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**Course:** BSc IT 5th sem

**Subject:** Android Application Development

**PROBLEM STATEMENT**: Develop an android application to demonstrate Implicit as well as Explicit Intent.

manifest.xml>

<?xml version="1.0" encoding="utf-8"?>  
<manifest xmlns:android="http://schemas.android.com/apk/res/android"  
 package="com.example.midterm">  
  
 <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.MidTerm">  
 <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>  
 <activity  
 android:name=".ExplicitActivity"  
 android:exported="true">  
 </activity>  
 </application>  
  
</manifest>

MainActivity.java>

package com.example.midterm;  
  
import androidx.appcompat.app.AppCompatActivity;  
  
import android.content.Intent;  
import android.net.Uri;  
import android.os.Bundle;  
import android.view.View;  
import android.widget.Button;  
  
public class MainActivity extends AppCompatActivity {  
Button explicit , implicit;  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_main*);  
 explicit = (Button)findViewById(R.id.*explicit*);  
 implicit = (Button)findViewById(R.id.*implicit*);  
  
 explicit.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View view) {  
 Intent i = new Intent(getApplicationContext() ,ExplicitActivity.class);  
 startActivity(i);  
 }  
 });  
  
 implicit.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View view) {  
 Intent i = new Intent(Intent.*ACTION\_DIAL*);  
 i.setData(Uri.*parse*("tel:"+ "8881338500"));  
 startActivity(i);  
 }  
 });  
  
  
  
 }  
}

ExplicitActivity>

package com.example.midterm;  
  
import androidx.appcompat.app.AppCompatActivity;  
  
import android.os.Bundle;  
  
public class ImplicitActivity extends AppCompatActivity {  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_explicit*);  
 }  
}

MainActivity.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:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="Hello World"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintLeft\_toLeftOf="parent"  
 app:layout\_constraintRight\_toRightOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent" />  
  
 <Button  
 android:id="@+id/implicit"  
 android:layout\_width="222dp"  
 android:layout\_height="60dp"  
 android:layout\_marginBottom="160dp"  
 android:text="Implicit"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.551"  
 app:layout\_constraintStart\_toStartOf="parent" />  
  
 <Button  
 android:id="@+id/explicit"  
 android:layout\_width="222dp"  
 android:layout\_height="60dp"  
 android:layout\_marginTop="484dp"  
 android:text="Explicit"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.551"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent" />  
  
</androidx.constraintlayout.widget.ConstraintLayout>

ExplicitActivity.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=".ExplicitActivity">  
  
 <TextView  
 android:id="@+id/textView"  
 android:layout\_width="367dp"  
 android:layout\_height="415dp"  
 android:text="This is triggred via explicit intent"  
 android:textSize="50px"  
 android:textAlignment="center"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent" />  
</androidx.constraintlayout.widget.ConstraintLayout>

**Problem Statement:** Develop an android application to demonstrate activity life cycle using logcat.

**XML FILE CODING:**

*<?*xml version="1.0" encoding="utf-8"*?>*<RelativeLayout 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:layout\_alignParentTop="true"  
 android:layout\_centerHorizontal="true"  
 android:layout\_marginTop="210dp"  
 android:text="WELCOME TO ANDROID LIFECYCLE"  
 android:textSize="24sp" />  
</RelativeLayout>

**JAVA SOURCE CODE:**

package com.example.activitylifecycle;  
import androidx.appcompat.app.AppCompatActivity;  
import android.os.Bundle;  
import android.util.Log;  
  
public class MainActivity extends AppCompatActivity {  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_main*);  
 Log.*d*("Lifecycycle","onCreate Invoke");  
 }  
  
 public void onStart(){  
 super.onStart();  
 Log.*d*("LifeCycle","onStart Invoke");  
  
 }  
  
  
 public void onResume(){  
 super.onResume();  
 Log.*d*("LifeCycle","onResume Invoke");  
  
 }  
  
  
 public void onPause(){  
 super.onPause();  
 Log.*d*("LifeCycle","onPause Invoke");  
  
 }

public void onStop(){  
 super.onStop();  
 Log.*d*("LifeCycle","onStop Invoke");  
  
 }  
  
 public void onDestroy(){  
 super.onDestroy();  
 Log.*d*("LifeCycle","onDestroy Invoke");  
  
 }  
}

**OUTPUT:**

