Ganpat University

U.V. Patel College of Engineering

|| विद्यया समाजोत्कर्ष: ||

Department of Computer Engineering/Information Technology

MainActivity.XML File:

```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">

    <TextView
        android:id="@+id/textView"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="20012532001\nImplicit Intent"
        android:textSize="22sp"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintHorizontal_bias="0.449"
        app:layout_constraintLeft_toLeftOf="parent"
        app:layout_constraintRight_toRightOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.07" />

    <EditText
        android:id="@+id/editText"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginTop="72dp"
        android:ems="10"
        android:hint="Enter number/URL"
        android:inputType="textPersonName"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.497"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toBottomOf="@+id/textView" />

    <Button
        android:id="@+id/button"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginTop="96dp"
        android:text="make a call"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
```

```xml
        app:layout_constraintTop_toBottomOf="@+id/editText" />

    <Button
        android:id="@+id/button2"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="open url"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toBottomOf="@+id/button" />

    <Button
        android:id="@+id/button3"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="pick up contact"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toBottomOf="@+id/button2" />

    <Button
        android:id="@+id/button4"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="call log"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toBottomOf="@+id/button3" />

    <Button
        android:id="@+id/button5"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="gallery"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toBottomOf="@+id/button4" />

    <Button
        android:id="@+id/button6"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="set alarm"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toBottomOf="@+id/button5" />
```

```xml
    <Button
        android:id="@+id/button7"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="camera"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toBottomOf="@+id/button6" />

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

MainActivity.kt File:

```kotlin
package com.example.pr_4

import android.Manifest.permission.READ_CALL_LOG
import android.Manifest.permission_group.CALL_LOG
import android.app.Activity
import android.content.Intent
import android.database.Cursor
import android.net.Uri
import androidx.appcompat.app.AppCompatActivity
import android.os.Bundle
import android.provider.AlarmClock
import android.provider.ContactsContract
import android.provider.MediaStore
import android.util.Log
import android.widget.Button
import android.widget.EditText

class MainActivity : AppCompatActivity() {
    override fun onCreate(savedInstanceState: Bundle?) {
        super.onCreate(savedInstanceState)
        setContentView(R.layout.activity_main)

        val edt1: EditText = findViewById(R.id.editText)
        val url: Button = findViewById(R.id.button2)
        val call: Button = findViewById(R.id.button)
        val pick_contact: Button = findViewById(R.id.button3)
```

```kotlin
val callog: Button = findViewById(R.id.button4)
val gallery: Button = findViewById(R.id.button5)
val set_alarm: Button = findViewById(R.id.button6)
val camera: Button = findViewById(R.id.button7)


url.setOnClickListener {
    val str_url = edt1.text.toString()
    val web_uri: Uri = Uri.parse(str_url)
    val intent1: Intent = Intent(Intent.ACTION_VIEW, web_uri)
    if (intent1.resolveActivity(packageManager) != null) {
        startActivity(intent1)
    } else {
        Log.d("Implicit Examle", "Can not handel")
    }
}

call.setOnClickListener {
    val number = edt1.text.toString()
    // val ca= Uri.parse("tel:"+call_no)
    val callIntent = Intent(Intent.ACTION_CALL)
    callIntent.data = Uri.parse("tel:" + number)
    startActivity(callIntent)
}

pick_contact.setOnClickListener {
    val contactIntent: Intent =
        Intent(Intent.ACTION_PICK, ContactsContract.Contacts.CONTENT_URI)

    startActivity(contactIntent);
}

callog.setOnClickListener {
    val calL_log: Intent = Intent(Intent.ACTION_DIAL)
    startActivity(calL_log)
}

gallery.setOnClickListener {
    val intent: Intent = Intent()
    intent.setAction(android.content.Intent.ACTION_GET_CONTENT)
    intent.type = "image/*"
    intent.setFlags(Intent.FLAG_ACTIVITY_NEW_TASK)
    if (intent.resolveActivity(packageManager) != null) {
        startActivity(intent)
    } else {
        Log.d("Implicit Intent", "Can not handle Intent")
    }
}
```

```kotlin
        }

        set_alarm.setOnClickListener {
            val intent: Intent = Intent(AlarmClock.ACTION_SET_ALARM)
            intent.putExtra(AlarmClock.EXTRA_MESSAGE, "Alarm Demo")
            intent.putExtra(AlarmClock.EXTRA_HOUR, 2)
            intent.putExtra(AlarmClock.EXTRA_MINUTES, 2)

            intent.putExtra(AlarmClock.EXTRA_DAYS, arrayListOf(2, 3, 4))
            startActivity(intent)
        }

        camera.setOnClickListener {
            val intent: Intent = Intent(MediaStore.ACTION_IMAGE_CAPTURE)
            startActivity(intent)
        }

    }
}
```

AndroidManifest.XML File:

```xml
<?xml version="1.0" encoding="utf-8"?>
<manifest xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools"
    package="com.example.pr_4">
    <uses-permission android:name="android.permission.CALL_PHONE"/>
    <uses-permission android:name="android.permission.READ_CALL_LOG"/>
    <uses-permission android:name="android.permission.SET_ALARM"/>
```

```xml
<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/Theme.Pr_4">
    <activity
        android:name=".MainActivity"
        android:exported="true">
        <intent-filter>
            <action android:name="android.intent.action.MAIN" />

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

    </activity>

</application>

/manifest>
```

Enter number/URL

MAKE A CALL

OPEN URL

PICK UP CONTACT

CALL LOG

GALLERY

SET ALARM

CAMERA

MAKE A CALL

OPEN URL

PICK UP CONTACT

CALL LOG

GALLERY

SET ALARM

CAMERA

No alarms on

5:30 AM
Alarm, Only ring once

7:00 AM
Alarm, Only ring once

9:10 AM
Alarm, Only ring once

12:00 PM
Alarm, Only ring once

Alarm   World clock   Stopwatch   Timer