**package** com.google.engedu.anagrams;  
  
**import** android.content.Context;  
**import** android.content.res.AssetManager;  
**import** android.os.Bundle;  
**import** android.support.design.widget.FloatingActionButton;  
**import** android.support.v7.app.AppCompatActivity;  
**import** android.support.v7.widget.Toolbar;  
**import** android.text.Html;  
**import** android.text.InputType;  
**import** android.text.TextUtils;  
**import** android.view.KeyEvent;  
**import** android.view.Menu;  
**import** android.view.MenuItem;  
**import** android.view.View;  
**import** android.view.inputmethod.EditorInfo;  
**import** android.view.inputmethod.InputMethodManager;  
**import** android.widget.EditText;  
**import** android.widget.TextView;  
**import** android.widget.Toast;  
  
**import** java.io.IOException;  
**import** java.io.InputStream;  
**import** java.util.ArrayList;  
  
  
**public class** AnagramsActivity **extends** AppCompatActivity {  
  
 **public static final** String ***START\_MESSAGE*** = **"Find as many words as possible that can be formed by adding one letter to <big>%s</big> (but that do not contain the substring %s)."**;  
 **private** AnagramDictionary **dictionary**;  
 **private** String **currentWord**;  
 **private** ArrayList<String> **anagrams**;  
  
 @Override  
 **protected void** onCreate(Bundle savedInstanceState) {  
 **super**.onCreate(savedInstanceState);  
 setContentView(R.layout.***activity\_anagrams***);  
 Toolbar toolbar = (Toolbar) findViewById(R.id.***toolbar***);  
 setSupportActionBar(toolbar);  
 AssetManager assetManager = getAssets();  
 **try** {  
 InputStream inputStream = assetManager.open(**"words.txt"**);  
 **dictionary** = **new** AnagramDictionary(inputStream);  
 } **catch** (IOException e) {  
 Toast toast = Toast.*makeText*(**this**, **"Could not load dictionary"**, Toast.***LENGTH\_LONG***);  
 toast.show();  
 }  
 *// Set up the EditText box to process the content of the box when the user hits 'enter'* **final** EditText editText = (EditText) findViewById(R.id.***editText***);  
 editText.setRawInputType(InputType.***TYPE\_CLASS\_TEXT***);  
 editText.setImeOptions(EditorInfo.***IME\_ACTION\_GO***);  
 editText.setOnEditorActionListener(**new** TextView.OnEditorActionListener() {  
 @Override  
 **public boolean** onEditorAction(TextView v, **int** actionId, KeyEvent event) {  
 **boolean** handled = **false**;  
 **if** (actionId == EditorInfo.***IME\_ACTION\_GO***) {  
 processWord(editText);  
 handled = **true**;  
 }  
 **return** handled;  
 }  
 });  
 }  
  
 **private void** processWord(EditText editText) {  
 TextView resultView = (TextView) findViewById(R.id.***resultView***);  
 String word = editText.getText().toString().trim().toLowerCase();  
 **if** (word.length() == 0) {  
 **return**;  
 }  
 String color = **"#cc0029"**;  
 **if** (**dictionary**.isGoodWord(word, **currentWord**) && **anagrams**.contains(word)) {  
 **anagrams**.remove(word);  
 color = **"#00aa29"**;  
 } **else** {  
 word = **"X "** + word;  
 }  
 resultView.append(Html.*fromHtml*(String.*format*(**"<font color=%s>%s</font><BR>"**, color, word)));  
 editText.setText(**""**);  
 FloatingActionButton fab = (FloatingActionButton) findViewById(R.id.***fab***);  
 fab.show();  
 }  
  
 @Override  
 **public boolean** onCreateOptionsMenu(Menu menu) {  
 *// Inflate the menu; this adds items to the action bar if it is present.* getMenuInflater().inflate(R.menu.***menu\_anagrams***, menu);  
 **return true**;  
 }  
  
 @Override  
 **public boolean** onOptionsItemSelected(MenuItem item) {  
 *// Handle action bar item clicks here. The action bar will  
 // automatically handle clicks on the Home/Up button, so long  
 // as you specify a parent activity in AndroidManifest.xml.* **int** id = item.getItemId();  
  
 *//noinspection SimplifiableIfStatement* **if** (id == R.id.***action\_settings***) {  
 **return true**;  
 }  
  
 **return super**.onOptionsItemSelected(item);  
 }  
  
 **public boolean** defaultAction(View view) {  
 TextView gameStatus = (TextView) findViewById(R.id.***gameStatusView***);  
 FloatingActionButton fab = (FloatingActionButton) findViewById(R.id.***fab***);  
 EditText editText = (EditText) findViewById(R.id.***editText***);  
 TextView resultView = (TextView) findViewById(R.id.***resultView***);  
 **if** (**currentWord** == **null**) {  
 **currentWord** = **dictionary**.pickGoodStarterWord();  
 **anagrams** = **dictionary**.getAnagramsWithOneMoreLetter(**currentWord**);  
 gameStatus.setText(Html.*fromHtml*(String.*format*(***START\_MESSAGE***, **currentWord**.toUpperCase(), **currentWord**)));  
 fab.setImageResource(android.R.drawable.***ic\_menu\_help***);  
 fab.hide();  
 resultView.setText(**""**);  
 editText.setText(**""**);  
 editText.setEnabled(**true**);  
 editText.requestFocus();  
 InputMethodManager imm = (InputMethodManager) getSystemService(Context.***INPUT\_METHOD\_SERVICE***);  
 imm.showSoftInput(editText, InputMethodManager.***SHOW\_IMPLICIT***);  
 } **else** {  
 editText.setText(**currentWord**);  
 editText.setEnabled(**false**);  
 fab.setImageResource(android.R.drawable.***ic\_media\_play***);  
 **currentWord** = **null**;  
 resultView.append(TextUtils.*join*(**"\n"**, **anagrams**));  
 gameStatus.append(**" Hit 'Play' to start again"**);  
 }  
 **return true**;  
 }  
}