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Lab 1: Temp Converter

ITMD 455-02

1-17-17

*/\*\* Deborah Barndt  
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 \* MainActivity.java  
 \* Lab 1  
 \* This program creates a temperature converter android application. It will convert the input  
 \* number from the user to either celsius or fahrenheit, change the color of the background  
 \* depending on the temperature entered, and display an image if the temperature is above 90  
 \* or below 0.  
 \* Written by Deborah Barndt.  
 \*/***package** com.example.u2.tempconverter;  
  
**import** android.graphics.Color;  
**import** android.net.Uri;  
**import** android.support.v7.app.AppCompatActivity;  
**import** android.os.Bundle;  
**import** android.widget.RadioButton;  
**import** android.widget.ImageView;  
**import** android.widget.Toast;  
**import** android.view.View;  
**import** android.widget.EditText;  
**import** com.google.android.gms.appindexing.Action;  
**import** com.google.android.gms.appindexing.AppIndex;  
**import** com.google.android.gms.appindexing.Thing;  
**import** com.google.android.gms.common.api.GoogleApiClient;  
  
**public class** MainActivity **extends** AppCompatActivity  
{  
 **private** EditText **text**;  
  
 *// Create object to manipulate background color.* View **view**;  
 */\*\*  
 \* ATTENTION: This was auto-generated to implement the App Indexing API.  
 \* See https://g.co/AppIndexing/AndroidStudio for more information.  
 \*/  
  
 // Create iv object to manipulate image view.* ImageView **iv**;  
  
 **private** GoogleApiClient **client**;  
  
 @Override  
 **protected void** onCreate(Bundle savedInstanceState)  
 {  
 **super**.onCreate(savedInstanceState);  
 setContentView(R.layout.***activity\_main***);  
 **text** = (EditText) findViewById(R.id.***editText***);  
 *// ATTENTION: This was auto-generated to implement the App Indexing API.  
 // See https://g.co/AppIndexing/AndroidStudio for more information.* **client** = **new** GoogleApiClient.Builder(**this**).addApi(AppIndex.***API***).build();  
 }  
  
 */\* This method is called when the user clicks the button and is handled  
 because we assigned the name to the "OnClick property" of the button.  
 \*/* **public void** onClick(View view)  
 {  
 **switch** (view.getId())  
 {  
 **case** R.id.***button***:  
 RadioButton celsiusButton = (RadioButton)  
 findViewById(R.id.***radioButton1***);  
 RadioButton fahrenheitButton = (RadioButton)  
 findViewById(R.id.***radioButton2***);  
  
 **if** (**text**.getText().length() == 0)  
 {  
 Toast.*makeText*(**this**, **"Please enter a valid number"**,  
 Toast.***LENGTH\_LONG***).show();  
 **return**;  
 }  
  
 **float** inputValue = Float.*parseFloat*(**text**.getText().toString());  
  
 **if** (celsiusButton.isChecked())  
 {  
 **text**.setText(String.*valueOf*(ConverterUtil.*convertCelsiusToFahrenheit*(inputValue)));  
 celsiusButton.setChecked(**false**);  
 fahrenheitButton.setChecked(**true**);  
 }  
  
 **else** {  
 **text**.setText(String.*valueOf*(ConverterUtil.*convertFahrenheitToCelsius*(inputValue)));  
 fahrenheitButton.setChecked(**false**);  
 celsiusButton.setChecked(**true**);  
 }  
  
 *// Grab current result value now in Text Field.* inputValue = Float.*parseFloat*(**text**.getText().toString());  
 view = findViewById(R.id.***activity\_main***);  
 **iv** = (ImageView) findViewById(R.id.***imageView***);  
  
 **if**(inputValue > 90)  
 {  
 *// Set hex color to sky blue.* view.setBackgroundColor(Color.*parseColor*(**"#87CEFF"**));  
  
 *// Set the image visibility.* **iv**.setVisibility(View.***VISIBLE***);  
  
 *// Clear any prior image.* ((ImageView) **iv**.findViewById(R.id.***imageView***)).setImageResource(0);  
  
 *// Show sun on image.* **iv**.setImageResource(R.drawable.***sun***);  
 }  
  
 **else if**(inputValue < 0)  
 {  
 *// Set color to red.  
 //view.setBackgroundColor(Color.RED);  
  
 // Set hex color to sky blue.* view.setBackgroundColor(Color.*parseColor*(**"#B0171F"**));  
  
 *// Clear any prior image.* ((ImageView) **iv**.findViewById(R.id.***imageView***)).setImageResource(0);  
  
 *// Show sun on image.* **iv**.setImageResource(R.drawable.***snowman***);  
 }  
  
 **else** {  
 *// Set color to yellow.* view.setBackgroundColor(Color.***YELLOW***);  
  
 *// Set the image visibility.* **iv**.setVisibility(View.***INVISIBLE***);  
  
 *// Clear any prior image.* ((ImageView) **iv**.findViewById(R.id.***imageView***)).setImageResource(0);  
 }  
  
 **break**;  
 }  
 }  
  
 */\*\*  
 \* ATTENTION: This was auto-generated to implement the App Indexing API.  
 \* See https://g.co/AppIndexing/AndroidStudio for more information.  
 \*/* **public** Action getIndexApiAction() {  
 Thing object = **new** Thing.Builder()  
 .setName(**"Main Page"**) *//* ***TODO: Define a title for the content shown.*** *//* ***TODO: Make sure this auto-generated URL is correct.*** .setUrl(Uri.*parse*(**"http://[ENTER-YOUR-URL-HERE]"**))  
 .build();  
 **return new** Action.Builder(Action.***TYPE\_VIEW***)  
 .setObject(object)  
 .setActionStatus(Action.***STATUS\_TYPE\_COMPLETED***)  
 .build();  
 }  
  
 @Override  
 **public void** onStart() {  
 **super**.onStart();  
  
 *// ATTENTION: This was auto-generated to implement the App Indexing API.  
 // See https://g.co/AppIndexing/AndroidStudio for more information.* **client**.connect();  
 AppIndex.***AppIndexApi***.start(**client**, getIndexApiAction());  
 }  
  
 @Override  
 **public void** onStop() {  
 **super**.onStop();  
  
 *// ATTENTION: This was auto-generated to implement the App Indexing API.  
 // See https://g.co/AppIndexing/AndroidStudio for more information.* AppIndex.***AppIndexApi***.end(**client**, getIndexApiAction());  
 **client**.disconnect();  
 }  
}