: /**
4:  * Created by spawrks on 2/22/14.
5:  */
6:
7: import android.app.ListActivity;
8: import android.content.Context;
9: import android.graphics.Bitmap;
10: import android.graphics.Canvas;
11: import android.graphics.Color;
12: import android.graphics.Paint;
13: import android.graphics.PorterDuff;
14: import android.graphics.PorterDuffXfermode;
15: import android.graphics.Rect;
16: import android.graphics.RectF;
17: import android.graphics.drawable.BitmapDrawable;
18: import android.view.LayoutInflater;
19: import android.view.View;
20: import android.view.ViewGroup;
21: import android.widget.BaseAdapter;
22: import android.widget.ImageView;
23: import android.widget.ProgressBar;
24: import android.widget.TextView;
25:
26: import java.util.ArrayList;
27:
28: /**
29:  * BaseAdapter extension with lazy loading. Item template is designed in
30:  * res/layout/row.xml
31:  */
32:
33: public class LazyAdapter extends BaseAdapter {
34:     private ListActivity activity;
35:     private LayoutInflater inflater;
36:     private ArrayList<String> names;
37:     private FacebookEntity[] cachedEntities;
38:     private int cacheSize = 0;
39:
40:     public LazyAdapter(ListActivity activity, ArrayList<String> names) {
41:         super();
42:         this.activity = activity;
43:         this.names = names;
44:         this.cachedEntities = new FacebookEntity[this.names.size()];
45:         inflater = (LayoutInflater) activity.getSystemService(Context.LAYOUT_INFLATER_SERVICE);
46:         new FetchDataTask(this, 0).execute();
47:     }
48:
```

```
49:
50:     public View getView(int position, View convertView, ViewGroup parent) {
51:         FacebookEntity cachedEntity = cachedEntities[position]; // trying to get a user from cache
52:
53:         View row = convertView;
54:         ViewHolder viewHolder;
55:
56:         if (row == null) {
57:             row = layoutInflater.inflate(R.layout.row, null);
58:             viewHolder = new ViewHolder();
59:             viewHolder.textView = (TextView) row.findViewById(R.id.nameTextView);
60:             viewHolder.spinner = (ProgressBar) row.findViewById(R.id.progressBar);
61:             viewHolder.imageView = (ImageView) row.findViewById(R.id.imageView);
62:             row.setTag(viewHolder);
63:         } else {
64:             viewHolder = (ViewHolder) row.getTag();
65:         }
66:
67:         if (cachedEntity != null) {
68:             viewHolder.textView.setText(cachedEntity.getName());
69:             viewHolder.spinner.setVisibility(View.GONE);
70:             if(cachedEntity.getBitmap() != null){
71:                 Bitmap b = roundCornerImage(cachedEntity.getBitmap(), 5.0f);
72:                 viewHolder.imageView.setImageBitmap(b);
73:             }
74:         } else {
75:             viewHolder.textView.setText("");
76:             viewHolder.spinner.setVisibility(View.VISIBLE);
77:
78:         }
79:
80:         return row;
81:     }
82:
83:     @Override
84:     public Object getItem(int position) {
85:         return names.get(position);
86:     }
87:
88:     @Override
89:     public long getItemId(int position) {
90:         return 0;
91:     }
92:
93:     @Override
94:     public int getCount() {
95:         return names.size();
96:     }
```



```
97:
98:     public void saveEntity(FacebookEntity user) {
99:         cachedEntities[cacheSize] = user;
100:         cacheSize++;
101:         notifyDataSetChanged(); //reload ListView
102:     }
103:
104:     private static class ViewHolder {
105:         public TextView textView;
106:         public ProgressBar spinner;
107:         public ImageView imageView;
108:     }
109:
110:     public Bitmap roundCornerImage(Bitmap src, float round) {
111:
112:         // Source image size
113:         int width = src.getWidth();
114:         int height = src.getHeight();
115:         // create result bitmap output
116:         Bitmap result = Bitmap.createBitmap(width, height, Bitmap.Config.ARGB_8888);
117:         // set canvas for painting
118:         Canvas canvas = new Canvas(result);
119:         canvas.drawARGB(0, 0, 0, 0);
120:
121:         // configure paint
122:         final Paint paint = new Paint();
123:         paint.setAntiAlias(true);
124:         paint.setColor(Color.BLACK);
125:
126:         // configure rectangle for embedding
127:         final Rect rect = new Rect(0, 0, width, height);
128:         final RectF rectF = new RectF(rect);
129:
130:         // draw Round rectangle to canvas
131:         canvas.drawRoundRect(rectF, round, round, paint);
132:
133:         // create Xfer mode
134:         paint.setXfermode(new PorterDuffXfermode(PorterDuff.Mode.SRC_IN));
135:         // draw source image to canvas
136:         canvas.drawBitmap(src, rect, rect, paint);
137:
138:         // return final image
139:         return result;
140:     }
141: }
```

```
1: package com.delta.bookshelf;
2:
3: /**
4:  * Created by learnovate on 3/13/14.
5:  */
6: public class MyInfo {
7:
8:     int myAge = 33;
9:     String myName = "Adam";
10:    boolean isMale = true;
11:    char middleInitial = 'J';
12:    float myHeightInMeters = 1.87f;
13:
14:    private void updateMyInfo(){
15:        myAge = 34;
16:        myName = "Adam Lupu";
17:    }
18:
19: }
```

1	bookshelf/src/main/java/com/delta/bookshelf/BookshelfActivity.java	2	pages	82	lines	14/02/22	22:20:57
2	bookshelf/src/main/java/com/delta/bookshelf/FacebookEntity.java	2	pages	67	lines	14/02/22	17:42:19
3	bookshelf/src/main/java/com/delta/bookshelf/FetchDataTask.java	2	pages	68	lines	14/02/22	17:42:19
4	bookshelf/src/main/java/com/delta/bookshelf/LazyAdapter.java	3	pages	140	lines	14/03/01	15:12:39
5	bookshelf/src/main/java/com/delta/bookshelf/MyInfo.java	1	pages	19	lines	14/03/13	14:10:07