*/\*\* Deborah Barndt  
 \* 3-23-17  
 \* MainActivity.java  
 \* Lab 5  
 \* This program creates a star rating quiz via a question bank from a specific URL.  
 \* Written by Deborah Barndt.  
 \*/***package** com.example.u2.quiz;  
  
**import** android.app.Activity;  
**import** android.app.ProgressDialog;  
**import** android.os.AsyncTask;  
**import** android.support.v7.app.AppCompatActivity;  
**import** android.os.Bundle;  
**import** android.view.View;  
**import** android.view.View.OnClickListener;  
**import** android.widget.Button;  
**import** android.widget.ImageView;  
**import** android.widget.RadioButton;  
**import** android.widget.RadioGroup;  
**import** android.widget.RatingBar;  
**import** android.widget.TextView;  
**import** android.widget.Toast;  
**import** android.widget.RatingBar;  
**import** java.io.BufferedReader;  
**import** java.io.InputStream;  
**import** java.io.InputStreamReader;  
**import** java.net.HttpURLConnection;  
**import** java.net.URL;  
**import** java.util.ArrayList;  
  
**public class** MainActivity **extends** AppCompatActivity  
{  
 Activity **context**;  
 TextView **txtview**;  
 ProgressDialog **pd**;  
  
 ArrayList<String> **stringList** = **new** ArrayList<String>();  
  
 **static int** *questionNum* = 0;  
  
 *// Keep score of the number of questions right.* **static int** *score* = 0;  
  
 **private** RadioGroup **radioQuestions**;  
 **private** RadioButton **radioButton**;  
  
 ImageView **image**;  
  
 @Override  
 **protected void** onCreate(Bundle savedInstanceState)  
 {  
 **super**.onCreate(savedInstanceState);  
 setContentView(R.layout.***activity\_main***);  
  
 **context** = **this**;  
  
 BackgroundTask bt = **new** BackgroundTask();  
  
 *// Get the URL.* bt.execute(**"http://www.papademas.net/sample.txt"**);  
 }  
  
 *// The background process to download the file from the internet.* **public class** BackgroundTask **extends** AsyncTask<String, Integer, Void>  
 {  
 **protected void** onPreExecute()  
 {  
 **super**.onPreExecute();  
  
 *// Display the progress dialog.* **pd** = **new** ProgressDialog(**context**);  
 **pd**.setTitle(**"Reading the text file..."**);  
 **pd**.setMessage(**"Please wait..."**);  
 **pd**.setCancelable(**true**);  
 **pd**.setIndeterminate(**false**);  
 **pd**.show();  
 }  
  
 **protected** Void doInBackground(String...params)  
 {  
 URL url;  
 String StringBuffer = **null**;  
  
 **try** {  
 *// Create an URL object to point to the file location on the internet.* url = **new** URL(params[0]);  
  
 *// Make a request to the server.* HttpURLConnection con = (HttpURLConnection) url.openConnection();  
  
 *// Get the InputStream instance.* InputStream is = con.getInputStream();  
  
 *// Create a BufferedReader object.* BufferedReader br = **new** BufferedReader(**new** InputStreamReader(is));  
  
 *// Read content of the file line by line and add it to the Stringbuffer.* **while** ((StringBuffer = br.readLine()) != **null**)  
 {  
 *// Add to the arraylist.* **stringList**.add(StringBuffer);  
 }  
  
 br.close();  
 }  
  
 **catch**(Exception e)  
 {  
 e.printStackTrace();  
  
 *// Close the dialog if error occurs.* **if**(**pd** != **null**)  
 **pd**.dismiss();  
 }  
  
 **return null**;  
 }  
  
 **protected void** onPostExecute(Void result)  
 {  
 *// Close the dialog.* **if**(**pd** != **null**)  
 **pd**.dismiss();  
  
 **txtview** = (TextView) findViewById(R.id.***textView1***);  
  
 *// Display the read text in the TextView.* **txtview**.setText(**stringList**.get(0));  
 startQuiz();  
 }  
 }  
  
 **public void** startQuiz()  
 {  
 RatingBar rb = (RatingBar) findViewById(R.id.***ratingBar***);  
 rb.setRating(0);  
 rb.setVisibility(View.***GONE***);  
  
 buttonListener();  
 }  
  
 **public void** buttonListener()  
 {  
 Button btnDisplay;  
  
  
 **radioQuestions** = (RadioGroup) findViewById(R.id.***radioQuestions***);  
 btnDisplay = (Button) findViewById(R.id.***btnDisplay***);  
  
 btnDisplay.setOnClickListener(**new** OnClickListener()  
 {  
 @Override  
 **public void** onClick(View v)  
 {  
 *// Get the selected radio button from radioGroup.* **int** selectId = **radioQuestions**.getCheckedRadioButtonId();  
  
 *// Find the radio button by returned Id.* **radioButton** = (RadioButton) findViewById(selectId);  
  
  
  
 **switch**(*questionNum*)  
 {  
 **case** 0:  
 *// Verify if the result matches the right button selection.* **if**(**radioButton**.getText().equals(**"True"**))  
 {  
 Toast.*makeText*(MainActivity.**this**,  
 **"Right answer!"**, Toast.***LENGTH\_LONG***).show();  
 *score*++;  
 }  
  
  
 **else** {  
 Toast.*makeText*(MainActivity.**this**,  
 **"Wrong answer!"**, Toast.***LENGTH\_LONG***).show();  
 }  
 **break**;  
  
 **case** 1:  
 *// Verify if the result matches the right button selection.* **if**(**radioButton**.getText().equals(**"False"**))  
 {  
 Toast.*makeText*(MainActivity.**this**,  
 **"Right answer!"**, Toast.***LENGTH\_LONG***).show();  
 *score*++;  
 }  
  
 **else** {  
 Toast.*makeText*(MainActivity.**this**,  
 **"Wrong answer!"**, Toast.***LENGTH\_LONG***).show();  
 }  
  
 **break**;  
  
 **case** 2:  
 *// Verify if the result matches the right button selection.* **if**(**radioButton**.getText().equals(**"True"**))  
 {  
 Toast.*makeText*(MainActivity.**this**,  
 **"Right answer!"**, Toast.***LENGTH\_LONG***).show();  
 *score*++;  
 }  
  
 **else** {  
 Toast.*makeText*(MainActivity.**this**,  
 **"Wrong answer!"**, Toast.***LENGTH\_LONG***).show();  
 }  
  
 **break**;  
  
 **case** 3:  
 *// Verify if the result matches the right button selection.* **if**(**radioButton**.getText().equals(**"False"**))  
 {  
 Toast.*makeText*(MainActivity.**this**,  
 **"Right answer!"**, Toast.***LENGTH\_LONG***).show();  
 *score*++;  
 }  
  
 **else** {  
 Toast.*makeText*(MainActivity.**this**,  
 **"Wrong answer!"**, Toast.***LENGTH\_LONG***).show();  
 }  
  
 **break**;  
  
 **case** 4:  
 *// Verify if the result matches the right button selection.* **if**(**radioButton**.getText().equals(**"False"**))  
 {  
 Toast.*makeText*(MainActivity.**this**,  
 **"Right answer!"**, Toast.***LENGTH\_LONG***).show();  
 *score*++;  
 }  
  
 **else** {  
 Toast.*makeText*(MainActivity.**this**,  
 **"Wrong answer!"**, Toast.***LENGTH\_LONG***).show();  
 *score*--;  
  
 RatingBar rb = (RatingBar) findViewById(R.id.***ratingBar***);  
 rb.setRating(*score*);  
 rb.setVisibility(View.***VISIBLE***);  
 }  
  
 **break**;  
 }  
 }  
 });  
  
 imageListener();  
  
 }  
  
 **public void** imageListener()  
 {  
 **image** = (ImageView) findViewById(R.id.***imageView1***);  
 **image**.setOnClickListener(**new** View.OnClickListener()  
 {  
 @Override  
 **public void** onClick(View view) {  
 *// Get the new question for viewing.* **if** (*questionNum* == 4)  
 {  
 *// Reset the count to -1 to start first question again.  
 questionNum* = -1;  
  
 RatingBar rb = (RatingBar) findViewById(R.id.***ratingBar***);  
 rb.setRating(*score*);  
 rb.setVisibility(View.***VISIBLE***);  
 }  
  
 **txtview**.setText(**stringList**.get(++*questionNum*));  
  
 *// Reset the radio button (radioTrue) to default.* **radioQuestions**.check(R.id.***radioTrue***);  
 }  
 });  
 }  
  
}