

## **Experiment Name: NITT Tools Application**

### **106118106 V Venkataraman CSE B**

**Date:** 04-03-2021

#### **Aim:**

To create a mobile application that takes the username and roll number of the person and allows them to choose from a list of facilities such as calling the helpline number, YouTube channel or visit the official website

#### **Description of App:**

We create two edit texts and receive the input which then open a new activity via explicit intents. The new activity has 3 buttons that opens the dial pad to place a call, Youtube redirecting to NITTs channel and the NITT website.

#### **Device Specifications:**

App runs on the minSDK version of 16 and Android version 11 using Pixel 3A API emulator and samsung device. Only default libraries were used.

#### **Technical Concepts Learnt:**

I have used Linear layout vertical orientation, Edit text and UI properties, Button and UI properties, Text View and used Explicit intent to call Activities and Implicit intent to call other apps from phone. Switch case implemented to choose between options.

#### **Source Code:**

##### **MainActivity.java**

```
package com.example.intent_application;

import android.content.Intent;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;

import androidx.appcompat.app.AppCompatActivity;

public class MainActivity extends AppCompatActivity {
    EditText roll,name;
    Button next;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
```

```

        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        roll = findViewById(R.id.roll);
        name = findViewById(R.id.name);

        findViewById(R.id.next).setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                Intent intent = new Intent(getApplicationContext(),
MainActivity2.class);
                intent.putExtra("roll", roll.getText().toString());
                intent.putExtra("name", name.getText().toString());
                startActivity(intent);
            }
        });
    }
}

```

## MainActivity2.java

```

package com.example.intent_application;

import android.content.Intent;
import android.net.Uri;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.RadioGroup;
import android.widget.Toast;

import androidx.annotation.Nullable;
import androidx.appcompat.app.AppCompatActivity;

public class MainActivity2 extends AppCompatActivity {
    RadioGroup radio;
    @Override
    protected void onCreate(@Nullable Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main2);

        Intent intent = getIntent();
        String name = intent.getStringExtra("name");
        Toast.makeText(getApplicationContext(), "Hello " + name,
Toast.LENGTH_SHORT).show();

        findViewById(R.id.back).setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                finish();
            }
        });
    }
}

```

```

    });

    findViewById(R.id.submit).setOnClickListener(new View.OnClickListener() {
        @Override
        public void onClick(View v) {
            radio = findViewById(R.id.radio);
            switch (radio.getCheckedRadioButtonId()) {
                case R.id.call: {
                    Intent intent = new Intent(Intent.ACTION_CALL,
Uri.parse("tel:" + "4312503000"));
                    startActivity(intent);
                }
                break;
                case R.id.website: {
                    Intent intent = new Intent(Intent.ACTION_VIEW,
Uri.parse("https://www.nitt.edu"));
                    startActivity(intent);
                }
                break;
                case R.id.youtube: {
                    Intent intent = new Intent(Intent.ACTION_VIEW,
Uri.parse("https://www.youtube.com/channel/UCEPOEe5azp3FbUjvMwttPqw"));
                    startActivity(intent);
                }
            }
        }
    });
}
}
}

```

## 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:layout_width="match_parent"
    android:layout_height="match_parent"
    android:background="#000000"
    android:orientation="vertical"
    tools:context=".MainActivity">

    <TextView
        android:id="@+id/head"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_margin="30dp"
    >

```

```

    android:background="#000000"
    android:gravity="center"
    android:text="Intent Application"
    android:textColor="#FF0000"
    android:textSize="24sp"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintLeft_toLeftOf="parent"
    app:layout_constraintRight_toRightOf="parent"
    app:layout_constraintTop_toTopOf="parent" />

```

```

<EditText
    android:id="@+id/roll"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:layout_marginBottom="10dp"
    android:background="#FFFFFF"
    android:ems="10"
    android:hint="Roll"
    android:inputType="number" />

```

```

<EditText
    android:id="@+id/name"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:background="#FFFFFF"
    android:ems="10"
    android:hint="Name"
    android:inputType="textPersonName" />

```

```

<Button
    android:id="@+id/next"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:layout_margin="10dp"
    android:background="#EC2D2D"
    android:text="Button"
    app:backgroundTint="#DF3A3A" />

```

```

</LinearLayout>

```

## Activity\_main2.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"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:background="#000000"
    android:orientation="vertical">

```

```
<TextView
    android:id="@+id/title"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:layout_gravity="center"
    android:layout_marginTop="20dp"
    android:background="#000000"
    android:foregroundGravity="center"
    android:gravity="center"
    android:text="Options:"
    android:textColor="#FF0000"
    android:textSize="20sp"
    android:textStyle="bold" />

<RadioGroup
    android:id="@+id/radio"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:layout_gravity="center"
    android:layout_margin="20dp"
    android:foregroundGravity="center"
    android:gravity="center">

    <RadioButton
        android:id="@+id/call"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:background="#000000"
        android:text="Call NITT"
        android:textColor="#FB4646" />

    <RadioButton
        android:id="@+id/youtube"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:background="#000000"
        android:text="YouTube NITT"
        android:textColor="#FB4646" />

    <RadioButton
        android:id="@+id/website"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:background="#000000"
        android:text="Website NITT"
        android:textColor="#FB4646" />
</RadioGroup>

<Button
```

```
        android:id="@+id/submit"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_margin="10dp"
        android:text="Submit"
        app:backgroundTint="#E12222" />

<Button
    android:id="@+id/back"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:layout_margin="10dp"
    android:text="Back"
    app:backgroundTint="#E62323" />
</LinearLayout>
```

## Screenshots:

4:38

VoLTE R 47%


Intent\_Application





Intent Application

106118106

V Venkataraman

BUTTON

4:39 

   VoLTE R || 47% 

# Intent\_Application

## Options:



- ☐ Call NITT
- ☐ YouTube NITT
- ☐ Website NITT






SUBMIT

BACK

Hello V Venkataraman



4:39  

   VoLTE R  47% 

Calling...

4312503000



Add call



Video call



Bluetooth



Speaker



Mute



Keypad



4:39

VoLTE R 47%



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The 72nd Republic Day on 26th Jan, 2021 Celebration Streaming



## Vision

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4:39



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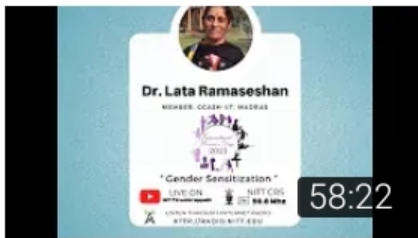


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