

Hybrid Application Development Lab

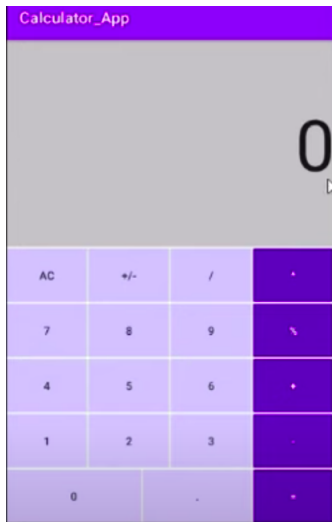
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Calculator - UI



Calculator - UI

```
<EditText
    android:id="@+id/editText"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:ems="10"
    android:layout_weight="1"
    android:background="@color/gray"
    android:gravity="right|center"
    android:textSize="40pt"
    android:inputType="textPersonName"
    android:text="0" />
```

Calculator - UI

```
<TableLayout
    android:layout_width="match_parent"
    android:layout_height="wrap_content">

    <TableRow
        android:layout_width="match_parent"
        android:layout_height="match_parent">
        <Button
            android:id="@+id/buAC"
            android:text="AC"
            android:layout_marginRight="1pt"
            android:layout_height="30pt"
            android:layout_width="30pt"
            android:layout_weight="1"
            android:background="@color/blueback"
        ></Button>
    </TableRow>
```

Calculator - UI

```
<TableRow
    android:layout_width="match_parent"
    android:layout_height="match_parent">
    <Button
        android:id="@+id/bu0"
        android:text="0"
        android:layout_marginRight="1pt"
        android:layout_height="30pt"
        android:layout_width="46pt"
        android:layout_weight="2"
        android:background="@color/blueback"
    ></Button>
    <Button
        android:id="@+id/buDot"
        android:text="."
        android:layout_marginRight="1pt"
        android:layout_height="30pt"
        android:layout_width="46pt"
        android:layout_weight="1"
        android:background="@color/blueback"
    ></Button>
```

Calculator - MainActivity

```
public class MainActivity extends AppCompatActivity {  
  
    boolean isNewOp = true;  
    EditText ed1;  
    @Override  
    protected void onCreate(Bundle savedInstanceState) {  
        super.onCreate(savedInstanceState);  
        setContentView(R.layout.activity_main);  
  
        ed1 = findViewById(R.id.editText);  
    }  
}
```

Calculator - Number Event

```
public void numberEvent(View view) {  
    if(isNewOp)  
        ed1.setText("");  
    isNewOp = false;  
    String number = ed1.getText().toString();  
    switch (view.getId()) {  
        case R.id.bu1:  
            number += "1";  
            break;  
        case R.id.bu2:  
            number += "2";  
            break;  
        case R.id.bu3:  
            number += "3";  
            break;  
        case R.id.bu4:  
            number += "4";  
            break;  
        case R.id.bu5:  
            number += "5";  
            break;  
        case R.id.bu6:  
            number += "6";  
            break;  
    }  
}
```


Calculator - Number Event

```
        number += "7";  
        break;  
    case R.id.bu8:  
        number += "8";  
        break;  
    case R.id.bu9:  
        number += "9";  
        break;  
    case R.id.bu0:  
        number += "0";  
        break;  
    case R.id.buDot:  
        number += ".";      I  
        break;  
    case R.id.buPlusMinus:  
        number = "-" + number;  
        break;  
    }  
    ed1.setText(number);  
}
```

Calculator - Operator Event

```
public void operatorEvent(View view) {  
    isNewOp = true;  
    oldNumber = ed1.getText().toString();  
    switch (view.getId()) {  
        case R.id.buDivide: op = "/"; break;  
        case R.id.buMultiply: op = "*"; break;  
        case R.id.buPlus: op = "+"; break;  
        case R.id.buMinus: op = "-"; break;  
    }  
}
```

Calculator - Equal Event

```
public void equalEvent(View view) {  
    String newNumber = ed1.getText().toString();  
    double result = 0.0;  
    switch (op){  
        case "+":  
            result = Double.parseDouble(oldNumber) + Double.parseDouble(newNumber);  
            break;  
        case "-":  
            result = Double.parseDouble(oldNumber) - Double.parseDouble(newNumber);  
            break;  
        case "*":  
            result = Double.parseDouble(oldNumber) * Double.parseDouble(newNumber);  
            break;  
        case "/":  
            result = Double.parseDouble(oldNumber) / Double.parseDouble(newNumber);  
            break;  
    }  
    ed1.setText(result+"");  
}
```

Calculator - AC Event

```
public void acEvent(View view) {  
    ed1.setText("0");  
    isNewOp = true;  
}
```

Calculator - Percent Event

```
public void percentEvent(View view) {  
    double no = Double.parseDouble(ed1.getText().toString())/100;  
    ed1.setText(no+"");  
    isNewOp = true;  
}
```