

## 1. Button

1. buat layout baru bernama control\_button setelah itu isi kodingan nya seperti ini :

```
<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout
    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">

    <TextView
        android:id="@+id/textView"
        android:layout_width="547dp"
        android:layout_height="0dp"
        android:background="#3F51B5"
        android:text="AplikasiKontrolUI"
        android:textColor="#FFFFFF"
        android:textSize="30sp" />

    <RelativeLayout
        android:layout_width="496dp"
        android:layout_height="694dp"

        app:layout_constraintTop_toBottomOf="@+id/textView"
        tools:context=".MainActivity"
        tools:layout_editor_absoluteX="3dp">

        <Button
            android:id="@+id/text_id"
            android:layout_width="343dp"
            android:layout_height="wrap_content"
            android:layout_centerHorizontal="true"
            android:layout_centerVertical="true"
            android:layout_marginTop="255dp"
            android:fontFamily="sans-serif-condensed-medium"
            android:text="I AM A BUTTON"
            android:textColor="@color/colorPrimary"
            android:textSize="25dp"
            android:textStyle="bold" />

        <TextView
            android:id="@+id/textView5"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_marginLeft="15dp"
            android:layout_marginTop="15dp"
            android:text="Contoh Button"
            android:textColor="@color/colorPrimary"
            android:textColorHighlight="@color/colorAccent"
            android:textSize="24sp"
            android:textStyle="bold" />
    </RelativeLayout>
</androidx.constraintlayout.widget.ConstraintLayout>
```

2. buat kelas java baru di java bernama Activitycontrol lalu isikan seperti ini

```
import android.app.Activity;
import android.os.Bundle;

import androidx.annotation.Nullable;

import com.example.tugas2.R;

public class Activitycontrol extends Activity {
    @Override
    protected void onCreate(@Nullable Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.control_button);
    }
}
```

3. setelah itu ubah manifest nya seperti ini

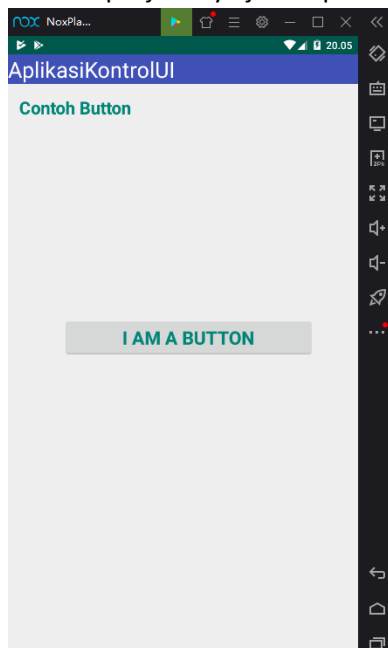
```
<?xml version="1.0" encoding="utf-8"?>
<manifest xmlns:android="http://schemas.android.com/apk/res/android"
    package="com.example.tugas2">

    <application
        android:allowBackup="true"
        android:icon="@mipmap/ic_launcher"
        android:label="@string/app_name"
        android:roundIcon="@mipmap/ic_launcher_round"
        android:supportRtl="true"
        android:theme="@style/AppTheme">
        <activity android:name=".Activitycontrol">
            <intent-filter>
                <action android:name="android.intent.action.MAIN" />

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

</manifest>
```

4. lalu run project nya jadi seperti ini



## 2. TextView

1. buat layout baru bernama control\_textview setelah itu isi kodingan nya seperti ini :

```
<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout
    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">
    <TextView
        android:id="@+id/textView"
        android:layout_width="547dp"
        android:layout_height="0dp"
        android:background="#3F51B5"
        android:text="AplikasiKontrolUI"
        android:textColor="#FFFFFF"
        android:textSize="30sp" />

    <RelativeLayout
        android:layout_width="532dp"
        android:layout_height="691dp"

        app:layout_constraintTop toBottomOf="@+id/textView">

        <TextView
            android:id="@+id/textView5"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_marginLeft="15dp"
            android:layout_marginTop="15dp"
            android:text="Contoh TextView"
            android:textColor="@color/colorPrimary"
            android:textColorHighlight="@color/colorAccent"
            android:textSize="24sp"
            android:textStyle="bold" />

        <TextView
            android:id="@+id/txtId"
            android:layout_width="343dp"
            android:layout_height="wrap_content"
            android:layout_centerHorizontal="true"
            android:layout_marginTop="175dp"
            android:fontFamily="cursive"
            android:text="Hello World"
            android:textColor="@color/colorPrimary"
            android:textSize="75dp" />

        <TextView
            android:id="@+id/txtId2"
            android:layout_width="343dp"
            android:layout_height="wrap_content"
            android:layout_below="@+id/txtId"
            android:layout_centerHorizontal="true"
            android:fontFamily="cursive"
            android:text="3SC1 PNJ"
            android:textColor="@color/colorPrimary"
            android:textSize="75dp" />
    </RelativeLayout>
</androidx.constraintlayout.widget.ConstraintLayout>
```

2. Ubah setContentView di Activitycontrol menjadi seperti ini

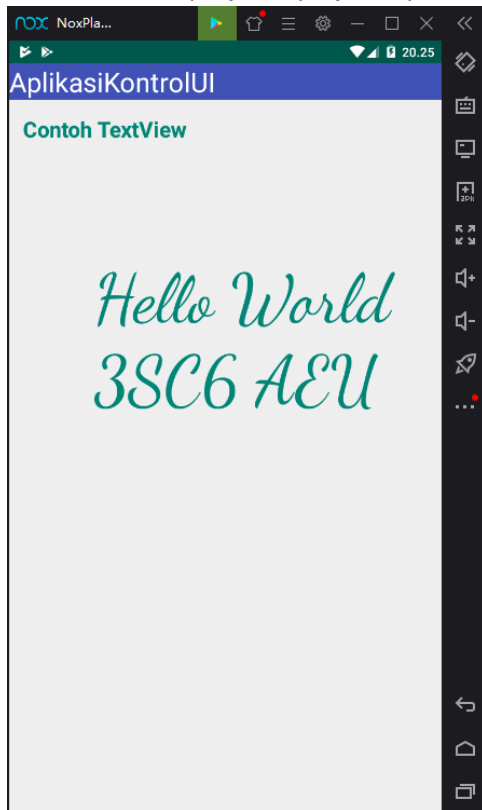
```
import android.app.Activity;
import android.os.Bundle;

import androidx.annotation.Nullable;
```

```
import com.example.tugas2.R;

public class Activitycontrol extends Activity {
    @Override
    protected void onCreate(@Nullable Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.control_textview);
    }
}
```

- Setelah itu run project nya, jad seperti ini



### 3. EditText

- buat layout baru bernama control\_edittext setelah itu isi kodingan nya seperti ini :

```
<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout
    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">
    <TextView
        android:id="@+id/textView"
        android:layout_width="547dp"
        android:layout_height="0dp"
        android:background="#3F51B5"
        android:text="AplikasiKontrolUI"
        android:textColor="#FFFFFF"
        android:textSize="30sp" />

    <RelativeLayout

        android:layout_width="505dp"
        android:layout_height="829dp"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintTop_toBottomOf="@+id/textView"
        tools:layout_editor_absoluteX="-4dp">

        <EditText
            android:id="@+id/etxId"
```

```

        android:layout_width="337dp"
        android:layout_height="wrap_content"
        android:layout_alignStart="@+id/btnId"
        android:layout_alignLeft="@+id/btnId"
        android:layout_alignRight="@+id/button"
        android:layout_marginStart="2dp"
        android:layout_marginLeft="2dp"
        android:layout_marginTop="205dp"
        android:hint="Masukkan Text"
        android:inputType="text" />

        <Button
            android:id="@+id/btnId"
            android:layout_width="343dp"
            android:layout_height="wrap_content"
            android:layout_centerHorizontal="true"
            android:layout_marginTop="255dp"
            android:fontFamily="sans-serif-condensed-medium"
            android:text="SHOW THE TEXT"
            android:textColor="@color/colorPrimary"
            android:textSize="25dp"
            android:textStyle="bold" />

        <TextView
            android:id="@+id/textView5"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_marginLeft="15dp"
            android:layout_marginTop="15dp"
            android:text="Contoh Edittext"
            android:textColor="@color/colorPrimary"
            android:textColorHighlight="@color/colorAccent"
            android:textSize="24sp"
            android:textStyle="bold" />
    </RelativeLayout>
</androidx.constraintlayout.widget.ConstraintLayout>

```

2. buat kelas java baru di java bernama Activityedittext lalu isikan seperti ini

```

import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
import android.widget.Toast;
import android.app.Activity;
import com.example.tugas2.R;

public class Activityedittext extends Activity{
    EditText eText;
    Button btn;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.control_edittext);
        eText = (EditText) findViewById(R.id.etxId);
        btn = (Button) findViewById(R.id.btnId);
        btn.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                String str = eText.getText().toString();
                Toast msg =
                Toast.makeText(getApplicationContext(), str, Toast.LENGTH_LONG);
                msg.show();
            }
        });
    }
}

```

3. setelah itu ubah manifest nya seperti ini

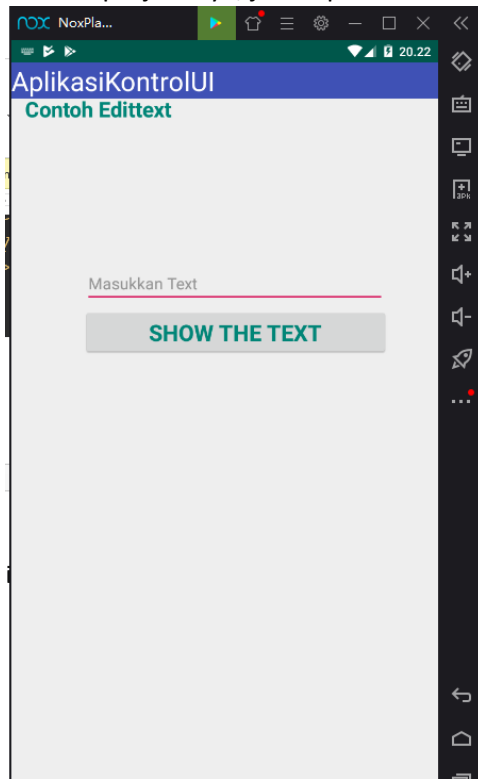
```
<?xml version="1.0" encoding="utf-8"?>
<manifest xmlns:android="http://schemas.android.com/apk/res/android"
    package="com.example.tugas2">

    <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=".Activityedittext">
            <intent-filter>
                <action android:name="android.intent.action.MAIN" />

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

</manifest>
```

4. lalu run project nya, jadi seperti ini



#### 4. AutoCompleteTextView

1. buat layout baru bernama control\_autocomplete setelah itu isi kodingan nya seperti ini :

```
<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout
    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">
    <TextView
        android:id="@+id/textView"
        android:layout_width="547dp"
        android:layout_height="0dp"
```

```

        android:background="#3F51B5"
        android:text="AplikasiKontrolUI"
        android:textColor="#FFFFFF"
        android:textSize="30sp" />

<RelativeLayout
    android:layout_width="544dp"
    android:layout_height="756dp"

    app:layout_constraintTop_toBottomOf="@+id/textView"
    tools:layout_editor_absoluteX="0dp">

    <TextView
        android:id="@+id/textView5"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginLeft="15dp"
        android:layout_marginTop="15dp"
        android:text="Contoh Autocomplete"
        android:textColor="@color/colorPrimary"
        android:textColorHighlight="@color/colorAccent"
        android:textSize="24sp"
        android:textStyle="bold" />

    <TextView
        android:id="@+id/textView2"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_alignParentTop="true"
        android:layout_centerVertical="true"
        android:layout_centerHorizontal="true"
        android:layout_marginTop="277dp"
        android:text="@string/example_autocompletetextView" />

    <AutoCompleteTextView
        android:id="@+id/autoCompleteTextView1"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_alignLeft="@+id/textView2"
        android:layout_below="@+id/textView2"
        android:layout_marginTop="54dp"
        android:ems="10" />

</RelativeLayout>

</androidx.constraintlayout.widget.ConstraintLayout>

```

2. buat kelas java baru di java bernama ActivityAutoComplete lalu isikan seperti ini

```

import android.app.Activity;
import android.os.Bundle;
import android.widget.ArrayAdapter;
import android.widget.AutoCompleteTextView;

public class ActivityAutoComplete extends Activity {
    AutoCompleteTextView autocomplt;
    // Pembuatan array
    String[] arr = {"Aditia Got Cha", "Kulsum", "Daffa Ahmad", "Edgard Jeremiah", "Farid", "Felix", "Haidar", "Raihan", "Rakha"};
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        // Memanggil layout
        setContentView(R.layout.control_autocomplete);
    }
}

```

```

        // Objek AutoComplete
        autocomplt =
        (AutoCompleteTextView) findViewById(R.id.autoCompleteTextView1);
        ArrayAdapter<String> adapter = new ArrayAdapter<String>
            (this, android.R.layout.select_dialog_item, arr);
        /* Threshold merupakan fungsi untuk mengatur jumlah huruf yang harus
        diketikkan sebelum suggestion words untuk autocompleteditampilkan.
        Dalam kasus ini kita minta minimum 2 huruf */
        autocomplt.setThreshold(1);
        // Mengatur adapter yang digunakan
        autocomplt.setAdapter(adapter);
    }
}

```

3. Lalu tambahkan baris berikut pada file **strings.xml**

```

<string name="example_autocompletetextview">Example showing
AutoCompleteTextView</string>

```

4. setelah itu ubah manifest nya seperti ini

```

<?xml version="1.0" encoding="utf-8"?>
<manifest xmlns:android="http://schemas.android.com/apk/res/android"
    package="com.example.tugas2">

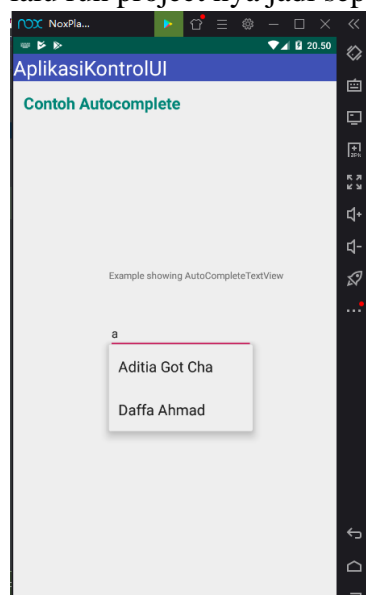
    <application
        android:allowBackup="true"
        android:icon="@mipmap/ic_launcher"
        android:label="@string/app_name"
        android:roundIcon="@mipmap/ic_launcher_round"
        android:supportsRtl="true"
        android:theme="@style/AppTheme">
        <activity android:name=".ActivityAutoComplete">
            <intent-filter>
                <action android:name="android.intent.action.MAIN" />

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

</manifest>

```

5. lalu run project nya jadi seperti ini





## 5. ImageButton

1. buat layout baru bernama control\_imagebutton setelah itu isi kodingan nya seperti ini :

```
<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout
    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">
    <TextView
        android:id="@+id/textView"
        android:layout_width="547dp"
        android:layout_height="0dp"
        android:background="#3F51B5"
        android:text="AplikasiKontrolUI"
        android:textColor="#FFFFFF"
        android:textSize="30sp" />

    <RelativeLayout
        android:layout_width="526dp"
        android:layout_height="749dp"

        app:layout_constraintTop_toBottomOf="@+id/textView"
        tools:layout_editor_absoluteX="-10dp">

        <TextView
            android:id="@+id/textView5"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_marginLeft="15dp"
            android:layout_marginTop="15dp"
            android:text="Contoh ImageButton"
            android:textColor="@color/colorPrimary"
            android:textColorHighlight="@color/colorAccent"
            android:textSize="24sp"
            android:textStyle="bold" />

        <TextView
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_alignEnd="@+id/imageButton"
            android:layout_alignRight="@+id/imageButton"
            android:layout_alignParentTop="true"
            android:layout_marginTop="55dp"
            android:layout_marginEnd="0dp"
            android:layout_marginRight="0dp"
            android:text="Tutorials Point"
            android:textSize="30dp" />

        <ImageButton
            android:id="@+id/imageButton"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_centerInParent="true"
            android:src="@mipmap/ic_launcher" />
    </RelativeLayout>

</androidx.constraintlayout.widget.ConstraintLayout>
```

2. buat kelas java baru di java bernama ActivityImageButton lalu isikan seperti ini

```
import android.app.Activity;
import android.os.Bundle;
import android.view.View;
```

```

import android.widget.ImageButton;
import android.widget.Toast;

import androidx.annotation.Nullable;

public class ActivityImageButton extends Activity{
    ImageButton imgbutton;

    @Override
    protected void onCreate(@Nullable Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.control_imagebutton);

        imgbutton = findViewById(R.id.imageButton);
        imgbutton.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                Toast.makeText(getApplicationContext(),"You Clicked The
Image",Toast.LENGTH_LONG).show();
            }
        });
    }
}

```

### 3. setelah itu ubah manifest nya seperti ini

```

<?xml version="1.0" encoding="utf-8"?>
<manifest xmlns:android="http://schemas.android.com/apk/res/android"
    package="com.example.tugas2">

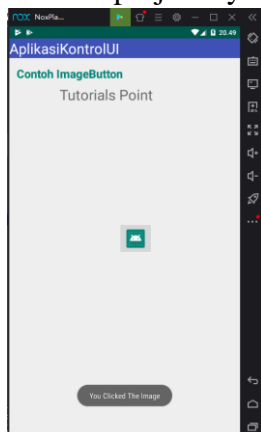
    <application
        android:allowBackup="true"
        android:icon="@mipmap/ic_launcher"
        android:label="@string/app_name"
        android:roundIcon="@mipmap/ic_launcher_round"
        android:supportsRtl="true"
        android:theme="@style/AppTheme">
        <activity android:name=".ActivityImageButton">
            <intent-filter>
                <action android:name="android.intent.action.MAIN" />

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

</manifest>

```

### 4. lalu run project nya jadi seperti ini



## 6. Checkbox

1. buat layout baru bernama control\_checkbox setelah itu isi kodingan nya seperti ini :

```
<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout
    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">
    <TextView
        android:id="@+id/textView"
        android:layout_width="547dp"
        android:layout_height="0dp"
        android:background="#3F51B5"
        android:text="AplikasiKontrolUI"
        android:textColor="#FFFFFF"
        android:textSize="30sp" />

    <RelativeLayout
        android:layout_width="528dp"
        android:layout_height="722dp"

        app:layout_constraintTop_toBottomOf="@+id/textView"
        tools:layout_editor_absoluteX="-19dp">

        <TextView
            android:id="@+id/textView1"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_alignParentTop="true"
            android:layout_centerHorizontal="true"
            android:text="Example of checkbox"
            android:textSize="30dp" />

        <CheckBox
            android:id="@+id/checkbox1"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_above="@+id/button"
            android:layout_centerHorizontal="true"
            android:text="Do you like Android Programming?" />

        <CheckBox
            android:id="@+id/checkbox2"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_above="@+id/checkbox1"
            android:layout_alignStart="@+id/checkbox1"
            android:layout_alignLeft="@+id/checkbox1"
            android:checked="false"
            android:text="Do you like Java Programming? " />

        <TextView
            android:id="@+id/textView2"
            android:layout_width="258dp"
            android:layout_height="wrap_content"
            android:layout_below="@+id/textView1"
            android:layout_alignLeft="@+id/checkbox1"
            android:layout_alignEnd="@+id/textView1"
            android:layout_alignRight="@+id/textView1"
            android:layout_marginLeft="12dp"
            android:layout_marginTop="39dp"
            android:text="CBD Class PNJ"
            android:textColor="#ff87ff09"
            android:textSize="30dp" />
    </RelativeLayout>
</androidx.constraintlayout.widget.ConstraintLayout>
```

```

<Button
    android:id="@+id/button"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_alignStart="@+id/checkbox1"
    android:layout_alignLeft="@+id/checkbox1"
    android:layout_alignParentBottom="true"
    android:text="Ok" />

<Button
    android:id="@+id/button2"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_alignEnd="@+id/textView2"
    android:layout_alignRight="@+id/textView2"
    android:layout_alignParentBottom="true"
    android:text="Cancel" />

<ImageButton
    android:id="@+id/imageButton"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_centerInParent="true"
    android:src="@mipmap/ic_launcher_round" />

</RelativeLayout>
</androidx.constraintlayout.widget.ConstraintLayout>

```

2. buat kelas java baru di java bernama ActivityCheckBox lalu isikan seperti ini

```

import android.app.Activity;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.CheckBox;
import android.widget.Toast;

import androidx.annotation.Nullable;

public class ActivityCheckBox extends Activity{
    CheckBox ch1,ch2;
    Button b1,b2;

    @Override
    protected void onCreate(@Nullable Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.control_checkbox);

        ch1 = findViewById(R.id.checkbox1);
        ch2 = findViewById(R.id.checkbox2);

        b1 = findViewById(R.id.button);
        b2 = findViewById(R.id.button2);
        b2.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                finish();
            }
        });
        b1.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                StringBuffer result = new StringBuffer();
                result.append("Checkbox1 : ").append(ch1.isChecked());
                result.append("\nCheckbox2 : ").append(ch2.isChecked());
            }
        });
    }
}

```

```

Toast.makeText(ActivityCheckBox.this, result.toString(), Toast.LENGTH_LONG).show();
    }
    });
}
}
}

```

3. setelah itu ubah manifest nya seperti ini

```

<?xml version="1.0" encoding="utf-8"?>
<manifest xmlns:android="http://schemas.android.com/apk/res/android"
    package="com.example.tugas2">

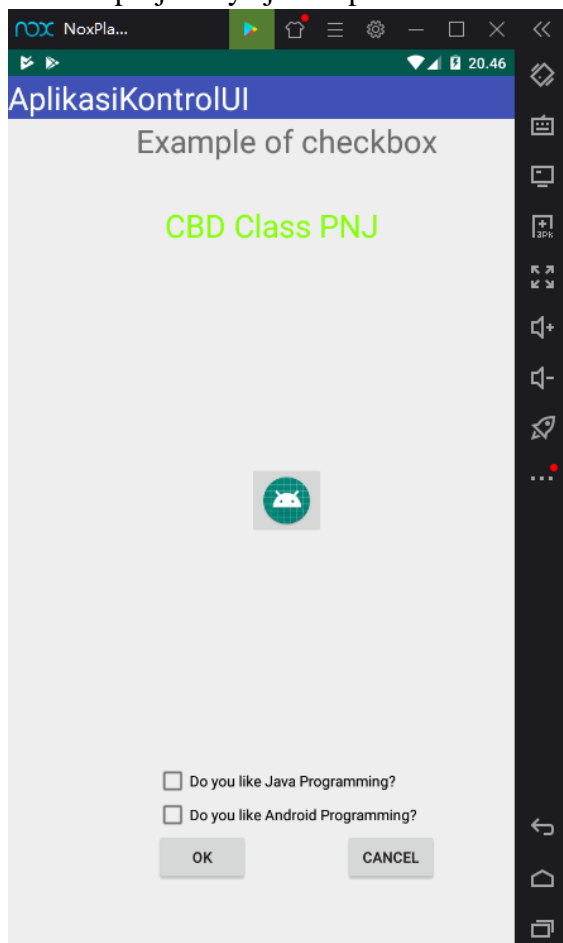
    <application
        android:allowBackup="true"
        android:icon="@mipmap/ic_launcher"
        android:label="@string/app_name"
        android:roundIcon="@mipmap/ic_launcher_round"
        android:supportsRtl="true"
        android:theme="@style/AppTheme">
        <activity android:name=".ActivityCheckBox">
            <intent-filter>
                <action android:name="android.intent.action.MAIN" />

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

</manifest>

```

4. lalu run project nya jadi seperti ini



## 7. ToggleButton

1. buat layout baru bernama control\_toggle setelah itu isi kodingan nya seperti ini :

```
<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout
    xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent">
    <TextView
        android:id="@+id/textView"
        android:layout_width="547dp"
        android:layout_height="0dp"
        android:background="#3F51B5"
        android:text="AplikasiKontrolUI"
        android:textColor="#FFFFFF"
        android:textSize="30sp" />

    <RelativeLayout

        android:layout_width="462dp"

        android:layout_height="727dp"
        tools:layout_editor_absoluteX="0dp"
        tools:layout_editor_absoluteY="41dp">
        <TextView
            android:id="@+id/textView2"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_above="@+id/imageButton"
            android:layout_centerHorizontal="true"
            android:layout_marginBottom="40dp"
            android:text="Tutorials point"
            android:textColor="#ff87ff09"
            android:textSize="30dp" />

        <ImageButton
            android:id="@+id/imageButton"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_centerInParent="true"
            android:src="@mipmap/ic_launcher" />

        <ToggleButton
            android:id="@+id/toggleButton"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_below="@+id/imageButton"
            android:layout_marginStart="98dp"
            android:layout_marginTop="5dp"
            android:layout_toEndOf="@+id/buttons2"
            android:checked="true"
            android:text="On" />

        <ToggleButton
            android:id="@+id/toggleButton2"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_alignTop="@+id/toggleButton"
            android:checked="true"
            android:text="Off" />

        <Button
            android:id="@+id/buttons2"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_alignParentBottom="true"
            android:layout_centerHorizontal="true"
            android:text="ClickMe" />
    </RelativeLayout>
</androidx.constraintlayout.widget.ConstraintLayout>
```

```

        </RelativeLayout>
    </androidx.constraintlayout.widget.ConstraintLayout>

```

2. buat kelas java baru di java bernama ActivityToggle lalu isikan seperti ini

```

import android.app.Activity;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.Toast;
import android.widget.ToggleButton;

import androidx.annotation.Nullable;

public class ActivityToggle extends Activity {
    ToggleButton tgl,tg2;
    Button b1;

    @Override
    protected void onCreate(@Nullable Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.control_toggle);

        tgl = findViewById(R.id.toggleButton);
        tg2 = findViewById(R.id.toggleButton2);

        b1 = findViewById(R.id.buttons2);
        b1.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                StringBuffer res = new StringBuffer();
                res.append("You have Clicked first ON Button-:D
") .append(tgl.getText());
                res.append("\nYou have Clicked second ON Button-:)
") .append(tg2.getText());

                Toast.makeText(ActivityToggle.this,res.toString(),Toast.LENGTH_LONG).show();
            }
        });
    }
}

```

3. setelah itu ubah manifest nya seperti ini

```

<?xml version="1.0" encoding="utf-8"?>
<manifest xmlns:android="http://schemas.android.com/apk/res/android"
    package="com.example.tugas2">

    <application
        android:allowBackup="true"
        android:icon="@mipmap/ic_launcher"
        android:label="@string/app_name"
        android:roundIcon="@mipmap/ic_launcher_round"
        android:supportRtl="true"
        android:theme="@style/AppTheme">
        <activity android:name=".ActivityToggle">
            <intent-filter>
                <action android:name="android.intent.action.MAIN" />

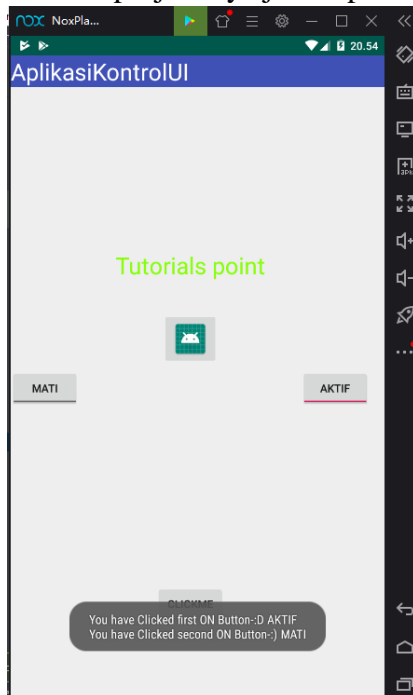
                <category android:name="android.intent.category.LAUNCHER"
            />
            </intent-filter>
        </activity>

```

```
</application>

</manifest>
```

4. lalu run project nya jadi seperti ini



## 8. RadioButton

1. buat layout baru bernama control\_radiobutton setelah itu isi kodingan nya seperti ini :

```
<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout
    xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent">
    <TextView
        android:id="@+id/textView"
        android:layout_width="547dp"
        android:layout_height="0dp"
        android:background="#3F51B5"
        android:text="AplikasiKontrolUI"
        android:textColor="#FFFFFF"
        android:textSize="30sp" />

    <RelativeLayout
        android:layout_width="479dp"

        android:layout_height="700dp"
        tools:layout_editor_absoluteX="0dp"
        tools:layout_editor_absoluteY="41dp">

        <TextView
            android:id="@+id/textView1"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_alignParentTop="true"
            android:layout_centerHorizontal="true"
            android:text="Example of Radio Button"
            android:textSize="30dp" />

        <TextView
            android:id="@+id/textView2"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
```



```
        android:layout_above="@+id/imageButton"
        android:layout_centerHorizontal="true"
        android:layout_marginBottom="40dp"
        android:text="CBD Class PNJ"
        android:textColor="#ff87ff09"
        android:textSize="30dp" />
```

<ImageButton

```
        android:id="@+id/imageButton"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_centerInParent="true"
        android:src="@mipmap/ic_launcher" />
```

<Button

```
        android:id="@+id/button2"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_alignLeft="@id/radioGroup"
        android:layout_alignTop="@id/radioGroup"
        android:layout_marginLeft="97dp"
        android:layout_marginTop="205dp"
        android:text="ClickMe" />
```

<RadioGroup

```
        android:id="@+id/radioGroup"
        android:layout_width="fill_parent"
        android:layout_height="fill_parent"
        android:layout_below="@+id/imageButton"
        android:layout_alignStart="@+id/textView2"
        android:layout_alignLeft="@+id/textView2"
        android:layout_marginStart="-41dp"
        android:layout_marginLeft="-41dp"
        android:layout_marginTop="0dp">
```

<RadioButton

```
        android:id="@+id/radioButton"
        android:layout_width="243dp"
        android:layout_height="wrap_content"
        android:layout_alignTop="@+id/radioGroup"
        android:layout_gravity="center_horizontal"
        android:checked="false"
        android:text="JAVA"
        android:textColor="@android:color/holo_red_light"
        android:textSize="25dp" />
```

<RadioButton

```
        android:id="@+id/radioButton2"
        android:layout_width="243dp"
        android:layout_height="wrap_content"
        android:layout_gravity="center_horizontal"
        android:checked="false"
        android:text="ANDROID"
        android:textColor="@android:color/holo_red_dark"
        android:textSize="25dp" />
```

<RadioButton

```
        android:id="@+id/radioButton3"
        android:layout_width="236dp"
        android:layout_height="wrap_content"
        android:layout_gravity="center_horizontal"
        android:checked="false"
        android:text="Kotlin"
        android:textColor="@android:color/holo_red_dark"
        android:textSize="25dp" />
```

</RadioGroup>

```

        </RelativeLayout>
    </androidx.constraintlayout.widget.ConstraintLayout>

```

2. buat kelas java baru di java bernama ActivityRadioButton lalu isikan seperti ini

```

import android.app.Activity;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.RadioButton;
import android.widget.RadioGroup;
import android.widget.Toast;

import androidx.annotation.Nullable;

public class ActivityRadioButton extends Activity{
    RadioGroup rg1;
    RadioButton rb1;
    Button b1;

    @Override
    protected void onCreate(@Nullable Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.control_radiobutton);
        Addlistener();
    }

    public void Addlistener(){
        rg1 = findViewById(R.id.radioGroup);
        b1 = findViewById(R.id.button2);
        b1.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                int s = rg1.getCheckedRadioButtonId();
                rb1 = findViewById(s);

                Toast.makeText(ActivityRadioButton.this, rb1.getText(), Toast.LENGTH_LONG).show();
            }
        });
    }
}

```

3. setelah itu ubah manifest nya seperti ini

```

<?xml version="1.0" encoding="utf-8"?>
<manifest xmlns:android="http://schemas.android.com/apk/res/android"
    package="com.example.tugas2">

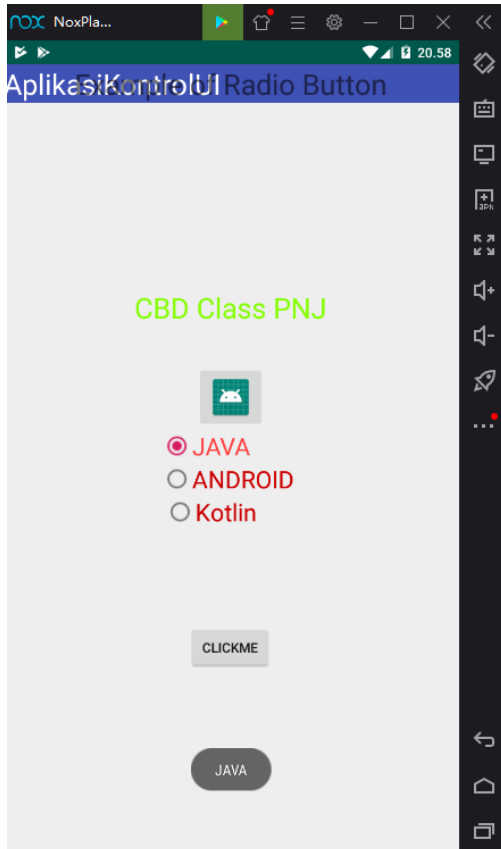
    <application
        android:allowBackup="true"
        android:icon="@mipmap/ic_launcher"
        android:label="@string/app_name"
        android:roundIcon="@mipmap/ic_launcher_round"
        android:supportsRtl="true"
        android:theme="@style/AppTheme">
        <activity android:name=".ActivityRadioButton">
            <intent-filter>
                <action android:name="android.intent.action.MAIN" />

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

</manifest>

```

4. lalu run project nya jadi seperti ini



## 9. RadioGroup

1. buat layout baru bernama control\_radiogroup setelah itu isi kodingan nya seperti ini :

```
<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout
    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">
    <TextView
        android:id="@+id/textView"
        android:layout_width="547dp"
        android:layout_height="0dp"
        android:background="#3F51B5"
        android:text="Aplikasi Kontrol UI"
        android:textColor="#FFFFFF"
        android:textSize="30sp" />

    <RelativeLayout
        android:layout_width="486dp"
        android:layout_height="624dp"
        app:layout_constraintTop_toBottomOf="@+id/textView">

        <TextView
            android:id="@+id/textView"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_alignParentTop="true"
            android:layout_centerHorizontal="true"
            android:text="Radio button"
            android:textSize="35dp" />

        <TextView
            android:id="@+id/textView2"
```

```

        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_below="@+id/textView"
        android:layout_alignEnd="@+id/textView"
        android:layout_alignRight="@+id/textView"
        android:text="CBD Class AEU"
        android:textColor="@android:color/holo_green_dark"
        android:textSize="35dp" />

<ImageView
    android:id="@+id/imageView"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_below="@+id/textView2"
    android:layout_alignStart="@+id/textView"
    android:layout_alignLeft="@+id/textView"
    android:layout_alignEnd="@+id/textView"
    android:layout_alignRight="@+id/textView"

    app:srcCompat="@mipmap/ic_launcher" />

<RadioGroup
    android:id="@+id/radioGroup"
    android:layout_width="fill_parent"
    android:layout_height="90dp"
    android:layout_below="@+id/imageView"
    android:layout_alignStart="@+id/textView2"
    android:layout_alignLeft="@+id/textView2"
    android:layout_alignEnd="@+id/textView3"
    android:layout_alignRight="@+id/textView3"
    android:layout_marginTop="58dp"
    android:weightSum="1">

    <RadioButton
        android:id="@+id/radioButton"
        android:layout_width="wrap_content"
        android:layout_height="55dp"
        android:layout_gravity="center_horizontal"
        android:checked="false"
        android:text="Male"
        android:textSize="25dp" />

    <RadioButton
        android:id="@+id/radioButton2"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_gravity="center_horizontal"
        android:layout_weight="0.13"
        android:checked="false"
        android:text="Female"
        android:textSize="25dp" />

</RadioGroup>

<TextView
    android:id="@+id/textView3"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_below="@+id/imageView"
    android:layout_alignStart="@+id/imageView"
    android:layout_alignLeft="@+id/imageView"
    android:layout_alignEnd="@+id/textView2"
    android:layout_alignRight="@+id/textView2"
    android:text="Are you?"
    android:textSize="35dp" />

<Button
    android:id="@+id/button"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"

```

```

        android:layout_below="@+id/radioGroup"
        android:layout_centerHorizontal="true"
        android:layout_gravity="center_horizontal"
        android:text="New Button" />

    </RelativeLayout>
</androidx.constraintlayout.widget.ConstraintLayout>

```

2. buat kelas java baru di java bernama ActivityRadioGroup lalu isikan seperti ini

```

import android.app.Activity;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.RadioButton;
import android.widget.RadioGroup;
import android.widget.Toast;

import androidx.annotation.Nullable;

public class ActivityRadioGroup extends Activity {
    private RadioGroup radiosexgroup;
    private RadioButton radiosexbutton;
    private Button btndisplay;

    @Override
    protected void onCreate(@Nullable Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.control_radiogroup);

        radiosexgroup = findViewById(R.id.radioGroup);
        btndisplay = findViewById(R.id.button);

        btndisplay.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                int S = radiosexgroup.getCheckedRadioButtonId();
                radiosexbutton = findViewById(S);

                Toast.makeText(ActivityRadioGroup.this, radiosexbutton.getText(), Toast.LENGTH_LONG).show();
            }
        });
    }
}

```

3. Tambahkan baris berikut pada file strings.xml

```

<string name="example_radiogroup">Example showing RadioGroup</string>

```

4. setelah itu ubah manifest nya seperti ini

```

<?xml version="1.0" encoding="utf-8"?>
<manifest xmlns:android="http://schemas.android.com/apk/res/android"
    package="com.example.tugas2">

    <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=".ActivityRadioGroup">
            <intent-filter>
                <action android:name="android.intent.action.MAIN" />
            </intent-filter>
        </activity>
    </application>
</manifest>

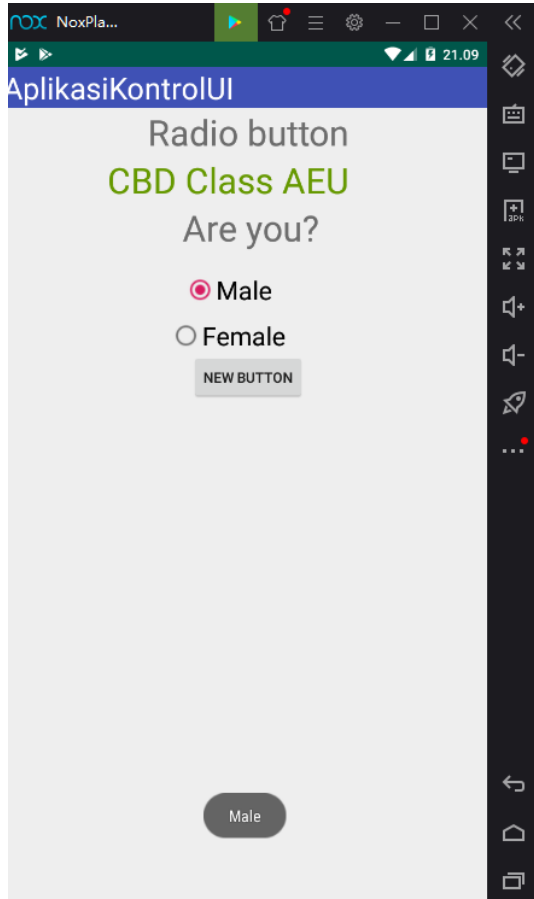
```

```

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

```

5. lalu run project nya jadi seperti ini



## 10. ProgressBar

1. buat layout baru bernama control\_progressbar setelah itu isi kodingan nya seperti ini :

```

<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout
    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">

    <TextView
        android:id="@+id/textView"
        android:layout_width="453dp"
        android:layout_height="34dp"
        android:background="#3F51B5"
        android:text="AplikasiKontrolUI"
        android:textColor="#FFFFFF"
        android:textSize="30sp" />

    <RelativeLayout
        android:layout_width="451dp"
        android:layout_height="662dp"

        app:layout_constraintTop_toBottomOf="@+id/textView">

```

```

<TextView
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:id="@+id/textView"
    android:layout_alignParentTop="true"
    android:layout_centerHorizontal="true"
    android:textSize="30dp"
    android:text="Progress bar" />

<TextView
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Tutorials Point"
    android:id="@+id/textView2"
    android:layout_below="@+id/textView"
    android:layout_centerHorizontal="true"
    android:textSize="35dp"
    android:textColor="#ff16ff01" />

<Button
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Download"
    android:onClick="download"
    android:id="@+id/button2"
    android:layout_centerHorizontal="true"
    android:layout_centerVertical="true" />

</RelativeLayout>
</androidx.constraintlayout.widget.ConstraintLayout>

```

2. buat kelas java baru di java bernama ActivityProgressbar lalu isikan seperti ini

```

import android.app.Activity;
import android.app.ProgressDialog;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.ProgressBar;

import androidx.annotation.Nullable;

public class ActivityProgressbar extends Activity {
    Button b1;
    private ProgressDialog pb1;

    @Override
    protected void onCreate(@Nullable Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.control_progressbar);
        b1=findViewById(R.id.button2);
    }

    public void download(View view){
        pb1=new ProgressDialog(this);
        pb1.setMessage("download Music");
        pb1.setProgressStyle(ProgressDialog.STYLE_HORIZONTAL);
        pb1.setIndeterminate(true);
        pb1.setProgress(5);
        pb1.show();

        final int total = 100;
        final Thread t = new Thread(){
            @Override
            public void run(){
                int jt = 0;
                while (jt<total){

```

```

        try{
            sleep(20);
            jt+=5;
            pb1.setProgress(jt);
        }catch (InterruptedException e){
            e.printStackTrace();
        }
    }
}
};
t.start();
}
}

```

3. setelah itu ubah manifest nya seperti ini

```

<?xml version="1.0" encoding="utf-8"?>
<manifest xmlns:android="http://schemas.android.com/apk/res/android"
    package="com.example.tugas2">

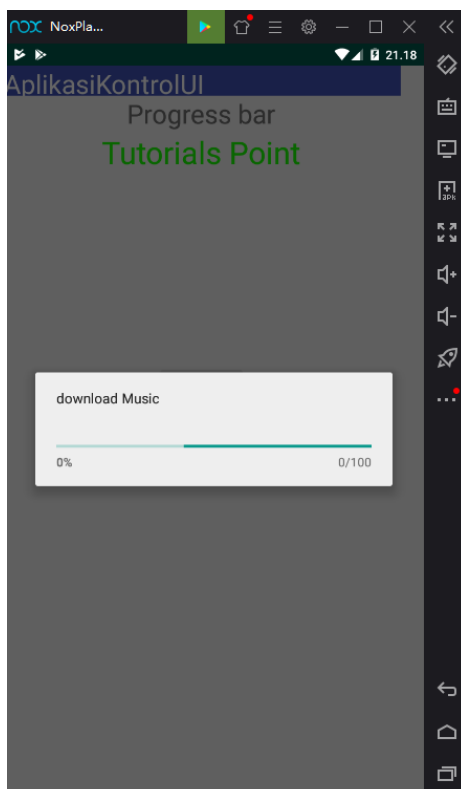
    <application
        android:allowBackup="true"
        android:icon="@mipmap/ic_launcher"
        android:label="@string/app_name"
        android:roundIcon="@mipmap/ic_launcher_round"
        android:supportsRtl="true"
        android:theme="@style/AppTheme">
        <activity android:name=".ActivityProgressbar">
            <intent-filter>
                <action android:name="android.intent.action.MAIN" />

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

</manifest>

```

4. lalu run project nya jadi seperti ini





## 11. Spinner

1. buat layout baru bernama control\_spinner setelah itu isi kodingan nya seperti ini :

```
<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout
    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">

    <TextView
        android:id="@+id/textView"
        android:layout_width="499dp"
        android:layout_height="50dp"
        android:background="#3F51B5"
        android:text="AplikasiKontrolUI"
        android:textColor="#FFFFFF"
        android:textSize="30sp" />

    <LinearLayout
        android:layout_width="fill_parent"
        android:layout_height="wrap_content"
        android:orientation="vertical"
        android:padding="10dip"
        tools:layout_editor_absoluteX="-25dp"
        tools:layout_editor_absoluteY="148dp">

        <TextView
            android:layout_width="fill_parent"
            android:layout_height="wrap_content"
            android:layout_marginTop="10dip"
            android:layout_marginBottom="5dp"
            android:text="Category:" />

        <Spinner
            android:id="@+id/spinner"
            android:layout_width="fill_parent"
            android:layout_height="wrap_content"
            android:prompt="@string/spinner_title" />
    </LinearLayout>

</androidx.constraintlayout.widget.ConstraintLayout>
```

2. buat kelas java baru di java bernama Activityspinner lalu isikan seperti ini

```
import android.app.Activity;
import android.os.Bundle;
import android.view.View;
import android.widget.AdapterView;
import android.widget.AdapterView.OnItemClickListener;
import android.widget.ArrayAdapter;
import android.widget.Spinner;
import android.widget.Toast;

import androidx.annotation.Nullable;

import java.util.ArrayList;
import java.util.List;

public class Activityspinner extends Activity implements
    AdapterView.OnItemClickListener{

    @Override
    protected void onCreate(@Nullable Bundle savedInstanceState) {
```

```

super.onCreate(savedInstanceState);
setContentView(R.layout.control_spinner);

Spinner spinner = findViewById(R.id.spinner);
spinner.setOnItemSelectedListener(this);
List<String> kategori = new ArrayList<String>();
kategori.add("Automobile");
kategori.add("Business Services");
kategori.add("Computers");
kategori.add("Education");
kategori.add("Personal");
kategori.add("Travel");

ArrayAdapter<String> dataadapter = new ArrayAdapter<String>
>(this, android.R.layout.simple_spinner_item, kategori);

dataadapter.setDropDownViewResource(android.R.layout.simple_spinner_dropdown_item);
spinner.setAdapter(dataadapter);

}

@Override
public void onItemSelected(AdapterView<?> parent, View view, int
position, long id) {
    String item = parent.getItemAtPosition(position).toString();
    Toast.makeText(Activityspinner.this, "Selected " +
item, Toast.LENGTH_LONG).show();
}

public void onNothingSelected(AdapterView<?> arg0) {
    // TODO Auto-generated method stub
}

{
}
}

```

3. Tambahkan baris berikut pada file strings.xml

```
<string name="spinner_title">Example showing Spinner</string>
```

4. setelah itu ubah manifest nya seperti ini

```

<?xml version="1.0" encoding="utf-8"?>
<manifest xmlns:android="http://schemas.android.com/apk/res/android"
    package="com.example.tugas2">

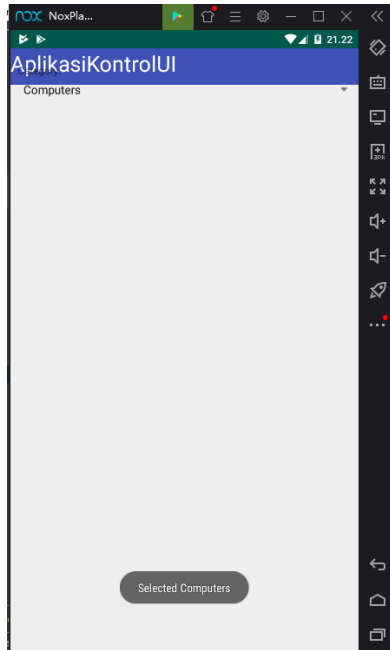
    <application
        android:allowBackup="true"
        android:icon="@mipmap/ic_launcher"
        android:label="@string/app_name"
        android:roundIcon="@mipmap/ic_launcher_round"
        android:supportsRtl="true"
        android:theme="@style/AppTheme">
        <activity android:name=".Activityspinner">
            <intent-filter>
                <action android:name="android.intent.action.MAIN" />

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

</manifest>

```

5. lalu run project nya jadi seperti ini



## 12. TimePicker

1. buat layout baru bernama control\_timepicker setelah itu isi kodingan nya seperti ini :

```
<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout
    xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent">
    <TextView
        android:id="@+id/textView"
        android:layout_width="547dp"
        android:layout_height="0dp"
        android:background="#3F51B5"
        android:text="AplikasiKontrolUI"
        android:textColor="#FFFFFF"
        android:textSize="30sp" />

    <RelativeLayout
        android:layout_width="542dp"
        android:layout_height="659dp"

        tools:layout_editor_absoluteY="32dp">
        <TextView
            android:id="@+id/textView2"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_alignParentTop="true"
            android:layout_centerHorizontal="true"
            android:text="@string/time_pick"
            android:textAppearance="?android:attr/textAppearanceMedium" />

        <Button
            android:id="@+id/set_button"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_alignParentBottom="true"
            android:layout_centerHorizontal="true"
            android:layout_marginBottom="180dp"
            android:onClick="setTime"
            android:text="@string/time_save" />

        <TimePicker
            android:id="@+id/timePicker1"
            android:layout_width="wrap_content"
```

```

        android:layout_height="wrap_content"
        android:layout_above="@+id/set_button"
        android:layout_centerHorizontal="true"
        android:layout_marginBottom="24dp" />
        <TextView
            android:id="@+id/textView3"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_alignLeft="@+id/timePicker1"
            android:layout_alignTop="@+id/set_button"
            android:layout_marginTop="67dp"
            android:text="@string/time_current"
            android:textAppearance="?android:attr/textAppearanceMedium" />
        <TextView
            android:id="@+id/textView1"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_below="@+id/textView3"
            android:layout_centerHorizontal="true"
            android:layout_marginTop="50dp"
            android:text="@string/time_selected"
            android:textAppearance="?android:attr/textAppearanceMedium" />

    </RelativeLayout>
</androidx.constraintlayout.widget.ConstraintLayout>

```

2. buat kelas java baru di java bernama Activitytime lalu isikan seperti ini

```

import android.app.Activity;
import android.widget.TimePicker;
import android.widget.TextView;
import java.util.*;
import android.os.Bundle;

import android.view.*;
public class Activitytime extends Activity {
    private TimePicker timePicker1;
    private TextView time;
    private Calendar calendar;
    private String format = "";

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

        timePicker1 = (TimePicker) findViewById(R.id.timePicker1);
        time = (TextView) findViewById(R.id.textView1);
        calendar = Calendar.getInstance();

        int hour = calendar.get(Calendar.HOUR_OF_DAY);
        int min = calendar.get(Calendar.MINUTE);
        showTime(hour, min);
    }

    public void setTime(View view) {
        int hour = timePicker1.getCurrentHour();
        int min = timePicker1.getCurrentMinute();
        showTime(hour, min);
    }

    public void showTime(int hour, int min) {
        if (hour == 0) {
            hour += 12;
            format = "AM";
        } else if (hour == 12) {

```

```

        format = "PM";
    } else if (hour > 12) {
        hour -= 12;
        format = "PM";
    } else {
        format = "AM";
    }

    time.setText(new StringBuilder().append(hour).append(" :
").append(min)
                .append(" ").append(format));
    }
}

```

3. Tambahkan baris berikut pada file strings.xml

```

<string name="action_settings">Settings</string>
<string name="time_picker_example">Time Picker Example</string>
<string name="time_pick">Pick the time and press save button</string>
<string name="time_save">Save</string>
<string name="time_selected"></string>
<string name="time_current">The Time is:</string>

```

4. setelah itu ubah manifest nya seperti ini

```

<?xml version="1.0" encoding="utf-8"?>
<manifest xmlns:android="http://schemas.android.com/apk/res/android"
    package="com.example.tugas2">

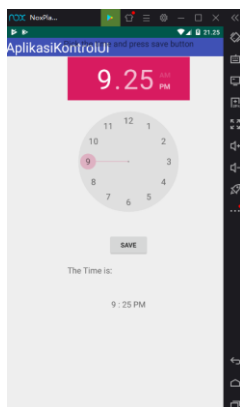
    <application
        android:allowBackup="true"
        android:icon="@mipmap/ic_launcher"
        android:label="@string/app_name"
        android:roundIcon="@mipmap/ic_launcher_round"
        android:supportRtl="true"
        android:theme="@style/AppTheme">
        <activity android:name=".Activitytime">
            <intent-filter>
                <action android:name="android.intent.action.MAIN" />

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

</manifest>

```

5. lalu run project nya jadi seperti ini



### 13. Date Picker

1. buat layout baru bernama control\_datetime setelah itu isi kodingan nya seperti ini :

```
<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout
    xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent">
    <TextView
        android:id="@+id/textView"
        android:layout_width="547dp"
        android:layout_height="0dp"
        android:background="#3F51B5"
        android:text="AplikasiKontrolUI"
        android:textColor="#FFFFFF"
        android:textSize="30sp" />

    <RelativeLayout
        android:layout_width="414dp"
        android:layout_height="673dp"

        tools:layout_editor_absoluteY="60dp">

        <Button
            android:id="@+id/button1"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_alignParentTop="true"
            android:layout_centerHorizontal="true"
            android:layout_marginTop="70dp"
            android:onClick="setDate"
            android:text="@string/date_button_set" />

        <TextView
            android:id="@+id/textView1"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_alignParentTop="true"
            android:layout_centerHorizontal="true"
            android:layout_marginTop="24dp"
            android:text="@string/date_label_set"
            android:textAppearance="?android:attr/textAppearanceMedium" />

        <TextView
            android:id="@+id/textView2"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_below="@+id/button1"
            android:layout_marginTop="66dp"
            android:layout_toLeftOf="@+id/button1"
            android:text="@string/date_view_set"
            android:textAppearance="?android:attr/textAppearanceMedium" />

        <TextView
            android:id="@+id/textView3"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_below="@+id/textView2"
            android:layout_alignRight="@+id/button1"
            android:layout_marginTop="72dp"
            android:text="@string/date_selected"
            android:textAppearance="?android:attr/textAppearanceMedium" />

    </RelativeLayout>
</androidx.constraintlayout.widget.ConstraintLayout>
```

2. buat kelas java baru di java bernama Activitydate lalu isikan seperti ini

```
import android.app.Activity;
import android.widget.DatePicker;
import java.util.*;
import android.widget.TextView;
import android.os.Bundle;
import android.view.View;
import android.widget.Toast;
import android.app.Dialog;
import android.app.DatePickerDialog;

public class Activitydate extends Activity{
    private DatePicker datePicker;
    private Calendar calendar;
    private TextView dateView;
    private int year, month, day;

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

        dateView = (TextView) findViewById(R.id.textView3);
        calendar = Calendar.getInstance();
        year = calendar.get(Calendar.YEAR);

        month = calendar.get(Calendar.MONTH);
        day = calendar.get(Calendar.DAY_OF_MONTH);
        showDate(year, month+1, day);
    }

    @SuppressWarnings("deprecation")
    public void setDate(View view) {
        showDialog(999);
        Toast.makeText(getApplicationContext(), "pilih tanggal",
            Toast.LENGTH_SHORT)
            .show();
    }

    @Override
    protected Dialog onCreateDialog(int id) {
        // TODO Auto-generated method stub
        if (id == 999) {
            return new DatePickerDialog(this,
                myDateListener, year, month, day);
        }
        return null;
    }

    private DatePickerDialog.OnDateSetListener myDateListener = new
        DatePickerDialog.OnDateSetListener() {
            @Override
            public void onDateSet(DatePicker arg0,
                int arg1, int arg2, int arg3) {
                // TODO Auto-generated method stub
                // arg1 = year
                // arg2 = month
                // arg3 = day
                showDate(arg1, arg2+1, arg3);
            }
        };

    private void showDate(int year, int month, int day) {
        dateView.setText(new StringBuilder().append(day).append("/")
            .append(month).append("/") .append(year));
    }
}
```

3. Tambahkan baris berikut pada file strings.xml

```
<string name="hello_world">Hello world!</string>
<string name="date_label_set">Press the button to set the date</string>
<string name="date_button_set">Set Date</string>
<string name="date_view_set">The Date is: </string>
<string name="date_selected"></string>
```

4. setelah itu ubah manifest nya seperti ini

```
<?xml version="1.0" encoding="utf-8"?>
<manifest xmlns:android="http://schemas.android.com/apk/res/android"
    package="com.example.tugas2">

    <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=".Activitydate">
            <intent-filter>
                <action android:name="android.intent.action.MAIN" />

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

</manifest>
```

5. lalu run project nya jadi seperti ini

