

BMI Calculator

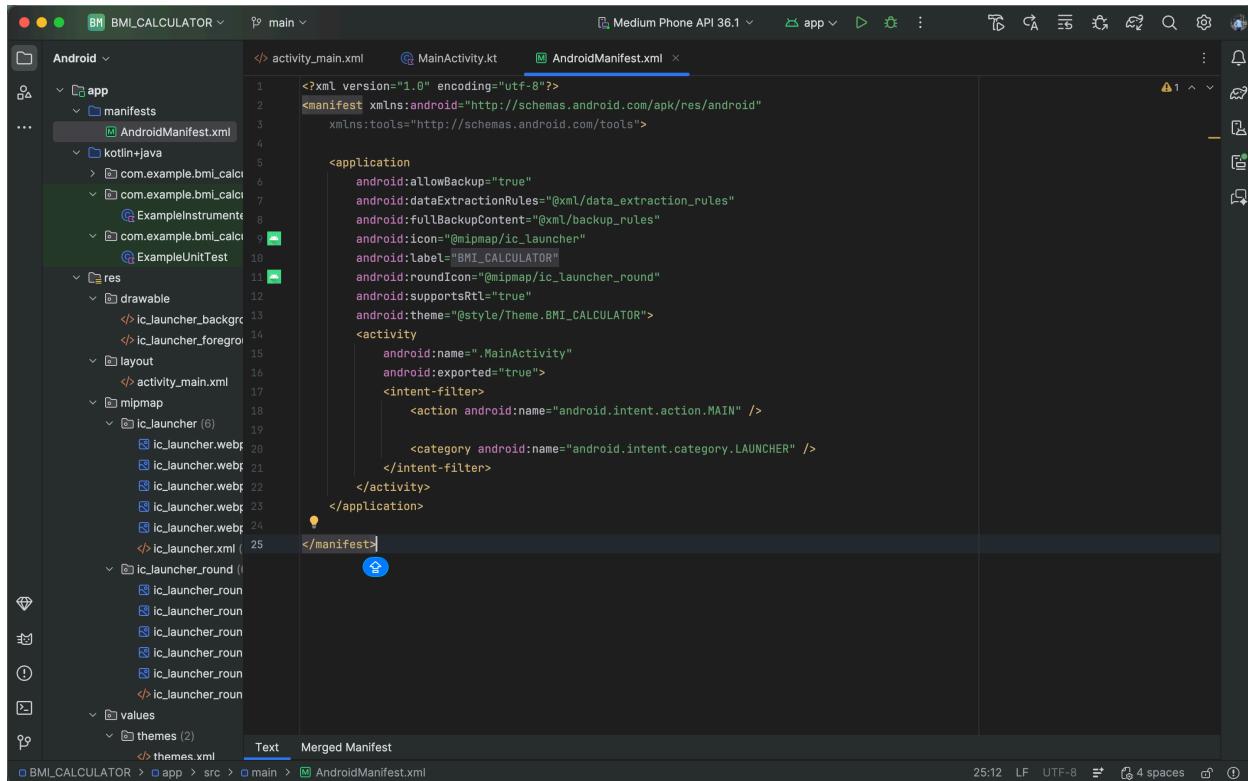
Aim

Create an app that calculates the Body Mass Index (BMI) based on user input for weight and height in EditText fields. The result is displayed in a TextView after pressing a Button.

Procedure:

1. Create a new project in **Android Studio**.
2. Add **EditText** for height and weight input.
3. Add a **Button** to calculate BMI.
4. Read height and weight in **MainActivity**.
5. Apply the BMI formula in code.
6. Display the BMI value in **TextView**.
7. Run the app and check the result.

AndroidManifest.xml

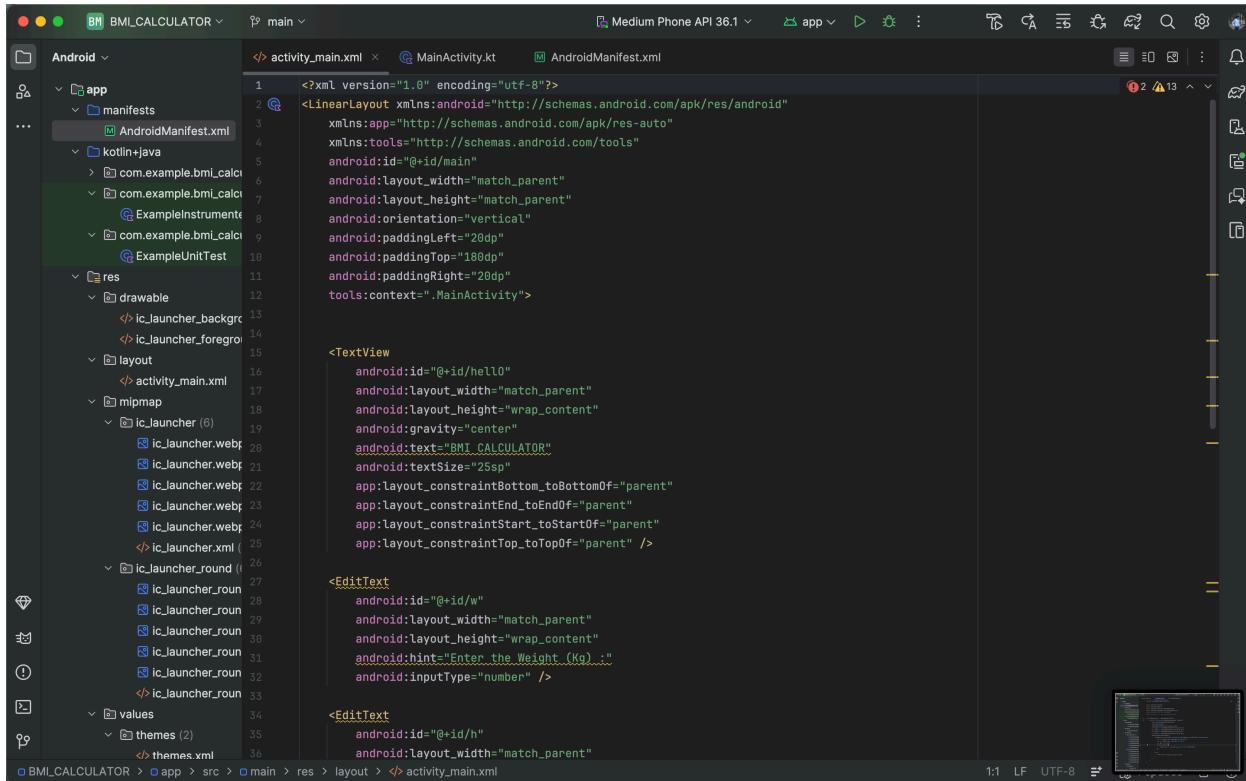


The screenshot shows the Android Studio interface with the project 'BMI_CALCULATOR' open. The left sidebar displays the project structure, including the 'app' module with its 'manifests', 'kotlin+java', 'com.example.bmi_calc' package, and various test and resource files. The right pane shows the 'AndroidManifest.xml' file, which is currently selected. The code in the manifest is as follows:

```
<?xml version="1.0" encoding="utf-8"?>
<manifest xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools">

    <application
        android:allowBackup="true"
        android:dataExtractionRules="@xml/data_extraction_rules"
        android:fullBackupContent="@xml/backup_rules"
        android:icon="@mipmap/ic_launcher"
        android:label="BMI_CALCULATOR"
        android:roundIcon="@mipmap/ic_launcher_round"
        android:supportsRtl="true"
        android:theme="@style/Theme.BMI_CALCULATOR">
        <activity
            android:name=".MainActivity"
            android:exported="true">
            <intent-filter>
                <action android:name="android.intent.action.MAIN" />
                <category android:name="android.intent.category.LAUNCHER" />
            </intent-filter>
        </activity>
    </application>
</manifest>
```

Activity_main.xml



The screenshot shows the Android Studio interface with the project 'BMI_CALCULATOR' open. The code editor displays the XML file 'activity_main.xml'. The XML code defines a linear layout with a text view for weight input and an edit text for height input.

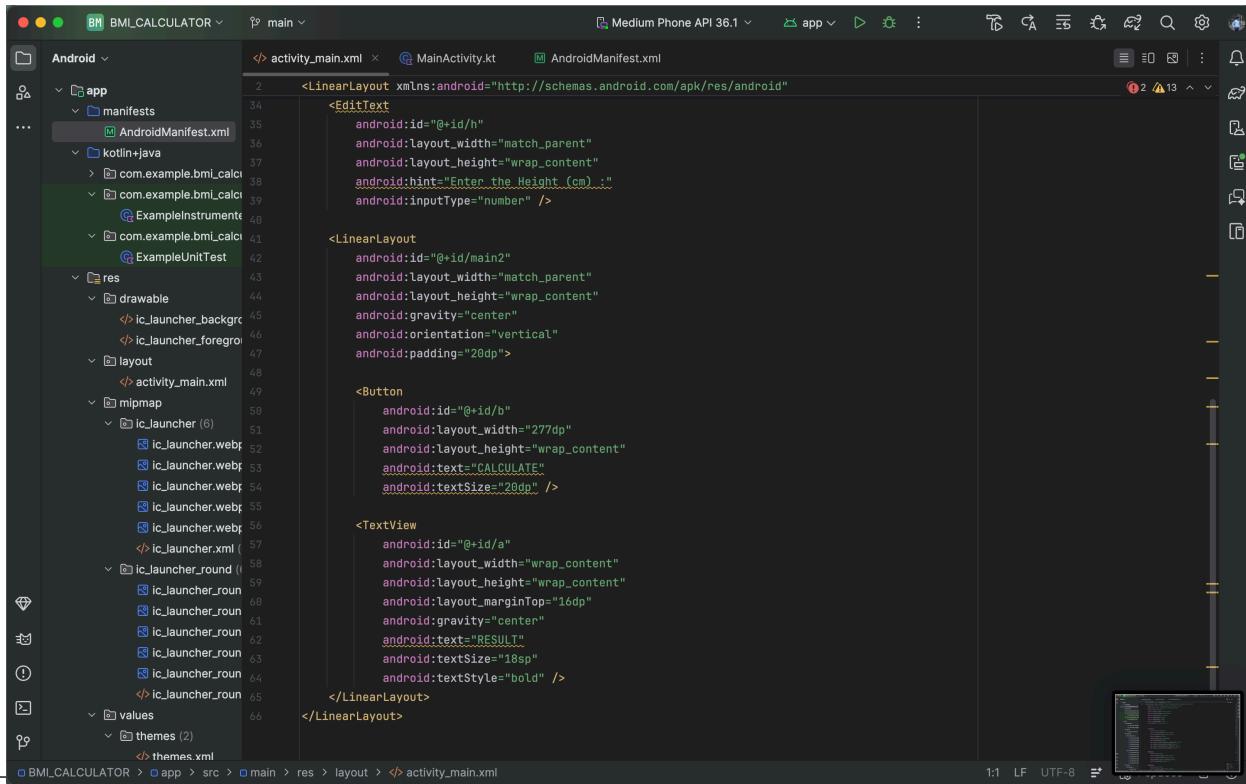
```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:orientation="vertical"
    android:paddingLeft="20dp"
    android:paddingTop="180dp"
    android:paddingRight="20dp"
    tools:context=".MainActivity" >

    <TextView
        android:id="@+id/hello"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:gravity="center"
        android:text="BMI CALCULATOR"
        android:textSize="25sp"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent" />

    <EditText
        android:id="@+id/w"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:hint="Enter the Weight (Kg) :"
        android:inputType="number" />

    <EditText
        android:id="@+id/h"
        android:layout_width="match_parent"
        android:layout_height="wrap_content" />

```



The screenshot shows the Android Studio interface with the project 'BMI_CALCULATOR' open. The code editor displays the XML file 'activity_main.xml'. The XML code defines a linear layout with an edit text for height input, a button for calculate, and a text view for result output.

```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:orientation="vertical"
    android:padding="20dp" >

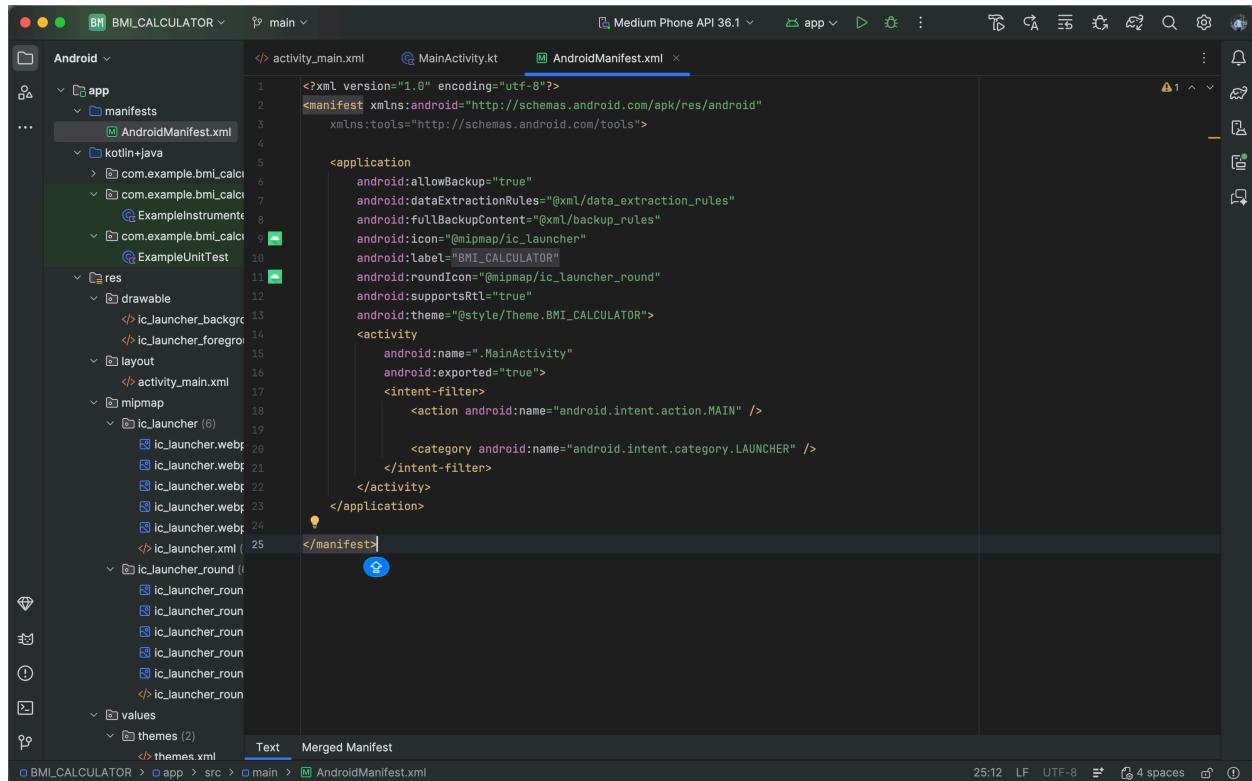
    <EditText
        android:id="@+id/h"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:hint="Enter the Height (cm) :"
        android:inputType="number" />

    <Button
        android:id="@+id/b"
        android:layout_width="277dp"
        android:layout_height="wrap_content"
        android:text="CALCULATE"
        android:textSize="20dp" />

    <TextView
        android:id="@+id/a"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginTop="16dp"
        android:gravity="center"
        android:text="RESULT"
        android:textSize="18sp"
        android:textStyle="bold" />

```

MainActivity.kt



The screenshot shows the Android Studio interface with the project 'BMI_CALCULATOR' open. The left sidebar displays the file structure under 'Android'. The main editor window shows the 'AndroidManifest.xml' file. The manifest includes declarations for an application, activity, and intent filters. The code is as follows:

```
<?xml version="1.0" encoding="utf-8"?>
<manifest xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools">

    <application
        android:allowBackup="true"
        android:dataExtractionRules="@xml/data_extraction_rules"
        android:fullBackupContent="@xml/backup_rules"
        android:icon="@mipmap/ic_launcher"
        android:label="@string/app_name"
        android:roundIcon="@mipmap/ic_launcher_round"
        android:supportsRtl="true"
        android:theme="@style/Theme.BMI_CALCULATOR">

        <activity
            android:name=".MainActivity"
            android:exported="true">
            <intent-filter>
                <action android:name="android.intent.action.MAIN" />
                <category android:name="android.intent.category.LAUNCHER" />
            </intent-filter>
        </activity>
    </application>
</manifest>
```

Output : Result: Successfully Verified

