**PRACTICAL NO.7**

**Programs on Intents, Events, Listeners and Adapters**

The Android Intent Class, Using Events and Event Listeners

**Code:**

**activity\_main.xml**

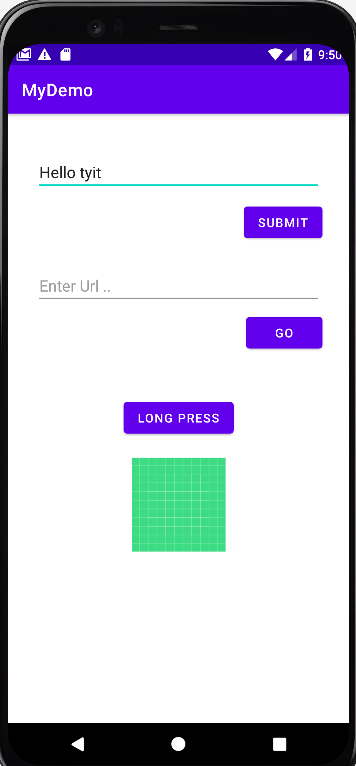
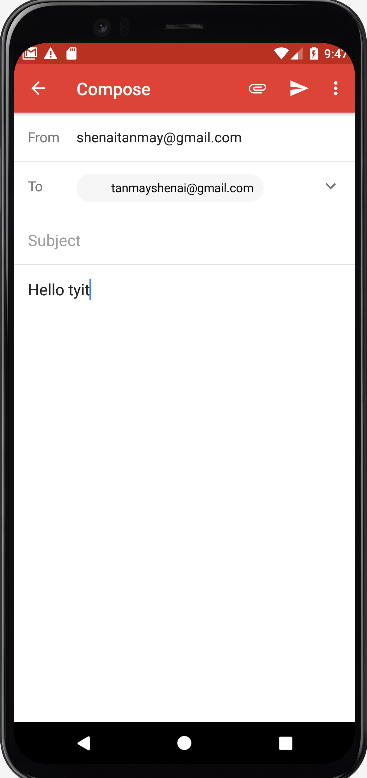
<?xml version="1.0" encoding="utf-8"?>  
<androidx.constraintlayout.widget.ConstraintLayout xmlns:android="http://schemas.android.com/apk/res/android"  
 xmlns:app="http://schemas.android.com/apk/res-auto"  
 xmlns:tools="http://schemas.android.com/tools"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 tools:context=".MainActivity">  
  
 <EditText  
 android:id="@+id/user\_data"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginStart="32dp"  
 android:layout\_marginEnd="32dp"  
 android:ems="10"  
 android:hint="User data"  
 android:inputType="textPersonName"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.402"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"  
 app:layout\_constraintVertical\_bias="0.069" />  
  
 <Button  
 android:id="@+id/button"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="Submit"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.899"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"  
 app:layout\_constraintVertical\_bias="0.155" />  
  
 <Button  
 android:id="@+id/button2"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="Go"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.9"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"  
 app:layout\_constraintVertical\_bias="0.349" />  
  
 <EditText  
 android:id="@+id/url\_text"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginStart="32dp"  
 android:layout\_marginEnd="32dp"  
 android:ems="10"  
 android:hint="Enter Url .."  
 android:inputType="textPersonName"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.388"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"  
 app:layout\_constraintVertical\_bias="0.268" />  
  
 <Button  
 android:id="@+id/button3"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="Long Press"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"  
 app:layout\_constraintVertical\_bias="0.499" />  
  
 <ImageView  
 android:id="@+id/imageView"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"  
 app:layout\_constraintVertical\_bias="0.667"  
 app:srcCompat="@drawable/ic\_launcher\_background" />  
</androidx.constraintlayout.widget.ConstraintLayout>

**MainActivity.kt**

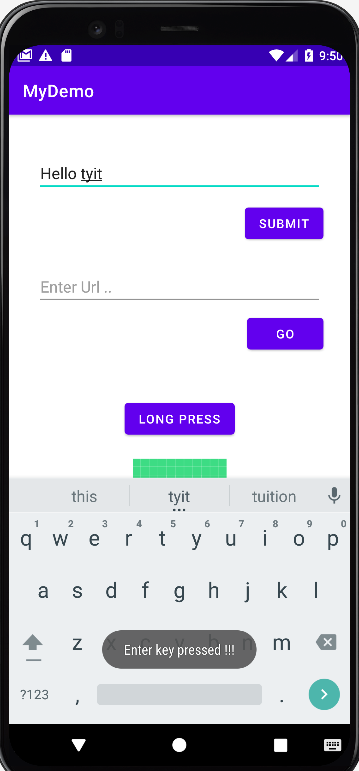
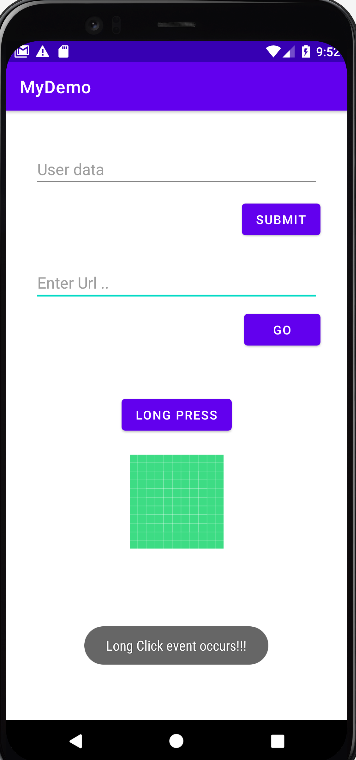
package com.example.mydemo  
import android.content.Intent  
import android.net.Uri  
import androidx.appcompat.app.AppCompatActivity  
import android.os.Bundle  
import android.view.KeyEvent  
import android.view.MotionEvent  
import android.widget.Toast  
import kotlinx.android.synthetic.main.activity\_main.\*  
  
class MainActivity : AppCompatActivity() {  
 override fun onCreate(savedInstanceState: Bundle?) {  
 super.onCreate(savedInstanceState)  
 setContentView(R.layout.activity\_main)  
 button.setOnClickListener {  
 var userdata=user\_data.text  
 var compose=Intent(Intent.ACTION\_SEND)  
 compose.putExtra(Intent.EXTRA\_TEXT,userdata)  
 compose.type="text/plain"  
  
 var sendOptions=Intent.createChooser(compose,"msg")  
 startActivity(sendOptions)  
 }  
  
 button2.setOnClickListener {  
 var url=url\_text.text  
 var siteData=Intent(Intent.ACTION\_VIEW)  
 siteData.setData(Uri.parse("$url"))  
 startActivity(siteData)  
 }  
  
 button3.setOnLongClickListener {  
 Toast.makeText(this,"Long Click event occurs!!!",Toast.LENGTH\_SHORT).show()  
 true  
 }  
  
 imageView.setOnTouchListener { view, motionEvent ->  
 when(motionEvent.action)  
 {  
 MotionEvent.ACTION\_DOWN -> Toast.makeText(this,"TouchListener - Action Down event occurs!!!",Toast.LENGTH\_SHORT).show()  
 MotionEvent.ACTION\_UP -> Toast.makeText(this,"TouchListener - Action Up event occurs!!!",Toast.LENGTH\_SHORT).show()  
 MotionEvent.ACTION\_POINTER\_DOWN -> Toast.makeText(this,"TouchListener - Action Pointer Down event occurs!!!",Toast.LENGTH\_SHORT).show()  
 }  
 true  
 }  
  
 user\_data.setOnKeyListener { view, i, keyEvent ->  
 if (keyEvent.keyCode == KeyEvent.KEYCODE\_ENTER)  
 {  
 Toast.makeText(this,"Enter key pressed !!!",Toast.LENGTH\_SHORT).show()  
 }  
 true  
 }  
 }  
}

**Output:**

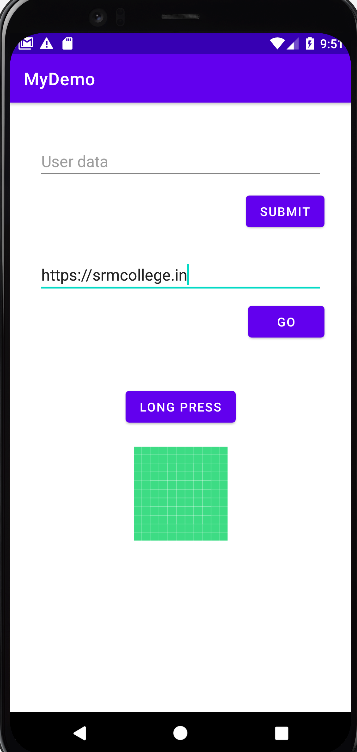
**Within an Application(Intent)**

**Enter Key Event & Long click event :**

**Outside an Application(Intent)**

**TouchListener-Action\_down & Action\_up :**

