

Android Mobile Platform

Mobile Part 2B : Steps required to retrieve a XML document from a remote server

I. Creating an Android Project in Eclipse

1. Inside Eclipse Navigate from **File -> New -> Project -> Android Project**
2. Enter Android Project Name, choose Target SDK and click on **Next**
3. Enter a Package name to store your source code and the click on **Finish**

II. How to Use Droid Draw to develop UI

1. Download DroidDraw tool from [DroidDraw](#)
2. You can Drag and drop several View's(UI components) onto the screen.
3. Modify the Properties of each view as per the need
4. After the required design is done, click on **Generate**
5. Copy the generated code and create a file **main.xml**(as per users wish) in **res/layouts** folder of your project

III. Explanation of sample Code Snippets

1. Every App must have an `appNameActivity` class which extends `Activity` class. The UI xml code generated in **part II** is linked to Activity using `setContentView()` method as below

High Level View of What is going on

(XML is configured to "<http://chukk.nuzoka.com/name.xml>" so enter the same in input UI box)

- Create a User Interface screen using Droiddraw and generate XML files
- Use the XML files generated in `res/layouts` folder
- Link these XML files to the Activity(created in `src` folder) using `setContentView()` method in `onCreate` method()
- Using `DefaultHttpClient`, `HttpGet`, `HttpResponse`, `HttpEntity` retrieve the XML from the remote server as a string
- Pass the response as a string to other activity using `Intent` and `putExtra()` method
- Receive the XML in other Activity using `getStringExtra()` method
- Display the received XML in the User Interface
- Use the Back button to get back to the Original Screen

Sample Code Snippets

```
public class XMLDemoActivity extends Activity {

    /** Called when the activity is first created. */
    @Override
    public void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.main); // xml file from DroidDraw
    }
}
```

Sample Code for retrieving XML retrieved from remote server

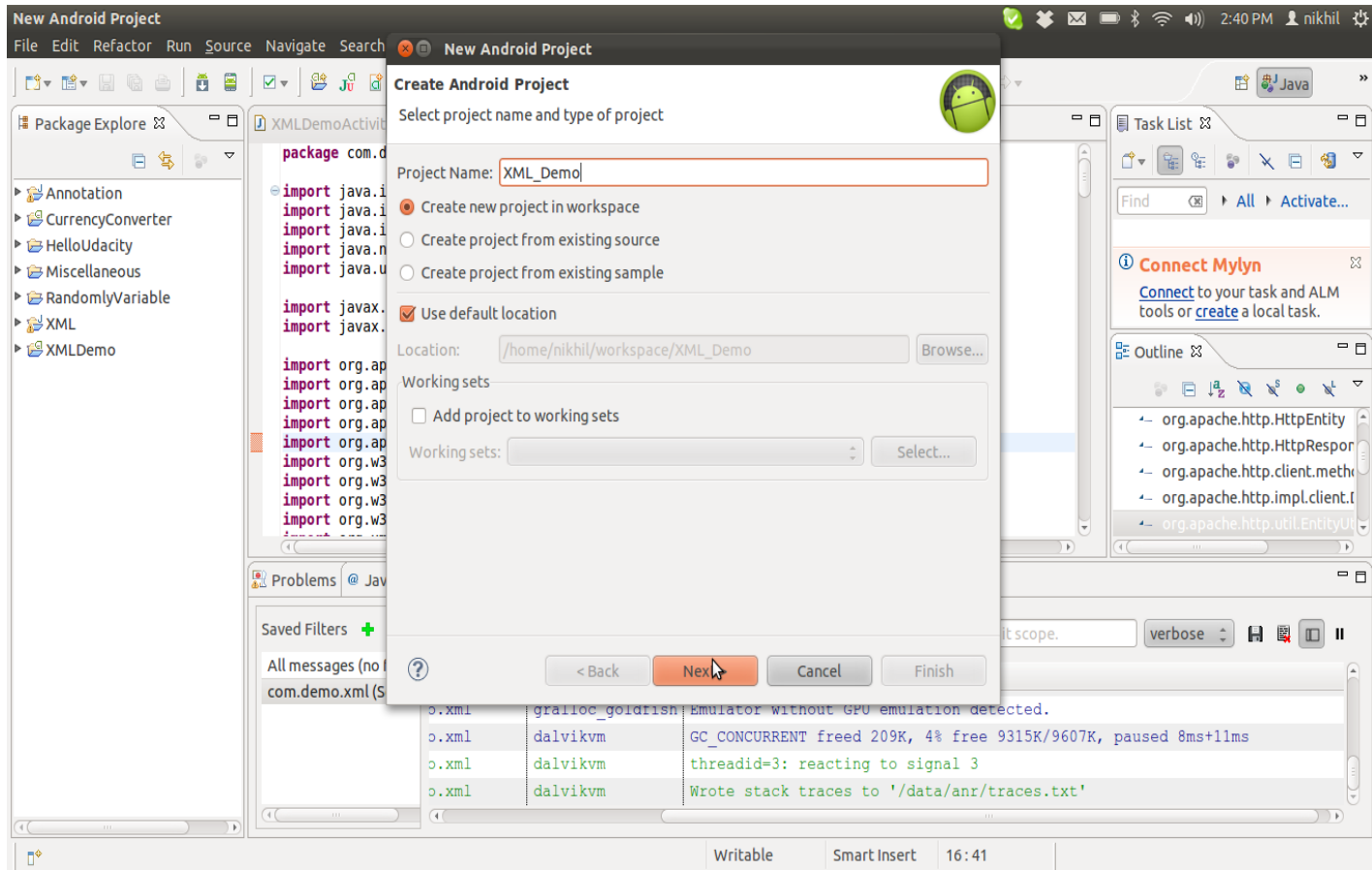
```
String response = null;
try
{
    DefaultHttpClient httpClient = new DefaultHttpClient();
    HttpGet httpGet = new HttpGet(url); //Pass the url as a string
    HttpResponse httpResponse = httpClient.execute(httpGet);
    HttpEntity httpEntity = httpResponse.getEntity();
    response = EntityUtils.toString(httpEntity);
    return response;
}
catch (UnsupportedEncodingException e)
{
    response = "Error";
} catch (MalformedURLException e) {
    response = "Error";
}
catch (IOException e) {
    response = "Error";
}
return response;
```

Creating and sending information to another Activity

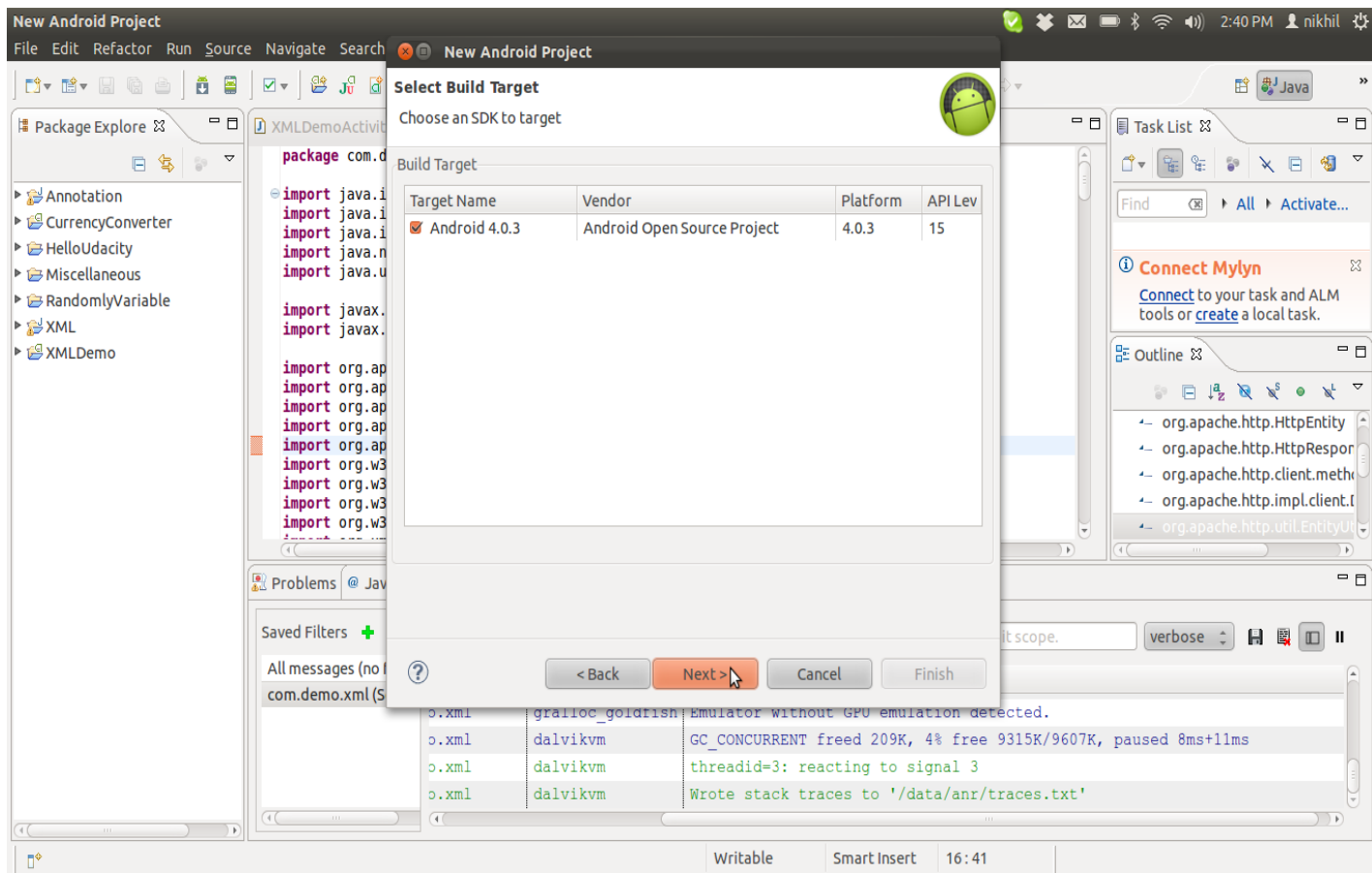
```
getRawContent.setOnClickListener(new OnClickListener()
{
    public void onClick(View v)
    {
        String results =
getRawResults(xmlurl.getText().toString());
        Intent rawResultsScreen = new
Intent(getApplicationContext(),RawResultsActivity.class);//New Intent
creation
        rawResultsScreen.putExtra("rawresults", results);
        startActivity(rawResultsScreen);
    }
});
```

Visual Depiction of Creating a Project

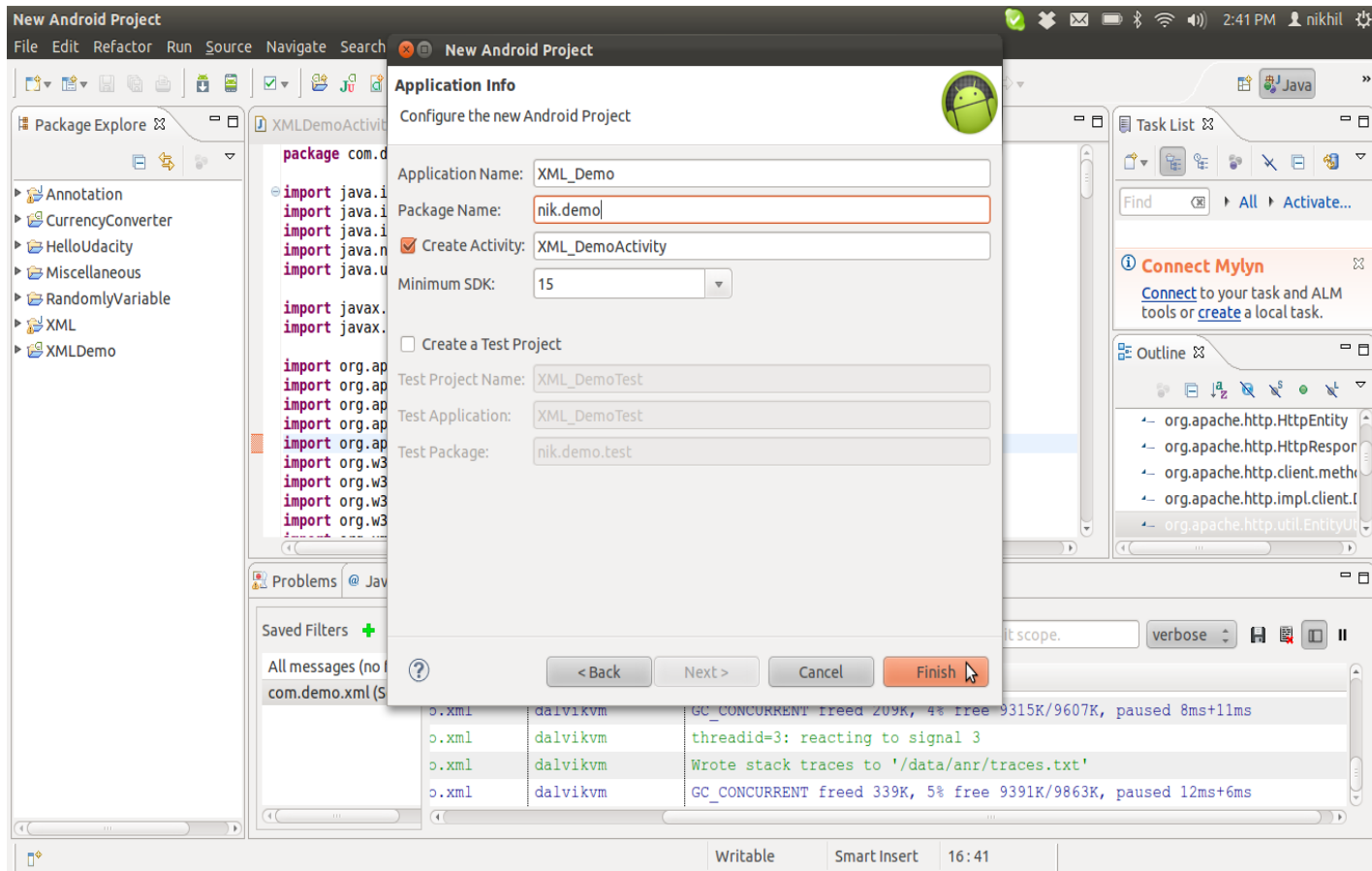
1. Inside Eclipse Navigate from **File -> New -> Project -> Android Project**



2. Enter Android Project Name, choose target SDK and click on **Next**

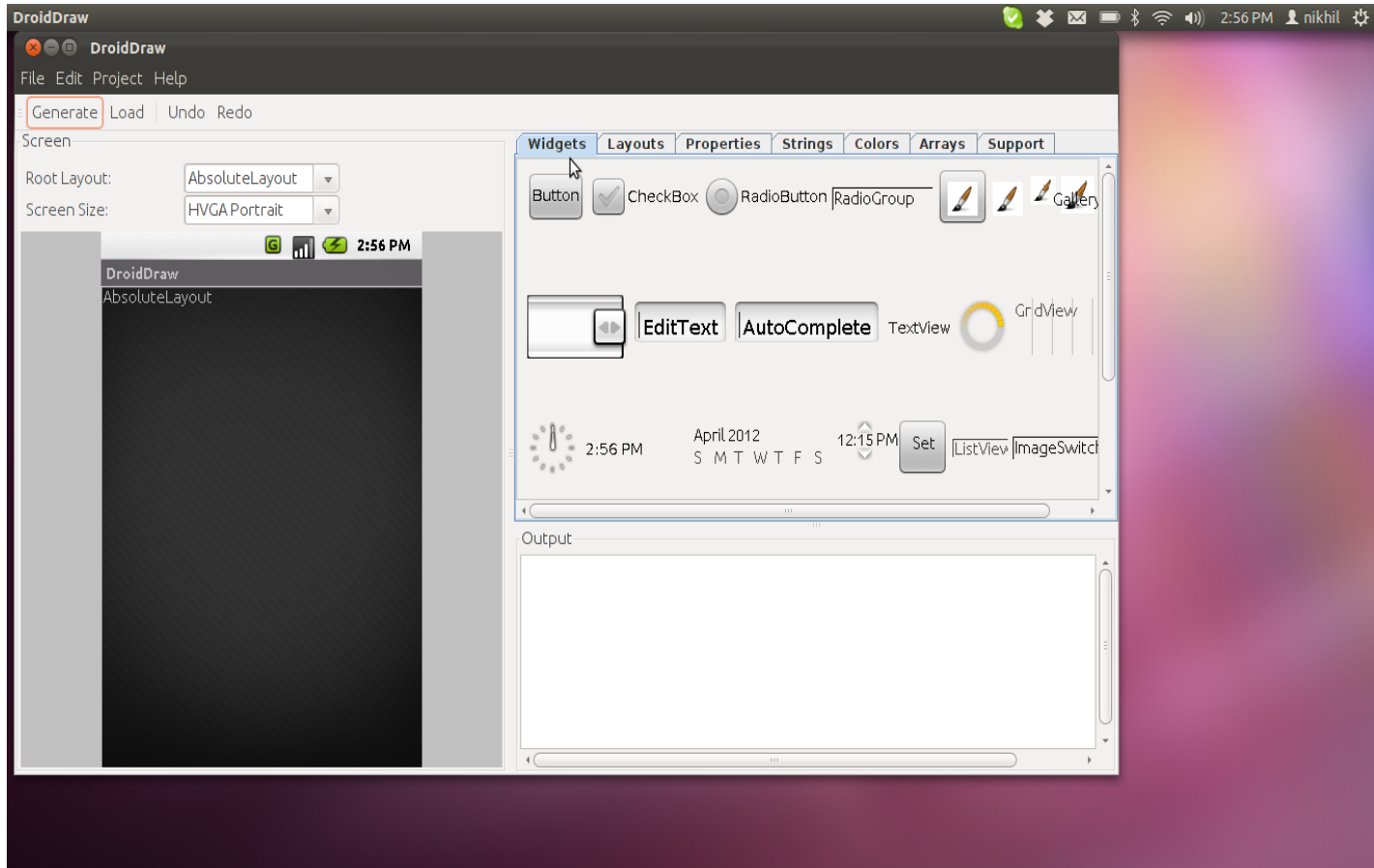


3. Enter a Package name to store your source code and the click on **Finish**

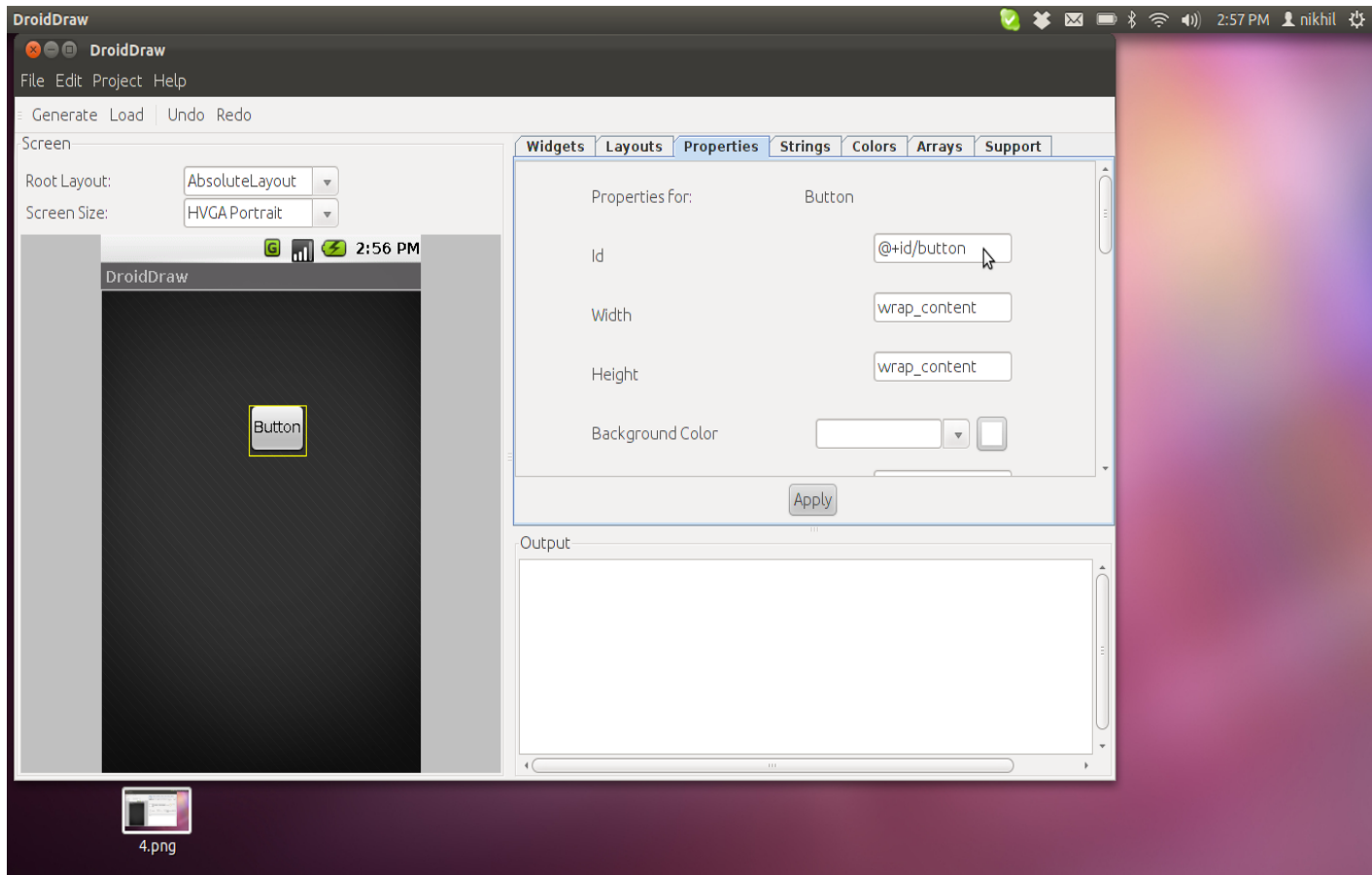


II Using DroidDraw to generate UI

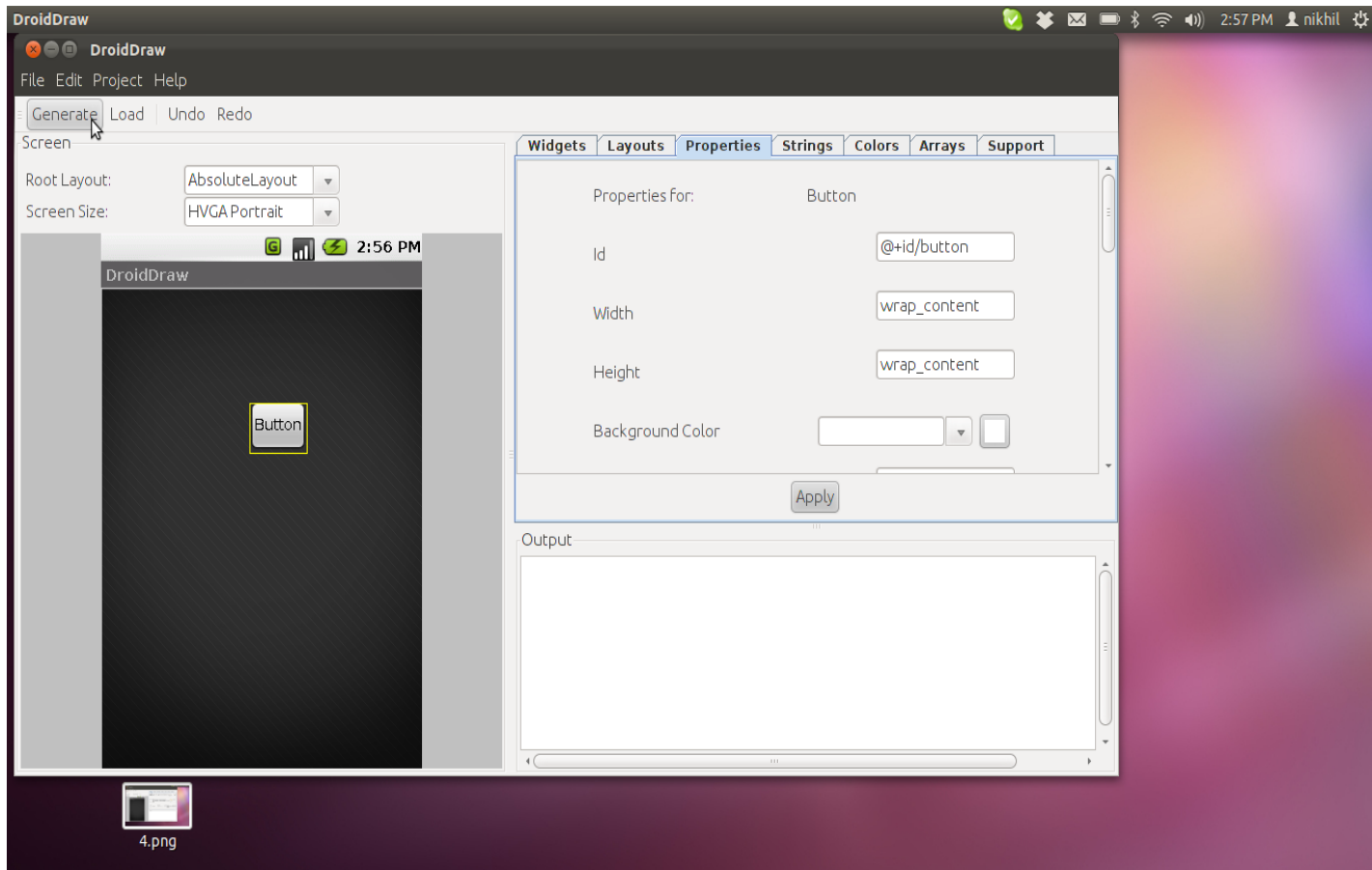
1. Drag and Drop several required view Elements



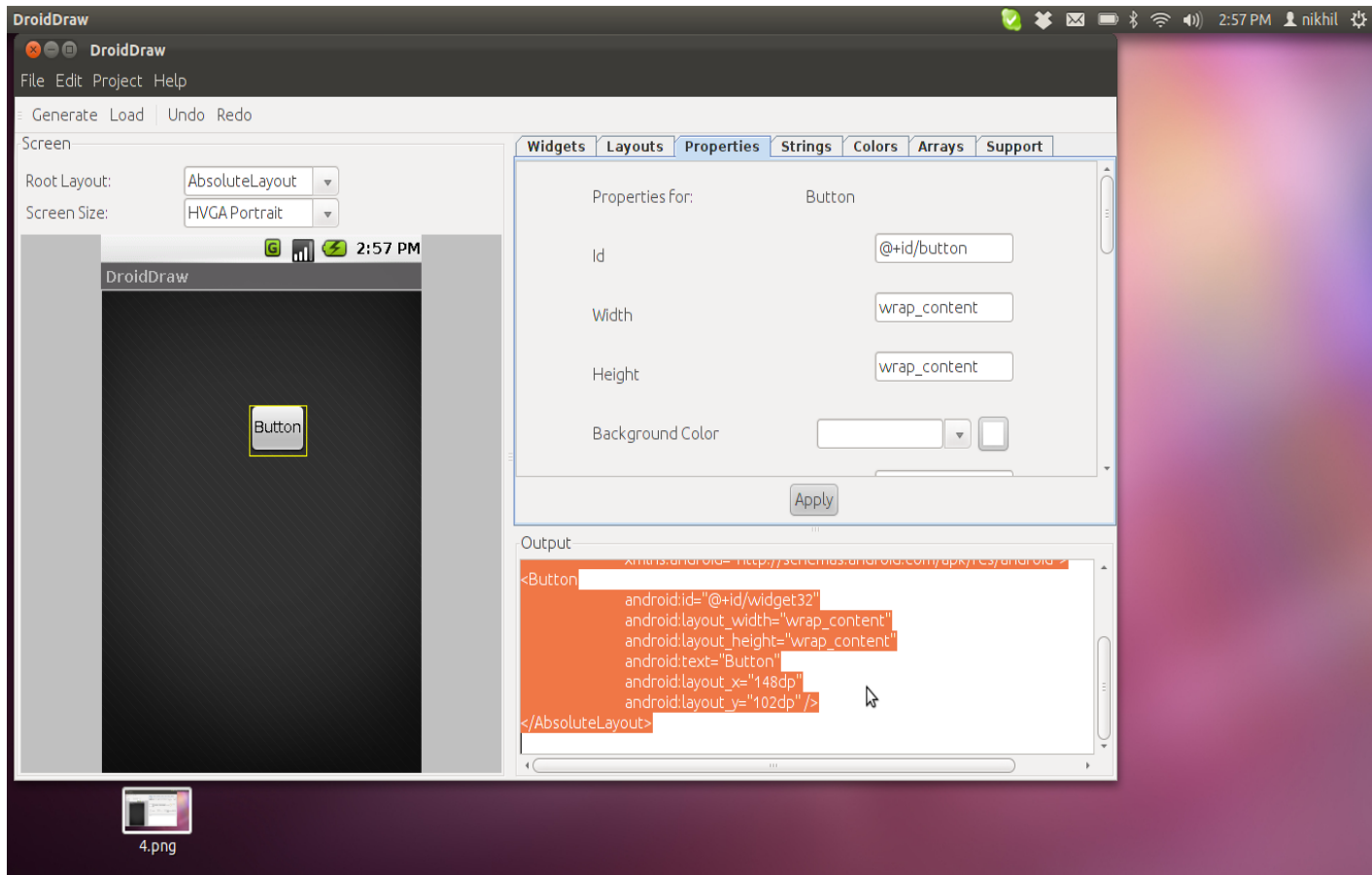
2. Setting Properties of Several View Elements (See position of cursor)



3. Generating the code for Required UI

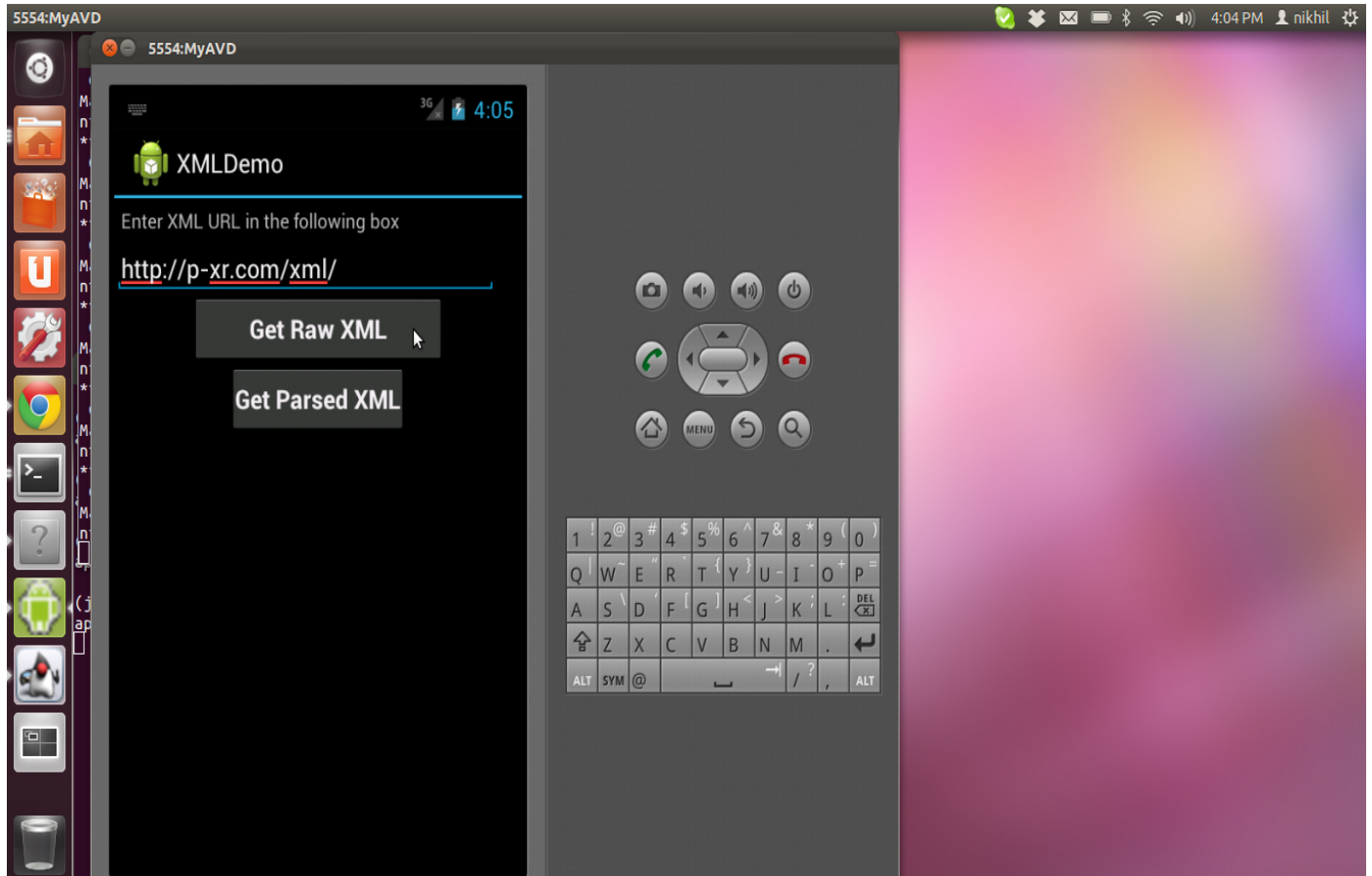


4. Copy the generated XML code and use it in **res/layouts** folder

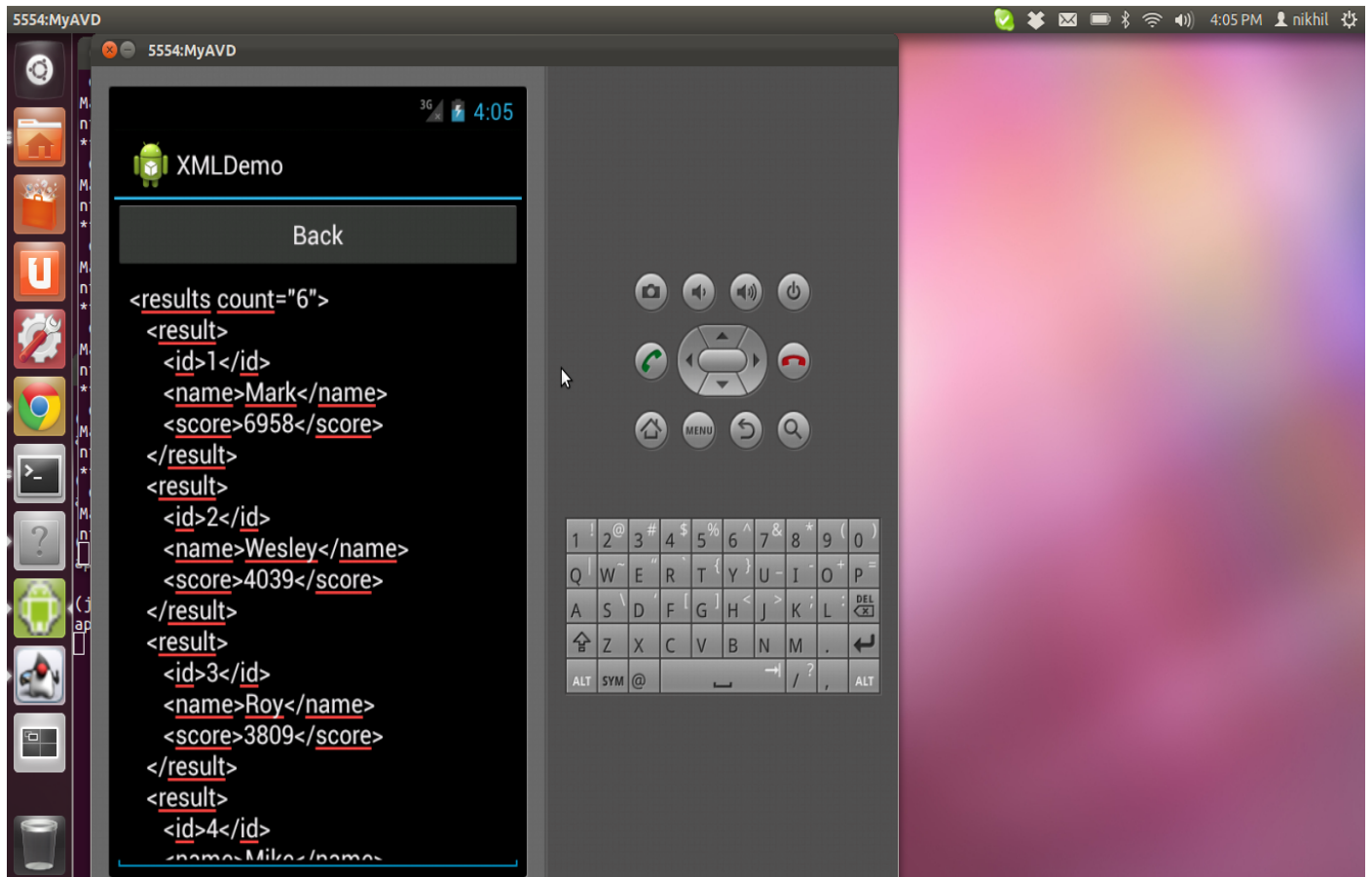


1. Inside Android phone (Retrieval of XML)

(After running the code, type the url (<http://p-xr.com/xml/>) into the input box and press "**Get Raw XML**" button)



2. Screen showing the retrieved XML



3. Going back to the initial screen

(Hit the back button to get back to the initial screen)

