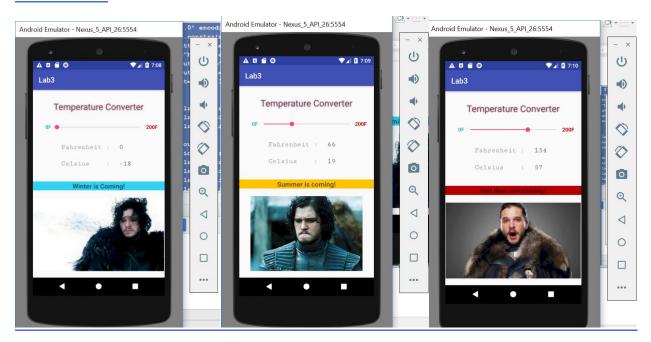
Bhavinkumar Patel - A20410380

ITMD555-Lab3

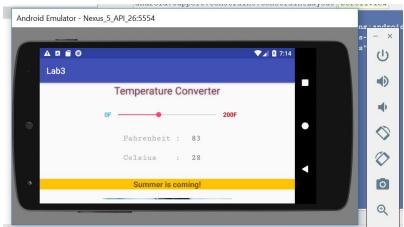
SCREENSHOTS

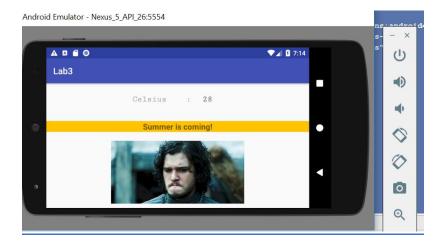


SCROLL IMPLEMENTATION FOR LANDSCAPE MODE









ACTIVITY MAIN.XML:

```
<?xml version="1.0" encoding="utf-8"?>
<android.support.constraint.ConstraintLayout</pre>
xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout width="match parent"
    android: layout height="match parent"
    tools:context="m.com.lab3.MainActivity">
    <ScrollView
        android:layout width="match parent"
        android:layout height="match parent"
        android:layout marginBottom="10dp">
    <RelativeLayout
        android:id="@+id/relview1"
        android:layout width="match parent"
        android:layout_height="match parent"
        android:layout_alignParentStart="true"
        android:layout_alignParentTop="true"
        tools:layout editor absoluteX="0dp"
        tools:layout editor absoluteY="0dp">
        <SeekBar
            android:id="@+id/seekBar"
            android:layout width="match parent"
            android: layout height="wrap content"
            android:layout alignEnd="@+id/textView12"
            android:layout alignStart="@+id/textView12"
            android:layout below="@+id/textView12"
            android:layout marginTop="24dp"
            android:max="200"
            android:progress="0" />
        <TextView
            android:id="@+id/textView7"
            android:layout width="wrap content"
            android:layout height="wrap content"
            android:layout alignBottom="@+id/seekBar"
            android:layout toStartOf="@+id/seekBar"
            android:text="0F"
            android:textColor="@android:color/holo_blue_light"
            android: textSize="14sp"
            android:textStyle="bold" />
        <TextView
            android:id="@+id/textView11"
            android:layout width="wrap content"
            android:layout height="wrap content"
            android:layout_alignBottom="@+id/seekBar"
            android:layout alignParentEnd="true"
            android:layout toEndOf="@+id/seekBar"
            android: text="200F"
            android:textColor="@android:color/holo_red_dark"
            android: textSize="14sp"
            android:textStyle="bold" />
            android:id="@+id/textView12"
```

```
android:layout width="wrap content"
    android:layout height="wrap content"
    android:layout alignParentTop="true"
    android:layout centerHorizontal="true"
    android:layout marginTop="22dp"
    android:padding="7dp"
    android: shadowColor="#B30753"
    android:shadowDx="0.0"
    android: shadowDy="0.0"
    android:shadowRadius="12"
    android:text="Temperature Converter"
    android:textSize="24sp" />
<TextView
    android:id="@+id/textView2"
    android:layout width="wrap content"
    android:layout height="wrap content"
    android:layout below="@+id/textView7"
    android:layout_marginStart="28dp"
    android:layout_marginTop="36dp"
    android:layout_toEndOf="@+id/textView7"
    android: fontFamily="serif-monospace"
    android:text="Fahrenheit :"
    android:textColor="@android:color/darker gray"
    android: textSize="18sp"
    android:textStyle="bold" />
<TextView
    android:id="@+id/textView3"
    android:layout width="wrap content"
    android:layout height="wrap content"
    android:layout alignStart="@+id/textView2"
    android:layout below="@+id/textView2"
    android:layout marginTop="25dp"
    android: fontFamily="serif-monospace"
    android:text="Celsius
    android:textColor="@android:color/darker gray"
    android: textSize="18sp"
    android:textStyle="bold" />
<TextView
    android:id="@+id/textView4"
    android:layout width="wrap content"
    android:layout height="wrap content"
    android:layout alignTop="@+id/textView2"
    android:layout marginStart="26dp"
    android:layout toEndOf="@+id/textView2"
    android:fontFamily="serif-monospace"
    android:text=""
    android: textAlignment="viewStart"
    android: textSize="18sp"
    android:textStyle="bold" />
<TextView
    android:id="@+id/textView5"
    android:layout width="wrap content"
    android: layout height="wrap content"
    android:layout alignBaseline="@+id/textView3"
    android:layout alignBottom="@+id/textView3"
    android:layout alignStart="@+id/textView4"
    android: fontFamily="serif-monospace"
    android:text=""
    android: textAlignment="viewStart"
```

```
android:textSize="18sp"
            android:textStyle="bold" />
        <TextView
            android:id="@+id/textView"
            android:layout width="match parent"
            android: layout height="wrap content"
            android:layout marginTop="250dp"
            android:background="@android:color/holo blue bright"
            android:text=""
            android:textAlignment="center"
            android:textSize="18sp"
            android:textStyle="bold" />
        <ImageView</pre>
            android:id="@+id/imageView"
            android:layout width="match parent"
            android:layout height="200dp"
            android:layout_below="@+id/textView"
            android:layout marginTop="20dp" />
    </RelativeLayout>
</ScrollView>
</android.support.constraint.ConstraintLayout>
MAINACTIVITY.JAVA
package m.com.lab3;
import android.graphics.Color;
import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.util.Log;
import android.widget.ImageView;
import android.widget.SeekBar;
import android.widget.TextView;
import android.widget.Toast;
public class MainActivity extends AppCompatActivity {
   private SeekBar seekbar;
   private TextView farText;
   private TextView celText;
    @Override
   protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity main);
        /* Setting listeners for seek bar widget*/
        seekbar = (SeekBar) findViewById(R.id.seekBar);
        farText = (TextView) findViewById(R.id.textView4);
        celText = (TextView) findViewById(R.id.textView5);
        seekbarListener();
        seekbar.setProgress(0);
        calculateCelValue(0);
        showImageAndText("winter");
    }
```

```
private void calculateCelValue(int farValue)
        long celsiusValue = Math.round((5.0/9.0)*(farValue-32));
        farText.setText(""+farValue);
        celText.setText(""+celsiusValue);
    /* Function show image and text dynamically*/
   private void showImageAndText(String type)
        ImageView img = (ImageView) findViewById(R.id.imageView);
        TextView disText = (TextView) findViewById(R.id.textView);
        if("winter".equalsIgnoreCase(type))
            img.setImageResource(R.drawable.winter);
            disText.setText("Winter is Coming!");
            disText.setBackgroundColor(Color.parseColor("#31D3F0"));
        else if("summer".equalsIgnoreCase(type))
            img.setImageResource(R.drawable.summer);
            disText.setText("Summer is coming!");
            disText.setBackgroundColor(Color.parseColor("#FFC300"));
        else if("hottest".equalsIgnoreCase(type))
            img.setImageResource(R.drawable.hottest);
            disText.setText("Hot days are coming!");
            disText.setBackgroundColor(Color.parseColor("#B3000A"));
    }
    /* Listener for seek bar */
   private void seekbarListener()
        seekbar.setOnSeekBarChangeListener(new SeekBar.OnSeekBarChangeListener()
            int farValue = 0;
            /* Track seek bar progress with this method */
            public void onProgressChanged(SeekBar seekBar, int progress, boolean
fromUser)
                farValue = progress;
                calculateCelValue(farValue);
                if(farValue <= 40)</pre>
                    showImageAndText("winter");
                else if(farValue > 40 && farValue < 90)</pre>
                    showImageAndText("summer");
                else if(farValue >= 90 && farValue <= 200)</pre>
                    showImageAndText("hottest");
```

/* Function to calculate fahrenheit and celsius values */

```
}

/* Track start of seek bar progress with this method */

public void onStartTrackingTouch(SeekBar seekBar)
{
    /* Implement abstract method */
}

public void onStopTrackingTouch(SeekBar seekBar)
{
    /* Implement abstract method */
    //Toast.makeText(MainActivity.this, ""+farValue,
Toast.LENGTH_SHORT).show();
    }
});
}
```

ANDROID MAINFESTS.XML

```
<?xml version="1.0" encoding="utf-8"?>
<manifest xmlns:android="http://schemas.android.com/apk/res/android"</pre>
   package="m.com.lab3">
    <application
        android:allowBackup="true"
        android:icon="@mipmap/ic_launcher"
        android:label="@string/app name"
        android:roundIcon="@mipmap/ic launcher round"
        android:supportsRtl="true"
        android:theme="@style/AppTheme">
        <activity android:name=".MainActivity"</pre>
            android:configChanges="orientation">
            <intent-filter>
                <action android:name="android.intent.action.MAIN" />
                <category android:name="android.intent.category.LAUNCHER" />
            </intent-filter>
        </activity>
    </application>
</manifest>
```