## 2CEIT5PE18: MOBILE APPLICATION DEVELOPMENT

# Practical: 3

AIM:- Create an android application which demonstrates implicit & explicit Intent.

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#### **Practical-3**

Create a "Hello World" application which has a yellow layout background with red color,20sp font size and display text on the center of the screen.

#### Activity main.xml:

```
<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout</p>
  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"
  tools:context=".MainActivity">
  <TextView
    android:id="@+id/textView1"
    android:layout width="wrap content"
    android:layout height="wrap content"
    android:layout marginStart="10dp"
    android:layout marginTop="50dp"
    android:gravity="center"
    android:text="Web URL:"
    android:textSize="17sp"
    app:layout constraintStart toStartOf="parent"
    app:layout constraintTop toTopOf="parent"/>
  <EditText
    android:id="@+id/urlinput"
    android:layout width="0dp"
    android:layout height="wrap content"
    android:layout marginStart="3dp"
    android:layout marginEnd="3dp"
    android:ems="10"
    android:hint="Enter URL"
    android:inputType="text"
    app:layout constraintBaseline toBaselineOf="@+id/textView1"
    app:layout constraintEnd toStartOf="@+id/urlbtn"
    app:layout_constraintStart_toEndOf="@+id/textView1" />
  <Button
    android:id="@+id/urlbtn"
    android:layout width="wrap content"
    android:layout height="wrap content"
    android:layout marginEnd="10dp"
    android:text="Browse"
    app:layout constraintEnd toEndOf="parent"
    app:layout constraintTop toTopOf="@id/urlinput"
```

```
app:layout constraintBottom toBottomOf="@id/urlinput"/>
<TextView
  android:id="@+id/textView3"
  android:layout width="wrap content"
  android:layout height="wrap content"
  android:layout marginStart="10dp"
  android:layout marginTop="40dp"
  android:gravity="center"
  android:text="Phone no.:"
  android:textSize="17sp"
  app:layout constraintStart toStartOf="parent"
  app:layout constraintTop toBottomOf="@+id/textView1"/>
<EditText
  android:id="@+id/phoneinput"
  android:layout width="0dp"
  android:layout height="wrap content"
  android:layout marginStart="3dp"
  android:layout marginEnd="3dp"
  android:ems="10"
  android:hint="Enter phone no."
  android:inputType="text"
  app:layout constraintEnd toStartOf="@+id/phonebtn"
  app:layout constraintStart toEndOf="@+id/textView3"
  app:layout constraintTop toTopOf="@id/textView3"
  app:layout constraintBottom toBottomOf="@id/textView3"/>
<Button
  android:id="@+id/phonebtn"
  android:layout width="wrap content"
  android:layout height="wrap content"
  android:layout marginEnd="10dp"
  android:text="Call"
  app:layout constraintEnd toEndOf="parent"
  app:layout constraintTop toTopOf="@id/phoneinput"
  app:layout constraintBottom toBottomOf="@id/phoneinput"/>
<TextView
  android:id="@+id/textView4"
  android:layout width="wrap content"
  android:layout height="wrap content"
  android:layout marginStart="10dp"
  android:layout marginTop="40dp"
  android:gravity="center"
  android:text="Call log:"
  android:textSize="17sp"
  app:layout constraintStart toStartOf="parent"
  app:layout constraintTop toBottomOf="@+id/textView3"/>
<TextView
  android:id="@+id/textView5"
```

```
android:layout width="wrap content"
  android:layout height="wrap content"
  android:layout marginStart="10dp"
  android:layout marginTop="40dp"
  android:gravity="center"
  android:text="Gallery:"
  android:textSize="17sp"
  app:layout constraintStart toStartOf="parent"
  app:layout constraintTop toBottomOf="@+id/textView4" />
<TextView
  android:id="@+id/textView6"
  android:layout width="wrap_content"
  android:layout height="wrap content"
  android:layout marginStart="10dp"
  android:layout marginTop="40dp"
  android:gravity="center"
  android:text="Camera:"
  android:textSize="17sp"
  app:layout constraintStart toStartOf="parent"
  app:layout constraintTop toBottomOf="@+id/textView5"/>
<TextView
  android:id="@+id/textView7"
  android:layout width="wrap content"
  android:layout height="wrap content"
  android:layout marginStart="10dp"
  android:layout marginTop="40dp"
  android:gravity="center"
  android:text="Alarm:"
  android:textSize="17sp"
  app:layout constraintStart toStartOf="parent"
  app:layout constraintTop toBottomOf="@+id/textView6"/>
<TextView
  android:id="@+id/textView8"
  android:layout width="wrap content"
  android:layout height="wrap content"
  android:layout marginStart="10dp"
  android:layout marginTop="40dp"
  android:gravity="center"
  android:text="Login:"
  android:textSize="17sp"
  app:layout constraintStart toStartOf="parent"
  app:layout constraintTop toBottomOf="@+id/textView7"/>
<Button
  android:id="@+id/clbtn"
  android:layout width="wrap content"
  android:layout height="wrap content"
  android:layout marginEnd="10dp"
```

```
android:text="Call log"
    app:layout constraintEnd toEndOf="parent"
    app:layout constraintTop toTopOf="@id/textView4"
    app:layout constraintBottom toBottomOf="@id/textView4"/>
  <Button
    android:id="@+id/glbtn"
    android:layout width="wrap content"
    android:layout height="48dp"
    android:layout marginEnd="10dp"
    android:text="Gallery"
    app:layout constraintBottom toBottomOf="@+id/textView5"
    app:layout constraintEnd toEndOf="parent"
    app:layout constraintTop toTopOf="@+id/textView5" />
  <Button
    android:id="@+id/cmbtn"
    android:layout width="wrap content"
    android:layout height="48dp"
    android:layout marginEnd="10dp"
    android:text="Camera"
    app:layout constraintBottom toBottomOf="@+id/textView6"
    app:layout constraintEnd toEndOf="parent"
    app:layout constraintTop toTopOf="@+id/textView6"/>
  <Button
    android:id="@+id/albtn"
    android:layout width="wrap content"
    android:layout height="48dp"
    android:layout marginEnd="10dp"
    android:text="Alarm"
    app:layout constraintBottom toBottomOf="@+id/textView7"
    app:layout constraintEnd toEndOf="parent"
    app:layout constraintTop toTopOf="@+id/textView7" />
  <Button
    android:id="@+id/lgbtn"
    android:layout width="wrap content"
    android:layout height="48dp"
    android:layout marginEnd="10dp"
    android:text="Login"
    app:layout constraintBottom toBottomOf="@+id/textView8"
    app:layout constraintEnd toEndOf="parent"
    app:layout constraintTop toTopOf="@+id/textView8" />
</androidx.constraintlayout.widget.ConstraintLayout>
```

#### Login Main.xml

```
<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout</p>
  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"
  tools:context=".LoginActivity">
  <ImageView
    android:id="@+id/imageView"
    android:layout width="match parent"
    android:layout height="150dp"
    app:layout constraintTop toTopOf="parent"
    app:srcCompat="@drawable/guni pink logo"/>
  <com.google.android.material.card.MaterialCardView</p>
    android:layout width="match parent"
    android:layout height="wrap content"
    android:layout marginHorizontal="20dp"
    app:cardElevation="20dp"
    app:cardCornerRadius="30dp"
    app:layout constraintTop toBottomOf="@id/imageView">
    <androidx.constraintlayout.widget.ConstraintLayout
      android:layout width="match parent"
      android:layout height="wrap content"
      android:padding="40dp">
      <TextView
         android:id="@+id/email text"
         android:layout width="wrap content"
         android:layout height="wrap content"
         android:text="Email:"
         android:layout marginStart="10dp"
         android:textSize="17sp"
         app:layout constraintTop toTopOf="parent"
         app:layout constraintStart toStartOf="parent"/>
       <EditText
         android:id="@+id/email input"
         android:layout width="0dp"
         android:layout height="wrap content"
         android:hint="Enter your email"
         android:layout marginStart="10dp"
         android:layout marginEnd="5dp"
         app:layout constraintTop toTopOf="@id/email text"
         app:layout constraintBottom toBottomOf="@id/email text"
         app:layout_constraintStart toEndOf="@id/email text"
```

```
app:layout constraintEnd toEndOf="parent"
         android:inputType="textEmailAddress"/>
      <TextView
         android:id="@+id/password text"
         android:layout width="wrap content"
         android:layout height="wrap content"
         android:text="Password:"
         android:layout marginStart="10dp"
         android:textSize="17sp"
         app:layout constraintTop toBottomOf="@id/email text"
         app:layout constraintStart toStartOf="parent"
         android:layout marginTop="30dp"/>
      <EditText
         android:id="@+id/password input"
         android:layout width="0dp"
         android:layout height="wrap content"
         android:hint="Enter your password"
         android:layout marginStart="10dp"
         android:layout marginEnd="5dp"
         app:layout constraintTop toTopOf="@id/password text"
         app:layout_constraintBottom toBottomOf="@id/password text"
         app:layout constraintStart toEndOf="@id/password text"
         app:layout constraintEnd toEndOf="parent"
         android:inputType="textPassword"/>
      <TextView
         android:id="@+id/forgot password"
         android:layout width="wrap content"
         android:layout height="wrap content"
         android:layout marginStart="10dp"
         android:layout marginTop="20dp"
         android:text="Forgot Password?"
         android:textSize="17sp"
         app:layout constraintStart toStartOf="parent"
         app:layout constraintTop toBottomOf="@id/password text"/>
      <Button
         android:id="@+id/login btn"
         android:layout width="wrap content"
         android:layout height="wrap content"
         android:layout marginTop="30dp"
         android:text="LOGIN"
         app:layout constraintEnd toEndOf="parent"
         app:layout_constraintStart toStartOf="parent"
         app:layout constraintTop toBottomOf="@id/forgot password" />
    </androidx.constraintlayout.widget.ConstraintLayout>
  </com.google.android.material.card.MaterialCardView>
</androidx.constraintlayout.widget.ConstraintLayout>
```

#### MainActivity.kt

```
package com.example.madprac 3
import android.content.Intent
import android.net.Uri
import android.os.Bundle
import android.provider.AlarmClock
import android.provider.MediaStore
import android.provider.Telephony.Mms.Intents
import android.widget.Button
import android.widget.EditText
import androidx.activity.enableEdgeToEdge
import androidx.appcompat.app.AppCompatActivity
import androidx.core.view.ViewCompat
import androidx.core.view.WindowInsetsCompat
class MainActivity : AppCompatActivity() {
  override fun onCreate(savedInstanceState: Bundle?) {
    super.onCreate(savedInstanceState)
    enableEdgeToEdge()
    setContentView(R.layout.activity main)
    ViewCompat.setOnApplyWindowInsetsListener(findViewById(R.id.main)) { v, insets ->
       val systemBars = insets.getInsets(WindowInsetsCompat.Type.systemBars())
       v.setPadding(systemBars.left, systemBars.top, systemBars.right, systemBars.bottom)
       insets
    }
    val urlbtn = findViewById<Button>(R.id.urlbtn)
    val urlinput = findViewById<EditText>(R.id.urlinput)
    urlbtn.setOnClickListener{
       val urlIntent = Intent(Intent.ACTION VIEW)
       urlIntent.setData(android.net.Uri.parse(urlinput.text.toString()))
       startActivity(urlIntent)
    }
    val phonebtn = findViewById<Button>(R.id.phonebtn)
    val phoneinput = findViewById<EditText>(R.id.phoneinput)
    phonebtn.setOnClickListener {
       val phoneNumber = phoneinput.text.toString()
       val phoneIntent = Intent(Intent.ACTION DIAL).apply {
         data = Uri.parse("tel:$phoneNumber")
       startActivity(phoneIntent)
    val clbtn = findViewById<Button>(R.id.clbtn)
    clbtn.setOnClickListener{
       val clIntent = Intent(Intent.ACTION VIEW)
       clIntent.setData(android.net.Uri.parse("content://call log/calls"))
```

```
startActivity(clIntent)
    val glbtn = findViewById<Button>(R.id.glbtn)
    glbtn.setOnClickListener{
      val intent = Intent(Intent.ACTION VIEW).apply {
         type = "image/*"
      }
      startActivity(intent)
    val cmbtn = findViewById<Button>(R.id.cmbtn)
    cmbtn.setOnClickListener{
      val cmIntent = Intent(MediaStore.ACTION IMAGE CAPTURE)
      startActivity(cmIntent)
    }
    val albtn = findViewById<Button>(R.id.albtn)
    albtn.setOnClickListener{
      val alIntent = Intent(AlarmClock.ACTION SHOW ALARMS)
      startActivity(alIntent)
    }
    val login button=findViewById<Button>(R.id.lgbtn)
    login button.setOnClickListener{
      Intent(this, LoginActivity::class.java)
         .putExtra("email", "Kawalgohil@gmail.com")
         .putExtra("password", "230194150938ada")
         .also{
           startActivity(it)
         }
    }
}
Login.kt
package com.example.madprac 3
import android.content.Intent
import android.os.Bundle
import android.util.Log
import android.widget.Button
import android.widget.EditText
import android.widget.Toast
import androidx.activity.enableEdgeToEdge
import androidx.appcompat.app.AppCompatActivity
import androidx.core.view.ViewCompat
import androidx.core.view.WindowInsetsCompat
```

#### Practical: 3

```
class LoginActivity : AppCompatActivity() {
  override fun onCreate(savedInstanceState: Bundle?) {
    super.onCreate(savedInstanceState)
    enableEdgeToEdge()
    setContentView(R.layout.login main)
    ViewCompat.setOnApplyWindowInsetsListener(findViewById(R.id.main)) { v, insets ->
      val systemBars = insets.getInsets(WindowInsetsCompat.Type.systemBars())
      v.setPadding(systemBars.left, systemBars.top, systemBars.right, systemBars.bottom)
      insets
    }
    val email = intent.getStringExtra("email").toString()
    val password = intent.getStringExtra("password").toString()
    /*Log.i("email", email)
    Log.i("password", password)*/
    val emailip = findViewById<EditText>(R.id.email input)
    val passwordip = findViewById<EditText>(R.id.password input)
    val loginbtn = findViewById<Button>(R.id.login btn)
    loginbtn.setOnClickListener {
      val emailinput = emailip.text.toString()
      val passwordinput = passwordip.text.toString()
      if (!emailinput.isBlank() && !passwordinput.isBlank()){
         Toast.makeText(this, "email: $email", Toast.LENGTH SHORT).show()
         Toast.makeText(this, "password: $password", Toast.LENGTH SHORT).show()
       } else {
         if (emailinput.isBlank()) {
           Toast.makeText(this, "Enter your email", Toast.LENGTH SHORT).show()
         } else if (passwordinput.isBlank()) {
           Toast.makeText(this, "Enter your password", Toast.LENGTH SHORT).show()
   }
```

### Practical: 3



