

22/08/2024

Activity_main.xml

```
<?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:id="@+id/main"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:orientation="vertical"
    android:gravity="center"
    tools:context=".MainActivity">

    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_gravity="center"
        android:textSize="30sp"
        android:text="@string/calculator"
        android:textColor="@color/red" />

    <LinearLayout
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_marginTop="90px"
        android:orientation="horizontal">

        <TextView
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_gravity="center"
            android:text="@string/enter_first_number"
            android:textColor="@color/black"
            android:textSize="18sp" />

        <EditText
            android:id="@+id/edit1"
            android:layout_width="match_parent"
            android:layout_height="wrap_content" />

    </LinearLayout>

    <LinearLayout
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_marginTop="90px"
        android:orientation="horizontal">

        <TextView
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_gravity="center"
            android:text="@string/enter_second_number"
```

```

        android:textColor="@color/black"
        android:textSize="18sp" />

        <EditText
            android:id="@+id/edit2"
            android:layout_width="match_parent"
            android:layout_height="wrap_content" />

    </LinearLayout>

    <TextView
        android:id="@+id/t1"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_gravity="center"
        android:textSize="30sp"
        android:layout_margin="20px"
        android:textColor="@color/red"/>

    <Button
        android:id="@+id/b"
        android:layout_height="wrap_content"
        android:layout_width="wrap_content"
        android:layout_gravity="center"
        android:layout_marginTop="90px"
        android:text="@string/calculate">

    </Button>

</LinearLayout>

```

Mainactivity.java

```

package com.example.mynewapplication;

import android.os.Bundle;
import android.util.Log;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
import android.widget.TextView;
import android.widget.Toast;

import androidx.activity.EdgeToEdge;
import androidx.appcompat.app.AppCompatActivity;
import androidx.core.graphics.Insets;
import androidx.core.view.ViewCompat;
import androidx.core.view.WindowInsetsCompat;

public class MainActivity extends AppCompatActivity {
    Button b;
    EditText edit1, edit2;
    TextView t1;
}

```

```

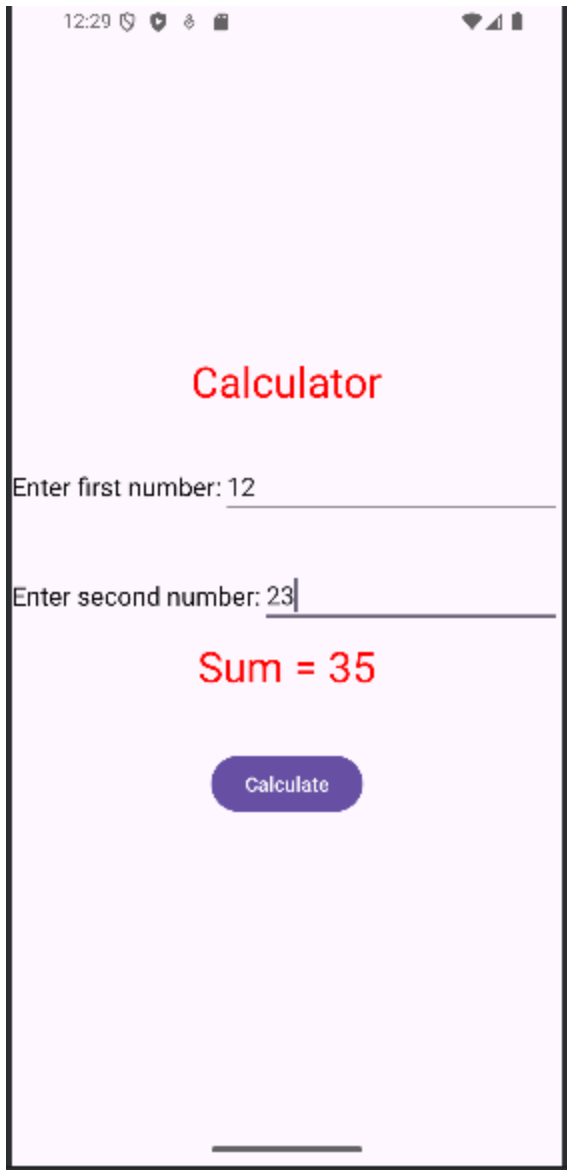
@Override
protected void onCreate(Bundle savedInstanceState) {
    super.onCreate(savedInstanceState);
    EdgeToEdge.enable(this);
    setContentView(R.layout.activity_main);
    edit1 = (EditText) findViewById(R.id.edit1);
    edit2 = (EditText) findViewById(R.id.edit2);
    b = (Button) findViewById(R.id.b);
    t1 = (TextView) findViewById(R.id.t1);

    b.setOnClickListener(new View.OnClickListener() {
        @Override
        public void onClick(View view) {
            int n1 = Integer.parseInt(edit1.getText().toString());
            int n2 = Integer.parseInt(edit2.getText().toString());
            int sum = n1+n2;
            t1.setText("Sum = "+sum);
            Toast.makeText(getApplicationContext(), "Sum = "+sum,
Toast.LENGTH_LONG).show();

            Log.v("Ajce",String.valueOf(sum));
        }
    });

    ViewCompat.setOnApplyWindowInsetsListener(findViewById(R.id.main), (v,
insets) -> {
        Insets systemBars =
insets.getInsets(WindowInsetsCompat.Type.systemBars());
        v.setPadding(systemBars.left, systemBars.top, systemBars.right,
systemBars.bottom);
        return insets;
    });
}
}

```



SNACKBAR AND POPUP

main_activity.java

```
package com.example.mynewapplication;

import android.os.Bundle;
import android.util.Log;
import android.view.LayoutInflater;
import android.view.View;
```

```
import android.widget.Button;
import android.widget.EditText;
import android.widget.LinearLayout;
import android.widget.PopupWindow;
import android.widget.TextView;
import android.widget.Toast;

import androidx.activity.EdgeToEdge;
import androidx.appcompat.app.AppCompatActivity;
import androidx.core.graphics.Insets;
import androidx.core.view.ViewCompat;
import androidx.core.view.WindowInsetsCompat;

import com.google.android.material.snackbar.Snackbar;

public class MainActivity extends AppCompatActivity {

    Button b,b2;

    EditText edit1,edit2;

    TextView t1;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);

        EdgeToEdge.enable(this);

        setContentView(R.layout.activity_main);

        edit1 = (EditText) findViewById(R.id.edit1);
        edit2 = (EditText) findViewById(R.id.edit2);

        b = (Button) findViewById(R.id.b);
        b2 = (Button) findViewById(R.id.b2);

        t1 = (TextView) findViewById(R.id.t1);
```

```

        b.setOnClickListener(new View.OnClickListener() {

            @Override

            public void onClick(View view) {

                int n1 = Integer.parseInt(edit1.getText().toString());

                int n2 = Integer.parseInt(edit2.getText().toString());

                int sum = n1+n2;

                t1.setText("Sum = "+sum);

                Snackbar.make(view, "Sum = "+sum,
Snackbar.LENGTH_LONG).setAction("UNDO",

                    new View.OnClickListener() {

                        @Override

                        public void onClick(View view) {

                            Toast.makeText(getApplicationContext(), "Sum =
"+sum, Toast.LENGTH_LONG).show();

                        }

                    }).setBackgroundTint(getColor(R.color.red)).show();

                Log.v("Ajce",String.valueOf(sum));

            }

        });

        b2.setOnClickListener(new View.OnClickListener() {

            @Override

            public void onClick(View view) {

                LayoutInflater inflater = (LayoutInflater)
getSystemService(LAYOUT_INFLATER_SERVICE);

                View popupView = inflater.inflate(R.layout.popup, null);

                PopupWindow popupWindow = new PopupWindow(

                    popupView,

                    LinearLayout.LayoutParams.WRAP_CONTENT,

                    LinearLayout.LayoutParams.WRAP_CONTENT

                );

                popupWindow.setFocusable(true);

```

```

        popupWindow.showAsDropDown(b2);

        TextView tv = popupView.findViewById(R.id.popup_result);

        tv.setText("Try again");

    }

});

ViewCompat.setOnApplyWindowInsetsListener(findViewById(R.id.main), (v,
insets) -> {

    Insets systemBars =
insets.getInsets(WindowInsetsCompat.Type.systemBars());

    v.setPadding(systemBars.left, systemBars.top, systemBars.right,
systemBars.bottom);

    return insets;

});

}

}

```

popup.xml

```

<?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:id="@+id/popup">

    <TextView

        android:layout_width="wrap_content"

        android:layout_height="wrap_content"

        android:id="@+id/popup_result"

        android:text="Popup"

        android:textColor="@color/orange"

        android:textSize="45dp"/>

```

```
</LinearLayout>
```

// if there are more than one item in the xml file and what to hide one more widget

```
b2.setOnClickListener(new View.OnClickListener() {  
    @Override  
    public void onClick(View view) {  
        LayoutInflater inflater = (LayoutInflater)  
getSystemService(LAYOUT_INFLATER_SERVICE);  
        View popupView = inflater.inflate(R.layout.popup, null);  
        PopupWindow popupWindow = new PopupWindow(  
            popupView,  
            LinearLayout.LayoutParams.WRAP_CONTENT,  
            LinearLayout.LayoutParams.WRAP_CONTENT  
        );  
        popupWindow.setFocusable(true);  
        popupWindow.showAsDropDown(b2);  
        TextView tv = popupView.findViewById(R.id.popup_result);  
        tv.setText("Try again");  
        TextView tv2 = popupView.findViewById(R.id.result);  
        tv2.setVisibility(View.INVISIBLE);  
    }  
});
```

MENU

Options menu

activity_main.xml

```
<?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"
    tools:context=".MainActivity">

    <androidx.appcompat.widget.Toolbar
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintLeft_toLeftOf="parent"
        android:id="@+id/toolbar"/>

    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Hello World!"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent" />

</androidx.constraintlayout.widget.ConstraintLayout>

```

menu.xml

```

<?xml version="1.0" encoding="utf-8"?>

<menu xmlns:android="http://schemas.android.com/apk/res/android">

    <item
        android:id="@+id/it1"
        android:title="@string/search" />

    <item
        android:id="@+id/it2"
        android:title="@string/upload" />

</menu>

```

```
<item
    android:id="@+id/it3"
    android:title="@string/copy" />
<item
    android:id="@+id/it4"
    android:title="@string/print" />
<item
    android:id="@+id/it5"
    android:title="@string/delete" />
<item
    android:id="@+id/it6"
    android:title="@string/bookmark" />

</menu>
```

MainActivity.java

```
package com.example.optionsmenu;

import androidx.annotation.NonNull;
import androidx.appcompat.app.AppCompatActivity;
import androidx.appcompat.view.menu.MenuBuilder;
import androidx.appcompat.widget.Toolbar;
import android.annotation.SuppressLint;
import android.os.Bundle;
import android.view.Menu;
import android.view.MenuInflater;
import android.view.MenuItem;
import android.widget.Toast;

public class MainActivity extends AppCompatActivity {
    private Toolbar toolbar;

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

```

        super.onCreate(savedInstanceState);

        setContentView(R.layout.activity_main);

        toolbar = (Toolbar) findViewById(R.id.toolbar);
        setSupportActionBar(toolbar);
    }

    @SuppressWarnings("RestrictedApi")
    @Override

    public boolean onCreateOptionsMenu(Menu menu) {
        MenuInflater inflater = getMenuInflater();
        inflater.inflate(R.menu.menu, menu);

        if (menu instanceof MenuBuilder) {
            MenuBuilder m = (MenuBuilder) menu;
            m.setOptionalIconsVisible(true);
        }

        return super.onCreateOptionsMenu(menu);
    }

    @Override

    public boolean onOptionsItemSelected(@NonNull MenuItem item) {
        Toast.makeText(this, "Selected Items: " + item.getTitle(),
            Toast.LENGTH_SHORT).show();

        if (item.getItemId() == R.id.it1) {
            return true;
        } else if (item.getItemId() == R.id.it2) {
            return true;
        } else if (item.getItemId() == R.id.it3) {
            return true;
        } else if (item.getItemId() == R.id.it4) {
            return true;
        } else if (item.getItemId() == R.id.it5) {
            return true;
        } else if (item.getItemId() == R.id.it6) {
            return true;
        }
    }

```

```
    } else {  
        return super.onOptionsItemSelected(item);  
    }  
}  
}
```

string.xml

```
<resources>  
    <string name="app_name">Options menu</string>  
    <string name="search">Search</string>  
    <string name="upload">Upload</string>  
    <string name="copy">Copy</string>  
    <string name="print">Print</string>  
    <string name="bookmark">Bookmark</string>  
    <string name="delete">Delete</string>  
</resources>
```