

Intents 😊 :

✓ Types of Intents

Type of Intent	Description	Example
Explicit Intent	Directly specifies the target activity or component inside the same app	Open a specific new screen (Activity B)
Implicit Intent	Does not specify the target component. Android decides which app can handle the request	Share text, open camera, open web browser

Android Studio → New Project > Empty Views Activity > Name is “Intents”

On the First Screen (MainActivity.kt)

EXPLICIT

Code :

```
<?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:id="@+id/main"
    android:orientation="vertical"
    android:layout_width="match_parent"
    android:gravity="center"
    android:layout_height="match_parent"
    tools:context=".MainActivity">

    <EditText
```

```

        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:hint="Hello World!"

        android:id="@+id/userInput"
        android:textColorHint="@color/black"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent" />

        <Button
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:text="Share (Implicit)"
            android:id="@+id/shareimplicit"/>

        <Button
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:text="Save (Explicit)"
            android:id="@+id/saveexplicit"/>
    }
</LinearLayout>

```

Then, the First Screen Logic Code (MainActivity.kt) :

Code :

```

val data = findViewById<EditText>(R.id.userInput)
val transfrButton = findViewById<Button>(R.id.saveexplicit)
transfrButton.setOnClickListener {
    val text = data.text.toString()
    val Intent = Intent(this, NextScreen::class.java)
    Intent.putExtra("data", text)
    startActivity(Intent)
}

```

or

```

val data = findViewById<EditText>(R.id.userInput)
val transfrButton = findViewById<Button>(R.id.saveexplicit)
transfrButton.setOnClickListener {

    val text = data.text.toString()
    val Intent = Intent(this, NextScreen::class.java)
}

```

```
Intent.putExtra("data", text)
startActivity(Intent)
```

Then, on screen NextScreen.kt :

→ To Recieve the data (input) from user on this screen

Code :

```
val RecivedData = intent.getStringExtra("i")
```

Full Code of Explicit :

Files are → MainActivity.kt and NextScreen.kt and activity_main.xml and activity_next_screen.xml

activity_main.xml Code :

```
<?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:id="@+id/main"
    android:orientation="vertical"
    android:layout_width="match_parent"
    android:gravity="center"
    android:layout_height="match_parent"
    android:background="@color/white"
    tools:context=".MainActivity">

    <EditText
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:id="@+id/userInput"
        android:hint="Hello World!"
        android:textColorHint="@color/black"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent" />

    <Button
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Share (Implicit)"
        android:id="@+id/shareimplicit"/>
```

```

<Button
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Save (Explicit)"
    android:id="@+id/saveexplicit"/>
|
</LinearLayout>

```

activity_next_screen.xml Code :

```

<?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:id="@+id/main"
    android:background="@color/white"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context=".NextScreen">

```

```

<TextView
    android:id="@+id/textView"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="TextView"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintBottom_toBottomOf="parent"
    android:textSize="20dp"
    android:textColor="@color/black"/>

```

```

<TextView
    android:id="@+id/textView2"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="TextView"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.498"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintVertical_bias="0.556" />

```

```

<Button
    android:id="@+id/button"

```

```

        android:layout_width="262dp"
        android:layout_height="58dp"
        android:text="Button"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.489"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.631" />
    
```

MainActivity.kt Code :

```

package com.example.intent

import android.R.attr.data
import android.R.attr.text
import android.content.Intent
import android.os.Bundle
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)
        val editText = findViewById<EditText>(R.id.userInput)
        val transfrButton = findViewById<Button>(R.id.saveexplicit)
        transfrButton.setOnClickListener {
            val userInput = editText.text.toString()
            startActivity(Intent(this, NextScreen::class.java).putExtra("i", userInput))

            // 2nd Method to startActivity :
            // val text = data.text.toString()
            // val Intent = Intent(this, NextScreen::class.java)
            // Intent.putExtra("data", text)
            // startActivity(Intent)

        }
    }
}

```

```
}  
}
```

NextScreen.kt Code :

```
package com.example.intent  
  
import android.os.Bundle  
import android.widget.TextView  
import androidx.activity.enableEdgeToEdge  
import androidx.appcompat.app.AppCompatActivity  
import androidx.core.view.ViewCompat  
import androidx.core.view.WindowInsetsCompat  
  
class NextScreen : AppCompatActivity() {  
    override fun onCreate(savedInstanceState: Bundle?) {  
        super.onCreate(savedInstanceState)  
        enableEdgeToEdge()  
        setContentView(R.layout.activity_next_screen)  
        val RecivedData = intent.getStringExtra("i")  
        val textview = findViewById<TextView>(R.id.textView)  
        textview.text = RecivedData  
    }  
}
```

IMPLICIT

- To Share Data via other platforms :

Code :

```
shareButton.setOnClickListener {  
    val userInput = editText.text.toString()  
    if(userInput.isNotEmpty()) {  
        val intent = Intent(Intent.ACTION_SEND).apply {  
            type = "text/plain"  
            putExtra(Intent.EXTRA_TEXT, userInput)  
        }  
        startActivity(intent)  
    } else {  
        Toast.makeText(this, "Please write a Text Note, First", Toast.LENGTH_SHORT).show()  
    }  
}
```

EMPLICIT SCREEN

```
private lateinit var counterTextView : TextView

private var counter = 0

override fun onCreate(savedInstanceState: Bundle?) {
    super.onCreate(savedInstanceState)
    enableEdgeToEdge()
    setContentView(R.layout.activity_next_screen)
    val RecivedData = intent.getStringExtra("i")
    val textview = findViewById<TextView>(R.id.textView)
    textview.text = RecivedData

    counterTextView = findViewById<TextView>(R.id.textView2)
    savedInstanceState?.let {
        counter = it.getInt("counter", 0)
        counterTextView.text = counter.toString()
    }
    findViewById<Button>(R.id.button).setOnClickListener {
        counter++
        counterTextView.text= counter.toString()
    }
}

override fun onSaveInstanceState(outState: Bundle) {
    super.onSaveInstanceState(outState)
    outState.putInt("counter", counter)
}
}
```
