

# Lab 11: Android Themes

## Introduction

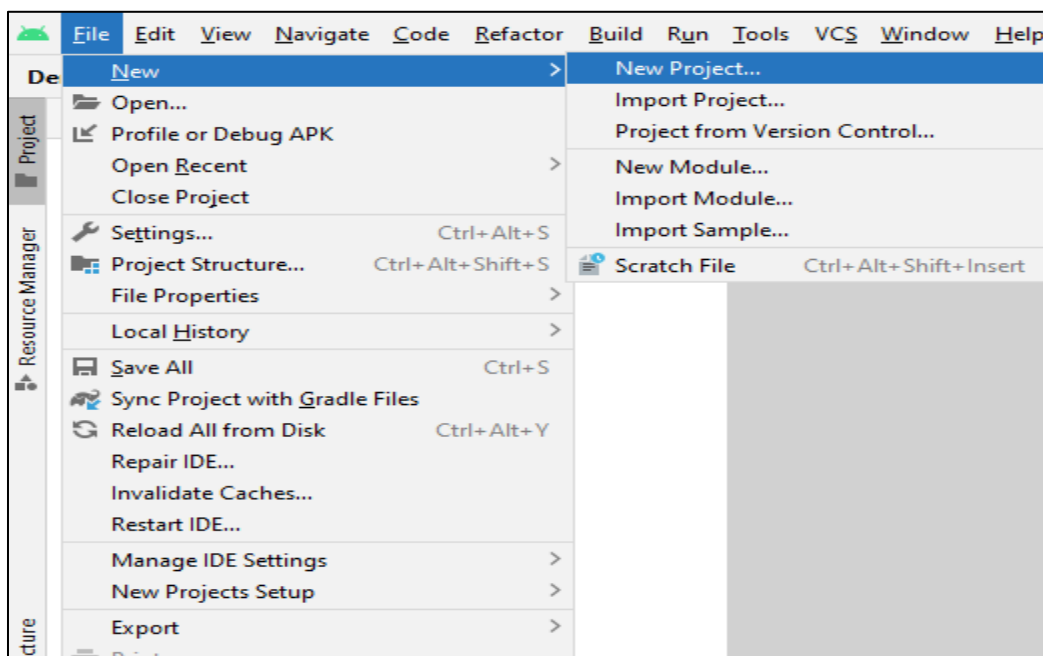
Theme is an Android App Style which is applied to entire screen components not individual view.

- On applying a theme each view which belongs to that category will consume that style and converts itself.
- To apply a theme in an Android app, an attribute named android:theme need to be configured

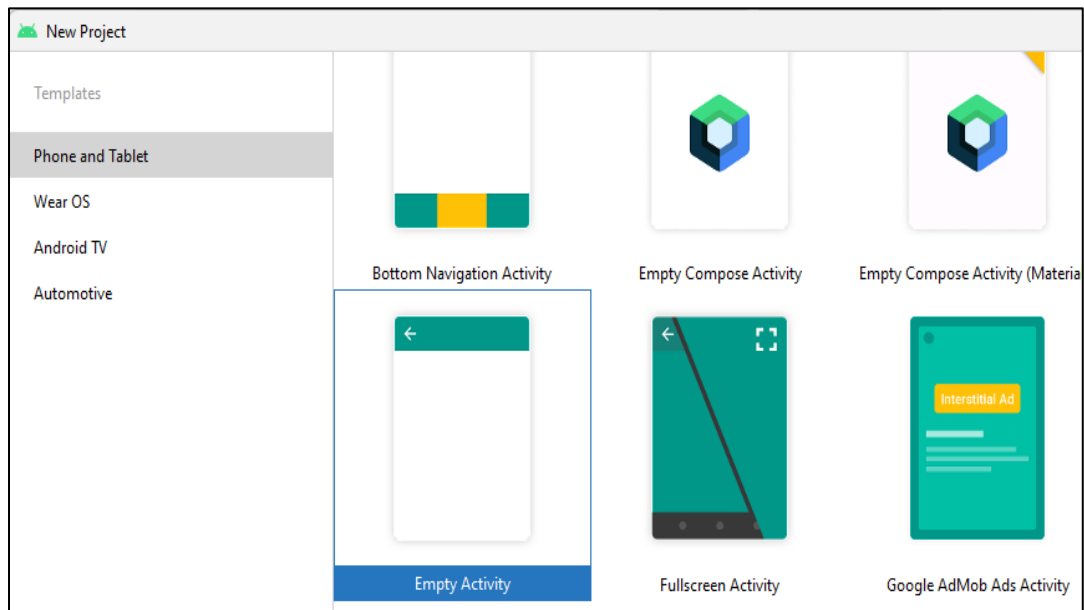
## Let's get Started

The activity that follows shows how to apply a theme to an application. We will alter our standard AppTheme for demonstration purposes, changing the default text's size, font family, shadow effects, etc.

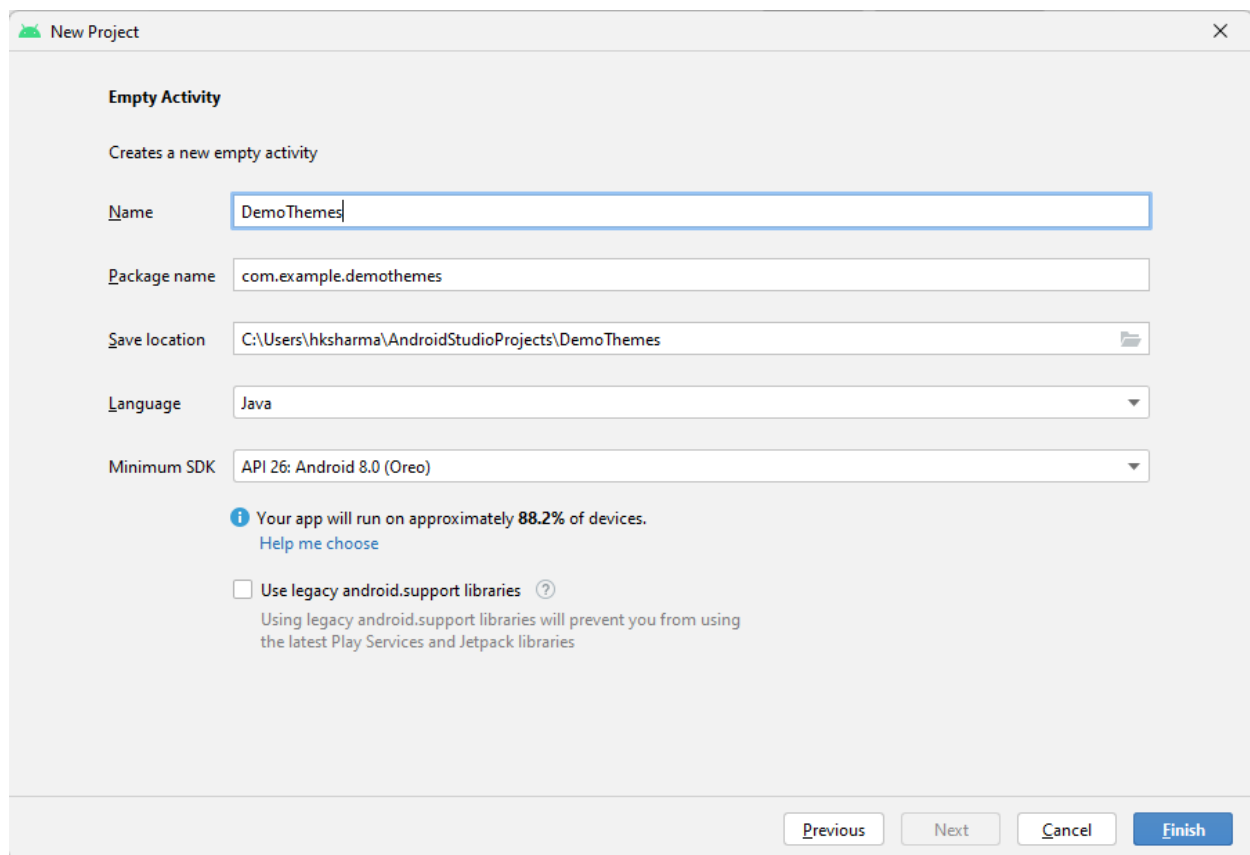
**Step 1: Create a New Project in Android Studio as shown below**



## Step 2: Select Empty Activity as shown below



## Step 3: Provide a Project Name as shown below



#### Step 4: Update MainActivity.java as per the code given below

```
package com.example.demoStyle;
import androidx.appcompat.app.AppCompatActivity;
import android.os.Bundle;
public class MainActivity extends AppCompatActivity {

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
    }
}
```

#### Step 5: Create a new xml file style.xml in res/values folder and write the code given below

```
<?xml version="1.0" encoding="utf-8"?>
<resources>
    <style name="ThemeGreen" parent="Theme.AppCompat.Light">
        <item name="android:windowBackground">#50E619</item>
        <item name="android:colorBackground">#68E619</item>
        <item name="colorPrimary">#4FFF3B</item>
        <item name="android:textColorPrimary">#FA1804</item>
        <item name="colorPrimaryDark">#F10707</item>
    </style>

    <style name="ThemeRed" parent="Theme.AppCompat.Light">
        <item name="android:windowBackground">#E64A19</item>
        <item name="android:colorBackground">#D32F2F</item>
        <item name="colorPrimary">#4FFF3B</item>
        <item name="android:textColorPrimary">#FA1804</item>
        <item name="colorPrimaryDark">#F10707</item>
    </style>
</resources>
```

#### Step 6: Update activity\_main.xml as per the code given below

```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout
    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"
    android:orientation="vertical"
    tools:context=".MainActivity">
    <Button
        style="@style/btnStyle"
        android:text="Android"/>
    <Button
        style="@style/btnStyle"
```

```

        android:text="Windows"/>
<Button
    style="@style/btnStyle"
    android:text="iPhone"/>
<Button
    style="@style/btnStyle"
    android:text="Blackberry"/>
<Button
    style="@style/btnStyle"
    android:text="Nokia"/>
</LinearLayout>

```

### Step 7: Update AndroidManifest.xml as per the code given below

```

<?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.DemoTheme"
        tools:targetApi="31">
        <activity
            android:name=".MainActivity"
            android:exported="true"
            android:theme="@style/ThemeRed">
            <intent-filter>
                <action android:name="android.intent.action.MAIN" />

                <category android:name="android.intent.category.LAUNCHER" />
            </intent-filter>

            <meta-data
                android:name="android.app.lib_name"
                android:value="" />
        </activity>
    </application>

</manifest>

```

**Step 8: Check Output on Android Emulator.**



**Step 9: Update AndroidManifest.xml as per the code given below**

```
<?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.DemoTheme"
    tools:targetApi="31">
    <activity
        android:name=".MainActivity"
        android:exported="true"
        android:theme="@style/ThemeGreen">
        <intent-filter>
            <action android:name="android.intent.action.MAIN" />

            <category android:name="android.intent.category.LAUNCHER" />
        </intent-filter>

        <meta-data
            android:name="android.app.lib_name"
            android:value="" />
    </activity>
</application>

</manifest>
```

**Step 9: Check Output on Android Emulator.**



**Voila!!** We have successfully completed this lab.