



Al Imam Mohammad Ibn Saud Islamic University
College of Computer and Information Sciences
Information Technology Department

Course Title:	Wireless & Mobile Computing
Course Code:	IT ₃₄₂
Date:	8/4/2023
Assignment#:	1
Student ID:	440022662
Student Name:	Ruba Hilal Al Hilal

Instructions:

1. Submission date on Saturday (8/4/2023) **soft copy (.pdf file)** via Blackboard before 7:00 PM.
2. Screen shots for the code (including: xml, java, Manifest Anderiod code) should be provided.
3. Screen shots for the emulator should be provided.
4. There will be no extension in the submission deadline.
5. Use this cover page when submit this assignment.
6. Any attempt to cheat from any of your classmates or form the Internet the whole assignment will be marked as Zero.
7. Any delayed submission will not be accepted.

Official Use Only		
Question	Student Marks	Question Marks
I		5
Total		5



Student Name (in English): _____ Student ID: _____

Exercise:

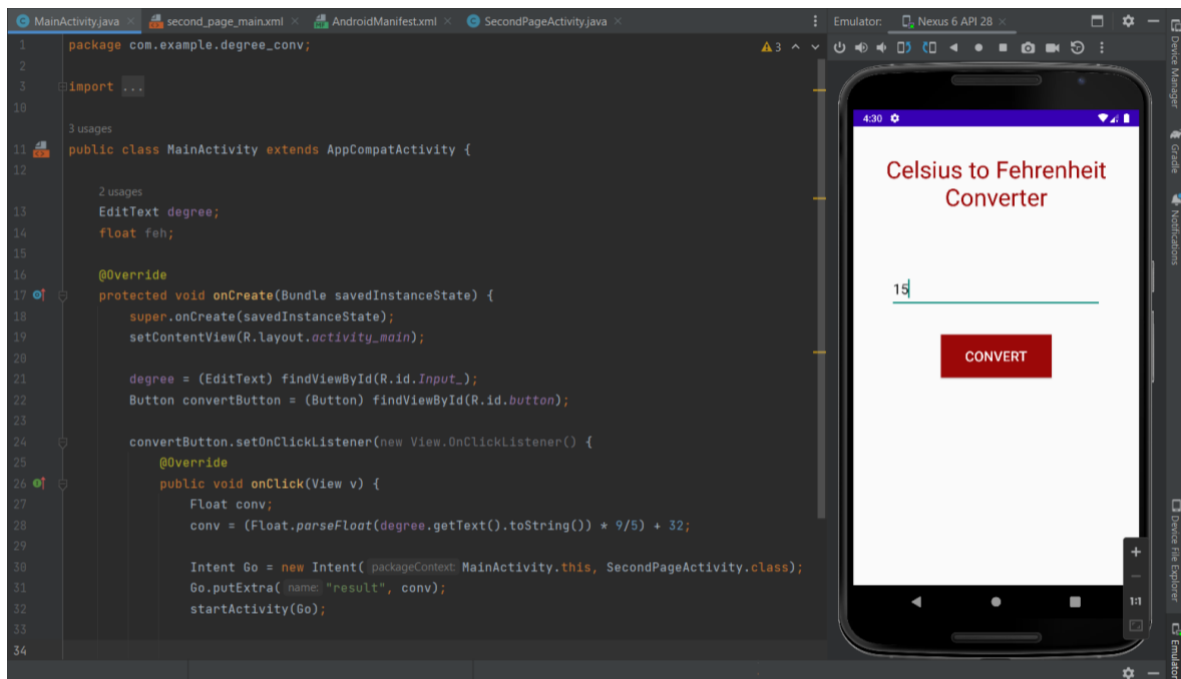
Create an Android application that Allows user to convert from Celsius to Fahrenheit, which enable user to enter the degree in cilice the main activity page, and present the result in Fahrenheit with a picture (any related picture) in another activity page.

*Tasks:

- Create two activities in Android studio with a link between them.
- Customize the components properties (color, text size, background ...etc.).

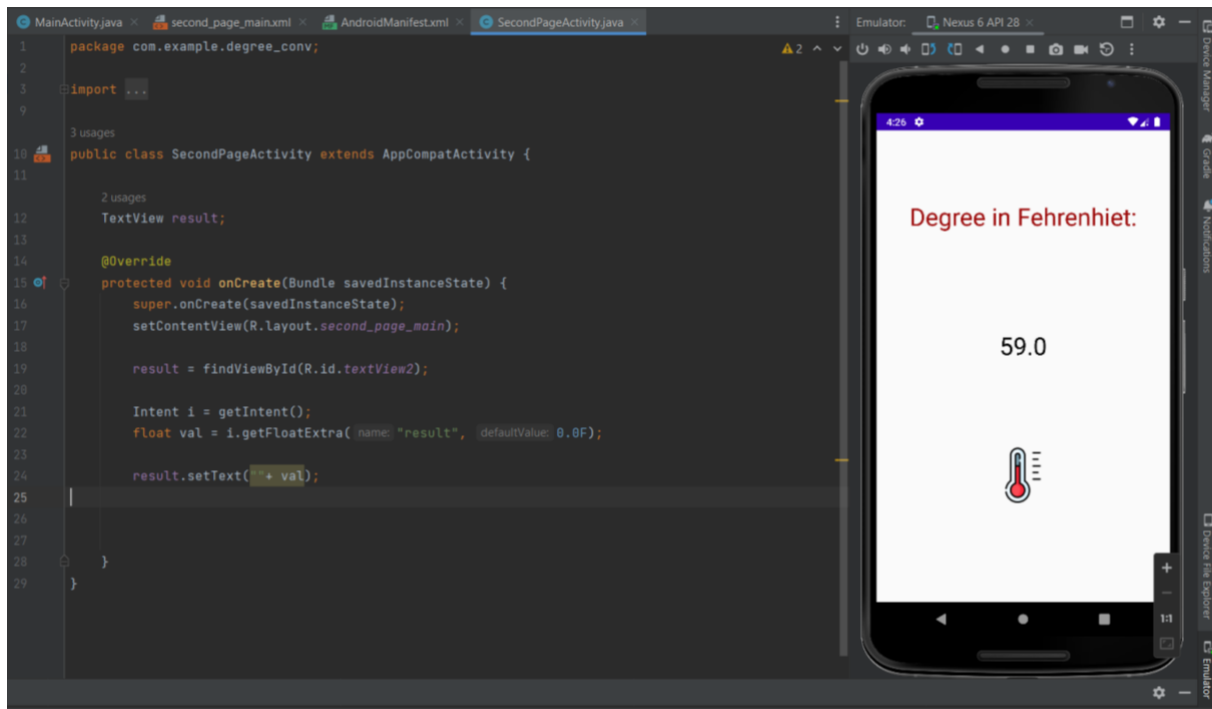
Java Code:

- Page 1



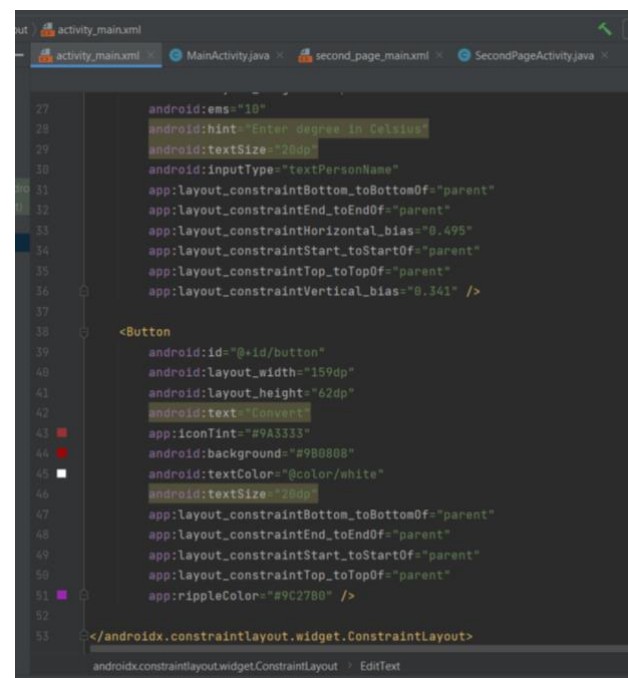
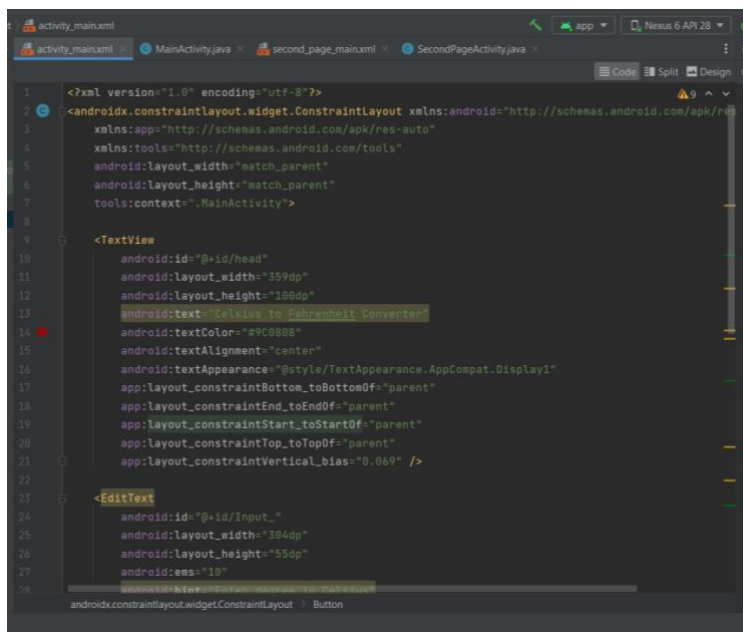


- Page 2



XML code:

- Page 1





- Page 2

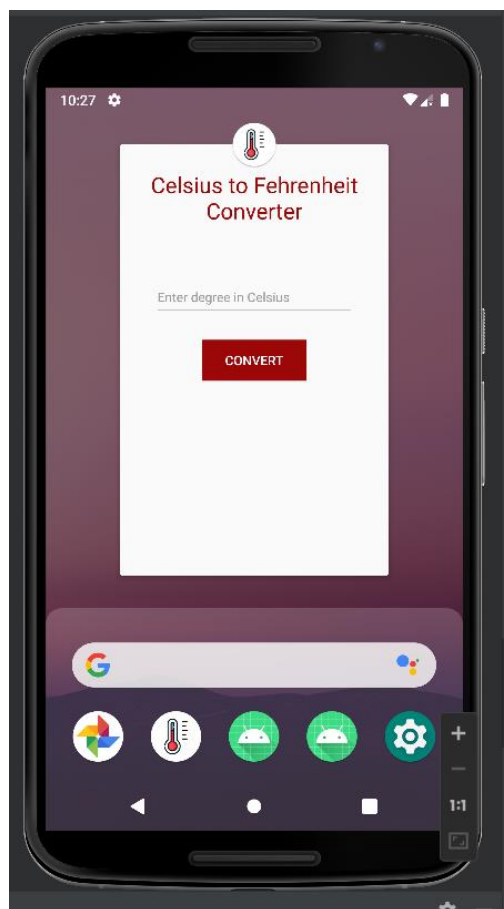
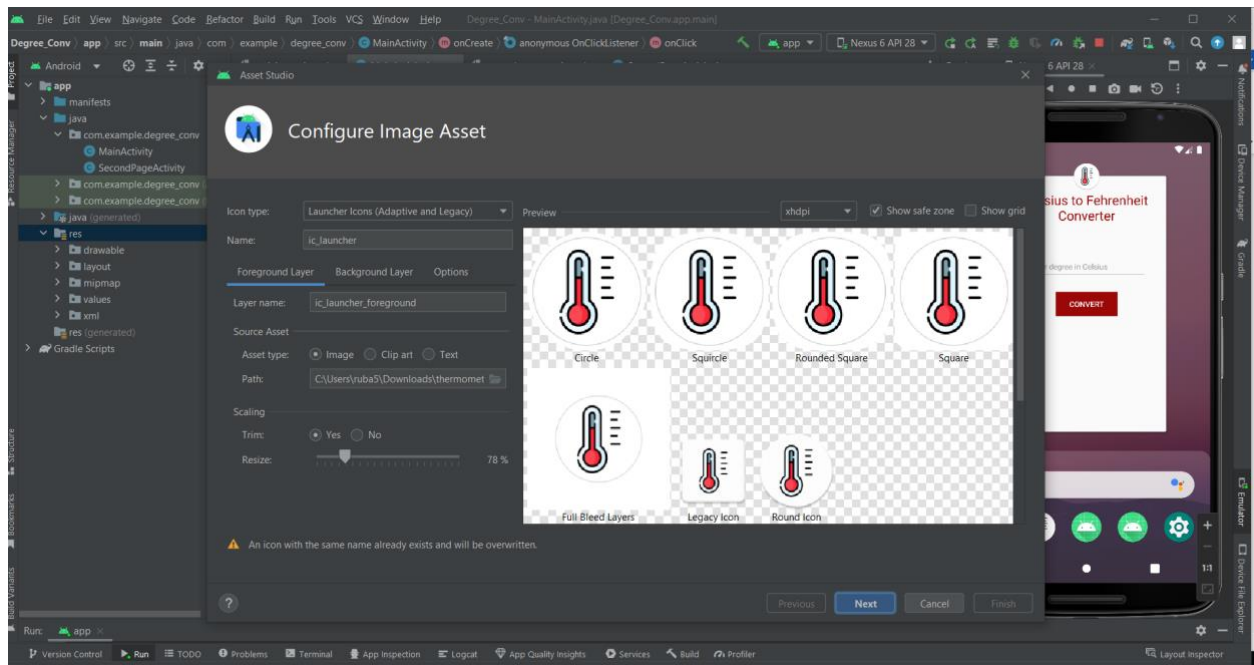
```
activity_main.xml MainActivity.java second_page_main.xml SecondPageActivity.java
1 <?xml version="1.0" encoding="utf-8"?>
2 <androidx.constraintlayout.widget.ConstraintLayout xmlns:android="http://schemas.android.com/apk/res-auto"
3   xmlns:tools="http://schemas.android.com/tools"
4   android:layout_width="match_parent"
5   android:layout_height="match_parent"
6   tools:context=".SecondPageActivity">
7
8
9
10 <TextView
11   android:id="@+id/head"
12   android:layout_width="359dp"
13   android:layout_height="100dp"
14   android:text="Degrees in Fahrenheit"
15   android:textAlignment="center"
16   android:textAppearance="@style/TextAppearance.AppCompat.Display1"
17   android:textColor="#9C0000"
18   app:layout_constraintBottom_toBottomOf="parent"
19   app:layout_constraintEnd_toEndOf="parent"
20   app:layout_constraintStart_toStartOf="parent"
21   app:layout_constraintTop_toTopOf="parent"
22   app:layout_constraintVertical_bias="0.174" />
23
24 <TextView
25   android:id="@+id/textView2"
26   android:layout_width="wrap_content"
27   android:layout_height="wrap_content"
28   android:text="Degrees in Celsius"
29   app:layout_constraintBottom_toBottomOf="parent"
30   app:layout_constraintEnd_toEndOf="parent"
31   app:layout_constraintStart_toStartOf="parent"
32   app:layout_constraintTop_toTopOf="parent"
33   app:layout_constraintVertical_bias="0.826" />
34
35 </androidx.constraintlayout.widget.ConstraintLayout>
```

```
29 android:id="@+id/textView2"
30 android:layout_width="wrap_content"
31 android:layout_height="wrap_content"
32 android:text="Degrees in Fahrenheit"
33 android:textAppearance="@style/TextAppearance.AppCompat.Display1"
34 android:textColor="@color/black"
35 app:layout_constraintBottom_toBottomOf="parent"
36 app:layout_constraintEnd_toEndOf="parent"
37 app:layout_constraintStart_toStartOf="parent"
38 app:layout_constraintTop_toTopOf="parent"
39 app:layout_constraintVertical_bias="0.453" />
40
41 <ImageView
42   android:id="@+id/imageView"
43   android:layout_width="163dp"
44   android:layout_height="162dp"
45   android:layout_marginStart="124dp"
46   android:layout_marginTop="63dp"
47   android:layout_marginEnd="124dp"
48   app:layout_constraintBottom_toBottomOf="parent"
49   app:layout_constraintEnd_toEndOf="parent"
50   app:layout_constraintHorizontal_bias="0.0"
51   app:layout_constraintStart_toStartOf="parent"
52   app:layout_constraintTop_toTopOf="parent"
53   app:layout_constraintVertical_bias="0.778"
54   app:srcCompat="@mipmap/ic_launcher_foreground" />
55
56 </androidx.constraintlayout.widget.ConstraintLayout>
```

Manifest Android code:

```
activity_main.xml MainActivity.java second_page_main.xml AndroidManifest.xml SecondPageActivity.java
1 <?xml version="1.0" encoding="utf-8"?>
2 <manifest xmlns:android="http://schemas.android.com/apk/res/android"
3   xmlns:tools="http://schemas.android.com/tools">
4
5   <application
6     android:allowBackup="true"
7     android:dataExtractionRules="@xml/data_extraction_rules"
8     android:fullBackupContent="@xml/backup_rules"
9     android:icon="@mipmap/ic_launcher"
10    android:label="@string/app_name"
11    android:supportsRtl="true"
12    android:theme="@style/Theme.Degree_Conv"
13    tools:targetApi="31">
14      <activity
15        android:name=".SecondPageActivity"
16        android:exported="false" />
17      <activity
18        android:name=".MainActivity"
19        android:exported="true">
20        <intent-filter>
21          <action android:name="android.intent.action.MAIN" />
22
23          <category android:name="android.intent.category.LAUNCHER" />
24        </intent-filter>
25      </activity>
26    </application>
27  </manifest>
```

- **Customize the application icon.**



App on Emulator:

