Save file to SD Card

In the previous exercises "[Load ImageView with bitmap from internet](http://android-er.blogspot.com/2010/06/load-imageview-with-bitmap-from.html)" and "[Generate QR code using Google Chart API](http://android-er.blogspot.com/2010/07/generate-qr-code-using-google-chart-api.html)", images were downloaded from internet for display only. Here, we are going to save the download image to SD Card.  
  
[](http://4.bp.blogspot.com/_C5a2qH8Y_jk/TD1k0aRn_7I/AAAAAAAAAhE/VEs3mUKnQVk/s1600/SaveImageOnSDCard.png)  
  
The path to SD Card can be retrieved using  
**Environment.getExternalStorageDirectory();**  
  
Then compress and write to SD Card by:  
**outStream = new FileOutputStream(file);**  
**bm.compress(Bitmap.CompressFormat.PNG, 100, outStream);**  
**outStream.flush();**  
**outStream.close();**  
  
In order to premit the App to access internet and write to SD Card, we need **"android.permission.INTERNET"** and**"android.permission.WRITE\_EXTERNAL\_STORAGE"**.  
Modify AndroidManifest.xml

<?xml version="1.0" encoding="utf-8"?>  
<manifest xmlns:android="http://schemas.android.com/apk/res/android"  
 package="com.exercise.AndroidWebImage"  
 android:versionCode="1"  
 android:versionName="1.0">  
 <application android:icon="@drawable/icon" android:label="@string/app\_name">  
 <activity android:name=".AndroidWebImage"  
 android:label="@string/app\_name">  
 <intent-filter>  
 <action android:name="android.intent.action.MAIN" />  
 <category android:name="android.intent.category.LAUNCHER" />  
 </intent-filter>  
 </activity>  
  
 </application>  
 <uses-sdk android:minSdkVersion="4" />  
<uses-permission android:name="android.permission.INTERNET" />  
<uses-permission android:name="android.permission.WRITE\_EXTERNAL\_STORAGE" />  
</manifest>

main.xml

<?xml version="1.0" encoding="utf-8"?>  
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"  
 android:orientation="vertical"  
 android:layout\_width="fill\_parent"  
 android:layout\_height="fill\_parent"  
 >  
<TextView  
 android:layout\_width="fill\_parent"  
 android:layout\_height="wrap\_content"  
 android:text="@string/hello"  
 />  
<Button  
 android:id="@+id/save"  
 android:layout\_width="fill\_parent"  
 android:layout\_height="wrap\_content"  
 android:text="Save"  
 />  
<ImageView  
 android:id="@+id/image"  
 android:scaleType="center"  
 android:layout\_width="fill\_parent"  
 android:layout\_height="fill\_parent"  
/>  
</LinearLayout>

AndroidWebImage.java

package com.exercise.AndroidWebImage;  
  
import java.io.File;  
import java.io.FileNotFoundException;  
import java.io.FileOutputStream;  
import java.io.IOException;  
import java.io.InputStream;  
import java.io.OutputStream;  
import java.net.HttpURLConnection;  
import java.net.URL;  
import java.net.URLConnection;  
  
import android.app.Activity;  
import android.graphics.Bitmap;  
import android.graphics.BitmapFactory;  
import android.os.Bundle;  
import android.os.Environment;  
import android.view.View;  
import android.widget.Button;  
import android.widget.ImageView;  
import android.widget.Toast;  
  
public class AndroidWebImage extends Activity {  
  
String image\_URL=  
 "http://chart.apis.google.com/chart?chs=200x200&cht=qr&chl=http%3A%2F%2Fandroid-er.blogspot.com%2F";  
  
String extStorageDirectory;  
  
Bitmap bm;  
  
 /\*\* Called when the activity is first created. \*/  
 @Override  
 public void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.main);  
   
 Button buttonSave = (Button)findViewById(R.id.save);  
  
 ImageView bmImage = (ImageView)findViewById(R.id.image);  
 BitmapFactory.Options bmOptions;  
 bmOptions = new BitmapFactory.Options();  
 bmOptions.inSampleSize = 1;  
 bm = LoadImage(image\_URL, bmOptions);  
 bmImage.setImageBitmap(bm);  
   
 extStorageDirectory = Environment.getExternalStorageDirectory().toString();  
   
 buttonSave.setText("Save to " + extStorageDirectory + "/qr.PNG");  
 buttonSave.setOnClickListener(buttonSaveOnClickListener);  
 }  
  
 private Bitmap LoadImage(String URL, BitmapFactory.Options options)  
 {   
 Bitmap bitmap = null;  
 InputStream in = null;   
 try {  
 in = OpenHttpConnection(URL);  
 bitmap = BitmapFactory.decodeStream(in, null, options);  
 in.close();  
 } catch (IOException e1) {  
 }  
 return bitmap;   
 }  
  
private InputStream OpenHttpConnection(String strURL) throws IOException{  
 InputStream inputStream = null;  
 URL url = new URL(strURL);  
 URLConnection conn = url.openConnection();  
  
 try{  
 HttpURLConnection httpConn = (HttpURLConnection)conn;  
 httpConn.setRequestMethod("GET");  
 httpConn.connect();  
  
 if (httpConn.getResponseCode() == HttpURLConnection.HTTP\_OK) {  
 inputStream = httpConn.getInputStream();  
 }  
 }  
 catch (Exception ex)  
 {  
 }  
 return inputStream;  
}  
  
Button.OnClickListener buttonSaveOnClickListener  
 = new Button.OnClickListener(){  
  
 @Override  
 public void onClick(View arg0) {  
 // TODO Auto-generated method stub  
 OutputStream outStream = null;  
 File file = new File(extStorageDirectory, "er.PNG");  
 try {  
 outStream = new FileOutputStream(file);  
 bm.compress(Bitmap.CompressFormat.PNG, 100, outStream);  
 outStream.flush();  
 outStream.close();  
   
 Toast.makeText(AndroidWebImage.this, "Saved", Toast.LENGTH\_LONG).show();  
   
 } catch (FileNotFoundException e) {  
 // TODO Auto-generated catch block  
 e.printStackTrace();  
 Toast.makeText(AndroidWebImage.this, e.toString(), Toast.LENGTH\_LONG).show();  
 } catch (IOException e) {  
 // TODO Auto-generated catch block  
 e.printStackTrace();  
 Toast.makeText(AndroidWebImage.this, e.toString(), Toast.LENGTH\_LONG).show();  
 }  
  
 }  
  
};  
  
}

[[http://2.bp.blogspot.com/_J90P-hyr9o8/SmR6wLejZpI/AAAAAAAAAbg/iSloE1vTVnE/s200/icons_download.gif](http://www.ziddu.com/download/10702726/AndroidWebImage_files_100714a.zip.html)Download the files](http://www.ziddu.com/download/10702726/AndroidWebImage_files_100714a.zip.html).