**Android Course**

**Intent**

**Main Activity**

*package* com.example.intents;  
  
*import* androidx.appcompat.app.AppCompatActivity;  
  
*import* android.content.Intent;  
*import* android.os.Bundle;  
*import* android.view.View;  
*import* android.widget.EditText;  
*import* android.widget.TextView;  
  
*public class* MainActivity *extends* AppCompatActivity {  
 *//public static final String NUMBER\_ONE = "com.example.intents.NUMBER\_ONE";* TextView tvFirstActivity;  
 EditText etNumberOne, etNumberTwo;  
  
 @Override  
 *protected void* onCreate(Bundle savedInstanceState) {  
 *super*.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_main*);  
  
 etNumberOne = findViewById(R.id.*et\_first\_number*);  
 etNumberTwo = findViewById(R.id.*et\_second\_number*);  
 tvFirstActivity = findViewById(R.id.*tv\_first\_activity*);  
  
 tvFirstActivity.setOnClickListener(*new* View.OnClickListener() {  
 @Override  
 *public void* onClick(View v) {  
 */\*Intent intent = new Intent();  
 intent.setClass(MainActivity.this, SecondActivity.class);  
 startActivity(intent);\*/* Intent intent = *new* Intent(MainActivity.*this*, SecondActivity.*class*);  
 *int* number1 = Integer.*parseInt*(etNumberOne.getText().toString());  
 *int* number2 = Integer.*parseInt*(etNumberTwo.getText().toString());  
  
 Bundle bundle = *new* Bundle();  
 bundle.putInt("FIRST\_NUMBER", number1);  
 bundle.putInt("SECOND\_NUMBER", number2);  
  
 intent.putExtra("Numbers", bundle);  
 startActivity(intent);  
 }  
 });  
 }  
}

**Second Activity**

*package* com.example.intents;  
  
*import* android.content.Intent;  
*import* android.os.Bundle;  
*import* android.widget.TextView;  
  
*import* androidx.annotation.Nullable;  
*import* androidx.appcompat.app.AppCompatActivity;  
  
*public class* SecondActivity *extends* AppCompatActivity {  
 TextView tvSecond;  
  
 @Override  
 *protected void* onCreate(@Nullable Bundle savedInstanceState) {  
 *super*.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_second*);  
  
 tvSecond = findViewById(R.id.*textView*);  
  
 Intent secondIntent = getIntent();  
 Bundle bundle = secondIntent.getExtras().getBundle("Numbers");  
 *int* number1 = bundle.getInt("FIRST\_NUMBER");  
 *int* number2 = bundle.getInt("SECOND\_NUMBER");  
 *int* sum = number1 + number2;  
 tvSecond.setText("" + sum);  
  
  
 }  
}

**Dialoge**

*package* com.example.alert\_dialoge;  
  
*import* androidx.appcompat.app.AlertDialog;  
*import* androidx.appcompat.app.AppCompatActivity;  
  
*import* android.content.*DialogInterface*;  
*import* android.os.Bundle;  
*import* android.view.View;  
*import* android.widget.Button;  
*import* android.widget.TextView;  
*import* android.widget.Toast;  
  
*public class* MainActivity *extends* AppCompatActivity {  
 Button btn\_AD\_1, btn\_AD\_2, btn\_AD\_3;  
 TextView tv\_delete;  
 @Override  
 *protected void* onCreate(Bundle savedInstanceState) {  
 *super*.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_main*);  
 btn\_AD\_1 = findViewById(R.id.*btn\_AD\_1*);  
 btn\_AD\_2 = findViewById(R.id.*btn\_AD\_2*);  
 btn\_AD\_3 = findViewById(R.id.*btn\_AD\_3*);  
 tv\_delete = findViewById(R.id.*tv\_Delete*);  
  
*// Normal Dialoge:* btn\_AD\_1.setOnClickListener(*new* View.OnClickListener() {  
 @Override  
 *public void* onClick(View v) {  
 AlertDialog alertDialog = *new* AlertDialog.Builder(MainActivity.*this*)  
 .setTitle("Status Keeper")  
 .setMessage("Do you want to download this : ")  
 .setIcon(R.drawable.*ic\_download*)  
 .setNegativeButton("No", *new DialogInterface*.OnClickListener() {  
 @Override  
 *public void* onClick(*DialogInterface* dialog, *int* which) {  
 dialog.dismiss();  
 }  
 })  
 .setPositiveButton("Yes", *new DialogInterface*.OnClickListener() {  
 @Override  
 *public void* onClick(*DialogInterface* dialog, *int* which) {  
 tv\_delete.setVisibility(View.*INVISIBLE*);  
 tv\_delete.setText("");  
 }  
 })  
 .setNeutralButton("Cancel", *new DialogInterface*.OnClickListener() {  
 @Override  
 *public void* onClick(*DialogInterface* dialog, *int* which) {  
 Toast.*makeText*(MainActivity.*this*, "Please yes if you want to download", Toast.*LENGTH\_LONG*).show();  
 }  
 })  
 .create();  
 alertDialog.show();  
 }  
 });  
  
*// Item View Dialoge:* btn\_AD\_2.setOnClickListener(*new* View.OnClickListener() {  
 @Override  
 *public void* onClick(View v) {  
  
 *//array bnae hai idhr he.* String[]cars= *new* String[]{"grande","Civic","Raptor150","Raptor 250","Raptor 350","Bughati","Limbergini","Firari"};  
  
 AlertDialog alertDialog = *new* AlertDialog.Builder(MainActivity.*this*)  
 .setTitle("Select Car")  
 .setIcon(R.drawable.*ic\_cars*)  
 .setItems(cars, *new DialogInterface*.OnClickListener() {  
 @Override  
 *public void* onClick(*DialogInterface* dialog, *int* which) {  
 String car = cars[which];  
 Toast.*makeText*(MainActivity.*this*, "You choose a :"+car, Toast.*LENGTH\_LONG*).show();  
 }  
 })  
 .create();  
 alertDialog.show();  
 }  
 });  
  
*// Checkbox Dialoge:* btn\_AD\_3.setOnClickListener(*new* View.OnClickListener() {  
 @Override  
 *public void* onClick(View v) {  
  
 *final* String[] car = *new* String[1];  
 String[] cars = getResources().getStringArray(R.array.*cars*);  
 *boolean*[] carHasChecked = *new boolean*[] {*false*, *false*, *false*,*false*, *false*, *false*};  
 AlertDialog dialog = *new* AlertDialog.Builder(MainActivity.*this*)  
  
 .setTitle("Select Car")  
  
 .setIcon(R.drawable.*ic\_cars*)  
  
 .setNegativeButton("Cancel", *new DialogInterface*.OnClickListener() {  
 @Override  
 *public void* onClick(*DialogInterface* dialog, *int* which) {  
 dialog.dismiss();  
 }  
 })  
  
 .setPositiveButton("Buy", *new DialogInterface*.OnClickListener() {  
 @Override  
 *public void* onClick(*DialogInterface* dialog, *int* which) {  
 Toast.*makeText*(MainActivity.*this*, "You Bought " + car[0], Toast.*LENGTH\_SHORT*).show();

}  
 })  
  
 .setMultiChoiceItems(cars, carHasChecked, *new DialogInterface*.OnMultiChoiceClickListener() {  
 @Override  
 *public void* onClick(*DialogInterface* dialog, *int* which, *boolean* isChecked) {  
 car[0] = cars[which];  
 Toast.*makeText*(MainActivity.*this*, "You choose " + car[0], Toast.*LENGTH\_LONG*).show();  
 }  
 })  
 .setCancelable(*false*)  
 .create();  
 dialog.show();  
 }  
 });  
 }  
}

**Time picker**

**TimePickerDialog dialog = new TimePickerDialog(**

**MainActivity.this,**

**new TimePickerDialog.OnTimeSetListener() {**

**@Override**

**public void onTimeSet(TimePicker view, int hourOfDay, int minute) {**

**tvTime.setText("Time: " + hourOfDay + ":" + minute);**

**}**

**},**

**10,**

**12,**

**true**

**);**

**dialog.show();**

**Time picker**

**XML PICKERS**

<?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/tv\_time"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="176dp"  
 android:text="Time: --:--"  
 android:textColor="@color/black"  
 android:textSize="24sp"  
 android:textStyle="bold"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.498"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent" />  
  
 <Button  
 android:id="@+id/btn\_set\_time"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="Set Time"  
 android:textSize="18sp"  
 android:layout\_marginTop="16dp"  
 app:layout\_constraintEnd\_toEndOf="@+id/tv\_time"  
 app:layout\_constraintStart\_toStartOf="@+id/tv\_time"  
 app:layout\_constraintTop\_toBottomOf="@+id/tv\_time" />  
  
</androidx.constraintlayout.widget.ConstraintLayout>

Main.Activity picker

TimePickerDialog dialog = new TimePickerDialog(

MainActivity.this,

new TimePickerDialog.OnTimeSetListener() {

@Override

public void onTimeSet(TimePicker view, int hourOfDay, int minute) {

tvTime.setText("Time: " + hourOfDay + ":" + minute);

}

},

10,

12,

true

);

dialog.show();

package com.example.pickers;  
  
import androidx.appcompat.app.AppCompatActivity;  
  
import android.app.TimePickerDialog;  
import android.os.Bundle;  
import android.text.format.DateFormat;  
import android.view.View;  
import android.widget.Button;  
import android.widget.TextView;  
import android.widget.TimePicker;  
  
import java.util.Calendar;  
  
public class MainActivity extends AppCompatActivity {  
 Button btnSetTime;  
 TextView tvTime;  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_main*);  
  
 btnSetTime = findViewById(R.id.*btn\_set\_time*);  
 tvTime = findViewById(R.id.*tv\_time*);  
  
 btnSetTime.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View v) {  
  
 Calendar calendar = Calendar.*getInstance*();  
 int hour = calendar.get(Calendar.*HOUR\_OF\_DAY*);  
 int min = calendar.get(Calendar.*MINUTE*);  
 boolean is24HourView = DateFormat.*is24HourFormat*(MainActivity.this);  
  
 TimePickerDialog dialog = new TimePickerDialog(  
 MainActivity.this,  
 new TimePickerDialog.OnTimeSetListener() {  
 @Override  
 public void onTimeSet(TimePicker view, int hourOfDay, int minute) {  
 tvTime.setText("Time: " + hourOfDay + ":" + minute);  
 }  
 },  
 hour,  
 min,  
 is24HourView  
 );  
 dialog.show();  
  
 */\*  
 //Ya esay karlo  
 MyTimePickerDialog dialog = new MyTimePickerDialog();  
 dialog.show(getSupportFragmentManager(), "TIMER");  
 \*/* }  
 });  
 }  
}

MyTimePickerDialoge

package com.example.pickers;  
  
import android.app.Dialog;  
import android.app.TimePickerDialog;  
import android.os.Bundle;  
import android.widget.TextView;  
import android.widget.TimePicker;  
  
import androidx.annotation.NonNull;  
import androidx.annotation.Nullable;  
import androidx.fragment.app.DialogFragment;  
  
public class MyTimePickerDialog extends DialogFragment {  
 @NonNull  
 @Override  
 public Dialog onCreateDialog(@Nullable Bundle savedInstanceState) {  
 TimePickerDialog dialog = new TimePickerDialog(  
 getActivity(),  
 new TimePickerDialog.OnTimeSetListener() {  
 @Override  
 public void onTimeSet(TimePicker view, int hourOfDay, int minute) {  
 TextView tvText = getActivity().findViewById(R.id.*tv\_time*);  
 tvText.setText("Time: " + hourOfDay + ":" + minute);  
 }  
 },  
 10,  
 12,  
 true  
 );  
  
 return dialog;  
 }  
}

**DATE picker**

**Datepicker 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/tv\_set\_date"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="Set Date"  
 android:textSize="24sp"  
 android:textColor="@color/black"  
 android:textStyle="bold"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintLeft\_toLeftOf="parent"  
 app:layout\_constraintRight\_toRightOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent" />  
  
</androidx.constraintlayout.widget.ConstraintLayout>

**Main.activity datepicker**

package com.example.datepicker;  
  
import androidx.annotation.RequiresApi;  
import androidx.appcompat.app.AppCompatActivity;  
  
import android.app.DatePickerDialog;  
import android.os.Build;  
import android.os.Bundle;  
import android.view.View;  
import android.widget.DatePicker;  
import android.widget.TextView;  
  
import java.util.Calendar;  
  
public class MainActivity extends AppCompatActivity {  
 TextView tvSetDate;  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_main*);  
  
 tvSetDate = findViewById(R.id.*tv\_set\_date*);  
  
 tvSetDate.setOnClickListener(new View.OnClickListener() {  
 @RequiresApi(api = Build.VERSION\_CODES.*N*)  
 @Override  
 public void onClick(View v) {  
  
 Calendar calendar = Calendar.*getInstance*();  
 int day = calendar.get(Calendar.*DAY\_OF\_MONTH*);  
 int month = calendar.get(Calendar.*MONTH*);  
 int year = calendar.get(Calendar.*YEAR*);  
  
 DatePickerDialog dialog = new DatePickerDialog(  
 MainActivity.this,  
 new DatePickerDialog.OnDateSetListener() {  
 @Override  
 public void onDateSet(DatePicker view, int year, int month, int dayOfMonth) {  
 tvSetDate.setText(dayOfMonth + "/" + setMonth((month + 1)) + "/" + year);  
 }  
 },  
 year,  
 month,  
 day  
 );  
 dialog.show();  
 }  
 });  
 }  
  
 private String setMonth(int month) {  
 if (month == 1)  
 return "JAN";  
 else if (month == 2)  
 return "FEB";  
 else if (month == 3)  
 return "MAR";  
 else if (month == 4)  
 return "APR";  
 else if (month == 5)  
 return "MAY";  
 else if (month == 6)  
 return "JUN";  
 else if (month == 7)  
 return "JUL";  
 else if (month == 8)  
 return "AUG";  
 else if (month == 9)  
 return "SEP";  
 else if (month == 10)  
 return "OCT";  
 else if (month == 11)  
 return "NOV";  
 else if (month == 12)  
 return "DEC";  
 else  
 return "JAN";  
 }  
}

**Save Instance**

**package com.example.project2onsaveonrestore;**

**import androidx.annotation.NonNull;**

**import androidx.annotation.Nullable;**

**import androidx.appcompat.app.AppCompatActivity;**

**import androidx.constraintlayout.widget.ConstraintLayout;**

**import android.os.Bundle;**

**import android.view.View;**

**import android.widget.EditText;**

**import android.widget.TextView;**

**public class MainActivity extends AppCompatActivity {**

**TextView tvCount;**

**ConstraintLayout rootLayout;**

**int count = 0;**

**@Override**

**protected void onCreate(@Nullable Bundle savedInstanceState) {**

**super.onCreate(savedInstanceState);**

**setContentView(R.layout.activity\_main);**

**tvCount = findViewById(R.id.tv\_count);**

**rootLayout = findViewById(R.id.root\_layout);**

**rootLayout.setOnClickListener(new View.OnClickListener() {**

**@Override**

**public void onClick(View v) {**

**count++;**

**tvCount.setText("" + count);**

**}**

**});**

**}**

**@Override**

**protected void onSaveInstanceState(@NonNull Bundle outState) {**

**super.onSaveInstanceState(outState);**

**outState.putInt("COUNTER", count);**

**}**

**@Override**

**protected void onRestoreInstanceState(@NonNull Bundle savedInstanceState) {**

**super.onRestoreInstanceState(savedInstanceState);**

**count = savedInstanceState.getInt("COUNTER");**

**tvCount.setText("" + count);**

**}**

**}**

**My Custom Toast**

**Main Actitvity of MyCustomToast**

package com.example.new\_custom\_toast;  
  
import androidx.appcompat.app.AppCompatActivity;  
  
import android.os.Bundle;  
import android.view.Gravity;  
import android.view.LayoutInflater;  
import android.view.View;  
import android.widget.Button;  
import android.widget.ImageView;  
import android.widget.TextView;  
import android.widget.Toast;  
  
public class MainActivity extends AppCompatActivity {  
 Button btn\_CToast;  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_main*);  
 btn\_CToast = findViewById(R.id.*btn\_CToast*);  
 btn\_CToast.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View v) {  
 MyCustomToast.*makeText*(MainActivity.this, "gfagaigiAUHUIHqgiuhQG", MyCustomToast.*LENGTH\_LONG*, R.drawable.*ic\_warning*).show();  
 }  
 });  
 }  
}

**MyCustomToast (seperet Class)**

package com.example.new\_custom\_toast;  
  
import android.app.Activity;  
import android.app.Application;  
import android.content.Context;  
import android.view.Gravity;  
import android.view.LayoutInflater;  
import android.view.View;  
import android.widget.ImageView;  
import android.widget.TextView;  
import android.widget.Toast;  
  
public class MyCustomToast extends Toast {  
  
 private TextView tvToast;  
 private ImageView ivToast;  
  
 public MyCustomToast(Context context) {  
 super(context);  
  
 //LayoutInflater inflater = LayoutInflater.from(context);  
 View layout = LayoutInflater.*from*(context).inflate(R.layout.*cusom\_toast\_layout*, null);  
 setDuration(*LENGTH\_LONG*);  
 setGravity(Gravity.*CENTER*, 0, 0);  
 setView(layout);  
 }  
  
 public MyCustomToast(Context context, String message, int duration, int imageResId) {  
 super(context);  
  
 View layout = LayoutInflater.*from*(context).inflate(R.layout.*cusom\_toast\_layout*, null);  
 setDuration(duration);  
 tvToast = layout.findViewById(R.id.*tv\_toast*);  
 ivToast = layout.findViewById(R.id.*iv\_toast*);  
 setGravity(Gravity.*CENTER*, 0, 0);  
 setIvToast(imageResId);  
 setTvToast(message);  
 setView(layout);  
 }  
  
 public static MyCustomToast makeText (Context context, String message, int duration, int imageResID) {  
 MyCustomToast toast = new MyCustomToast(context, message, duration, imageResID);  
 return toast;  
 }  
  
 public void setTvToast(String message) {  
 tvToast.setText(message);  
 }  
  
 public void setIvToast(int imageResID) {  
 ivToast.setImageResource(imageResID);  
  
 }  
}

**Calculator**

**Lecture\_2**

**Date: 24/11/2021**

**XML.Main 1**

<?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:padding="16dp"

android:layout\_gravity="center"

android:layout\_height="match\_parent"

tools:context=".MainActivity">

<EditText

android:id="@+id/etUserName"

android:layout\_width="0dp"

android:layout\_height="wrap\_content"

android:hint="Enter No 1"

android:inputType="number"

android:textSize="20sp"

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintHorizontal\_bias="0.0"

app:layout\_constraintLeft\_toLeftOf="parent"

app:layout\_constraintRight\_toRightOf="parent"

app:layout\_constraintTop\_toTopOf="parent"

app:layout\_constraintVertical\_bias="0.107" />

<EditText

android:id="@+id/etPassword"

android:layout\_width="0dp"

android:layout\_height="wrap\_content"

android:hint="Enter Second NO"

android:textSize="20sp"

android:inputType="number"

app:layout\_constraintHorizontal\_bias="1.0"

app:layout\_constraintLeft\_toLeftOf="@id/etUserName"

app:layout\_constraintRight\_toRightOf="@id/etUserName"

app:layout\_constraintTop\_toBottomOf="@id/etUserName"

/>

<Button

android:id="@+id/btn\_plus"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_marginTop="88dp"

android:text="+"

android:textSize="36sp"

android:textAllCaps="false"

app:layout\_constraintLeft\_toLeftOf="@id/etPassword"

app:layout\_constraintTop\_toBottomOf="@id/etPassword"

app:layout\_constraintRight\_toLeftOf="@id/btn\_Cancel"

/>

<Button

android:id="@+id/btn\_Cancel"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_marginTop="88dp"

android:text="Cancel"

android:textAllCaps="false"

app:layout\_constraintLeft\_toRightOf="@id/btn\_plus"

app:layout\_constraintRight\_toRightOf="@id/etPassword"

app:layout\_constraintTop\_toBottomOf="@id/etPassword"

app:layout\_constraintVertical\_bias="0.0" />

<TextView

android:id="@+id/tvUserName"

android:layout\_width="0dp"

android:layout\_height="wrap\_content"

android:text="Result"

android:textSize="20sp"

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintHorizontal\_bias="0.0"

app:layout\_constraintLeft\_toLeftOf="@id/etPassword"

app:layout\_constraintRight\_toRightOf="@id/etPassword"

app:layout\_constraintTop\_toBottomOf="@id/btn\_plus"

app:layout\_constraintVertical\_bias="0.107" />

<TextView

android:id="@+id/tvPassword"

android:layout\_width="0dp"

android:layout\_height="wrap\_content"

android:hint="Password"

android:textSize="20sp"

android:inputType="textPassword"

app:layout\_constraintHorizontal\_bias="1.0"

app:layout\_constraintLeft\_toLeftOf="@id/tvUserName"

app:layout\_constraintRight\_toRightOf="@id/tvUserName"

app:layout\_constraintTop\_toBottomOf="@id/tvUserName"

/>

</androidx.constraintlayout.widget.ConstraintLayout>

**XML.Main 2**

<?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:padding="16dp"

android:layout\_gravity="center"

android:layout\_height="match\_parent"

tools:context=".MainActivity">

<EditText

android:id="@+id/etUserName"

android:layout\_width="0dp"

android:layout\_height="wrap\_content"

android:hint="Enter No 1"

android:inputType="number"

android:textSize="20sp"

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintHorizontal\_bias="0.0"

app:layout\_constraintLeft\_toLeftOf="parent"

app:layout\_constraintRight\_toRightOf="parent"

app:layout\_constraintTop\_toTopOf="parent"

app:layout\_constraintVertical\_bias="0.107" />

<EditText

android:id="@+id/etPassword"

android:layout\_width="0dp"

android:layout\_height="wrap\_content"

android:hint="Enter Second NO"

android:textSize="20sp"

android:inputType="number"

app:layout\_constraintHorizontal\_bias="1.0"

app:layout\_constraintLeft\_toLeftOf="@id/etUserName"

app:layout\_constraintRight\_toRightOf="@id/etUserName"

app:layout\_constraintTop\_toBottomOf="@id/etUserName"

/>

<Button

android:id="@+id/btn\_plus"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_marginTop="88dp"

android:text="+"

android:textSize="36sp"

android:textAllCaps="false"

app:layout\_constraintLeft\_toLeftOf="@id/etPassword"

app:layout\_constraintTop\_toBottomOf="@id/etPassword"

app:layout\_constraintRight\_toLeftOf="@id/btn\_Cancel"

/>

<Button

android:id="@+id/btn\_Cancel"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_marginTop="88dp"

android:text="Cancel"

android:textAllCaps="false"

app:layout\_constraintLeft\_toRightOf="@id/btn\_plus"

app:layout\_constraintRight\_toRightOf="@id/etPassword"

app:layout\_constraintTop\_toBottomOf="@id/etPassword"

app:layout\_constraintVertical\_bias="0.0" />

<TextView

android:id="@+id/tvUserName"

android:layout\_width="0dp"

android:layout\_height="wrap\_content"

android:text="Result"

android:textSize="20sp"

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintHorizontal\_bias="0.0"

app:layout\_constraintLeft\_toLeftOf="@id/etPassword"

app:layout\_constraintRight\_toRightOf="@id/etPassword"

app:layout\_constraintTop\_toBottomOf="@id/btn\_plus"

app:layout\_constraintVertical\_bias="0.107" />

<TextView

android:id="@+id/tvPassword"

android:layout\_width="0dp"

android:layout\_height="wrap\_content"

android:hint="Password"

android:textSize="20sp"

android:inputType="textPassword"

app:layout\_constraintHorizontal\_bias="1.0"

app:layout\_constraintLeft\_toLeftOf="@id/tvUserName"

app:layout\_constraintRight\_toRightOf="@id/tvUserName"

app:layout\_constraintTop\_toBottomOf="@id/tvUserName"

/>

</androidx.constraintlayout.widget.ConstraintLayout>

**MainActivity.java1**

package com.example.new\_android\_project;

import androidx.appcompat.app.AppCompatActivity;

import android.os.Bundle;

import android.view.View;

import android.widget.Button;

import android.widget.EditText;

import android.widget.TextView;

public class MainActivity extends AppCompatActivity {

EditText etUserName, etPassword;

Button btn\_Login,btn\_Cancel;

TextView tvUserName, tvPassword;

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.*activity\_main*);

etUserName = findViewById(R.id.*etUserName*);

etPassword = findViewById(R.id.*etPassword*);

btn\_Login = findViewById(R.id.*btn\_plus*);

btn\_Cancel = findViewById(R.id.*btn\_Cancel*);

tvUserName = findViewById(R.id.*tvUserName*);

tvPassword = findViewById(R.id.*tvPassword*);

btn\_Login.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View v) {

int no1;

int no2;

try {

no1 = Integer.*parseInt*(etUserName.getText().toString());

no2 = Integer.*parseInt*(etPassword.getText().toString());

} catch (Exception e) {

no1 = 0;

no2 = 0;

}

int result = no1 + no2;

tvUserName.setText(String.*valueOf*(result));

}

});

}

}

**MainAcitivity.java2**

package com.example.new\_android\_project;

import androidx.appcompat.app.AppCompatActivity;

import android.os.Bundle;

import android.view.View;

import android.widget.Button;

import android.widget.Toast;

public class MainActivity2 extends AppCompatActivity {

Button showToast;

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.*activity\_main2*);

showToast = findViewById(R.id.*show\_toast*);

showToast.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View v) {

Toast.*makeText*(MainActivity2.this, R.string.*toast*, Toast.*LENGTH\_LONG*).show();

}

});

}

}

**Lecture 3**

**25/11/2021**

**XML Main**

<?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">  
  
 <Button  
 android:id="@+id/show\_default\_toast"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="@dimen/default\_margin\_top"  
 android:text="@string/default\_toast"  
 app:layout\_constraintBottom\_toTopOf="@id/show\_custom\_toast"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.5"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"  
 app:layout\_constraintVertical\_bias="0.5"  
 app:layout\_constraintVertical\_chainStyle="packed" />  
  
 <Button  
 android:id="@+id/show\_custom\_toast"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="24dp"  
 android:text="@string/show\_custom\_toast"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="@id/show\_default\_toast"  
 app:layout\_constraintHorizontal\_bias="0.5"  
 app:layout\_constraintStart\_toStartOf="@id/show\_default\_toast"  
 app:layout\_constraintTop\_toBottomOf="@id/show\_default\_toast" />  
</androidx.constraintlayout.widget.ConstraintLayout>

**Main Activity .java**

package com.example.customtoast;  
  
import androidx.appcompat.app.AppCompatActivity;  
  
import android.os.Bundle;  
import android.view.Gravity;  
import android.view.LayoutInflater;  
import android.view.View;  
import android.widget.Button;  
import android.widget.ImageView;  
import android.widget.TextView;  
import android.widget.Toast;  
  
import org.w3c.dom.Text;  
  
public class MainActivity extends AppCompatActivity {  
 Button showDefaultToast, showCustomToast;  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_main*);  
  
 showDefaultToast = findViewById(R.id.*show\_default\_toast*);  
 showDefaultToast.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View v) {  
 Toast.*makeText*(MainActivity.this, "Inside Anonymous", Toast.*LENGTH\_LONG*).show();  
 }  
 });  
  
 showCustomToast = findViewById(R.id.*show\_custom\_toast*);  
 showCustomToast.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View v) {  
 Toast toast = new Toast(MainActivity.this);  
 LayoutInflater inflater = LayoutInflater.*from*(MainActivity.this);  
 View layout = inflater.inflate(R.layout.*custom\_toast\_layout*, findViewById(R.id.*root\_layout*));  
 toast.setDuration(Toast.*LENGTH\_LONG*);  
 ImageView ivToast = layout.findViewById(R.id.*iv\_toast*);  
 TextView tvToast = layout.findViewById(R.id.*tv\_toast*);  
 ivToast.setImageResource(R.drawable.*ic\_launcher\_foreground*);  
 tvToast.setText("Hello");  
 toast.setGravity(Gravity.*TOP* | Gravity.*CENTER\_HORIZONTAL*, 0, 30);  
 toast.setView(layout);  
 toast.show();  
  
 }  
 });  
  
 }  
}

**Custom\_Toast\_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:id="@+id/root\_layout"  
 android:background="#FF0000"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent">  
  
 <ImageView  
 android:id="@+id/iv\_toast"  
 android:layout\_width="24dp"  
 android:layout\_height="24dp"  
 android:src="@drawable/ic\_warning"  
 app:tint="@color/white"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toStartOf="@+id/tv\_toast"  
 app:layout\_constraintHorizontal\_bias="0.5"  
 app:layout\_constraintHorizontal\_chainStyle="packed"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent" />  
  
 <TextView  
 android:id="@+id/tv\_toast"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="50dp"  
 android:layout\_marginLeft="16dp"  
 android:textColor="@color/white"  
 android:textStyle="bold"  
 android:gravity="center"  
 android:text="@string/tv\_toast"  
 android:textSize="18sp"  
 app:layout\_constraintBottom\_toBottomOf="@id/iv\_toast"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.5"  
 app:layout\_constraintStart\_toEndOf="@+id/iv\_toast"  
 app:layout\_constraintTop\_toTopOf="@id/iv\_toast" />  
  
  
</androidx.constraintlayout.widget.ConstraintLayout>

**Ic\_warning\_XML\_color**

<vector xmlns:android="http://schemas.android.com/apk/res/android"  
 android:width="24dp"  
 android:height="24dp"  
 android:viewportWidth="24"  
 android:viewportHeight="24"  
 android:tint="?attr/colorControlNormal">  
 <path  
 android:fillColor="@android:color/white"  
 android:pathData="M1,21h22L12,2 1,21zM13,18h-2v-2h2v2zM13,14h-2v-4h2v4z"/>  
</vector>

**Dimens\_XML**

<?xml version="1.0" encoding="utf-8"?>  
<resources>  
 <dimen name="default\_margin\_top">26dp</dimen>  
</resources>

**String\_XML**

<resources>  
 <string name="app\_name">CustomToast</string>  
 <string name="default\_toast">Show Default Toast</string>  
 <string name="show\_custom\_toast">Show Custom Toast</string>  
 <string name="tv\_toast">Smoking is injurious to health</string>  
  
</resources>

**BUILDER\_DESIGN\_PATERAN**

**Main.Class**

*package* com.gmail.hassan;  
  
*public class* Main {  
  
 *public static void* main(String[] args) {  
 Car car = *new* Car.Builder()  
 .setBuild("Honda")  
 .setCarGearType("Auto")  
 .build();  
  
 }  
}

**CAR**

*package* com.gmail.hassan;  
  
*public class* Car {  
  
 *private* Car(Builder builder) {  
 *this*.fuelType = builder.fuelType;  
 *this*.hasPowerMirrors = builder.hasPowerMirrors;  
 *this*.hasPowerStarting = builder.hasPowerStarting;  
 *this*.model = builder.model;  
 *this*.build = builder.build;  
 *this*.carGearType = builder.carGearType;  
 }  
  
 *private* String fuelType;  
 *private boolean* hasPowerMirrors;  
 *private boolean* hasPowerStarting;  
 *private short* model;  
 *private* String build;  
 *private* String carGearType;  
  
 *public static class* Builder {  
 *public* Builder() {  
  
 }  
  
 *private* String fuelType;  
 *private boolean* hasPowerMirrors;  
 *private boolean* hasPowerStarting;  
 *private short* model;  
 *private* String build;  
 *private* String carGearType;  
  
 *public* Builder setFuelType(String fuelType) {  
 *this*.fuelType = fuelType;  
 *return this*;  
 }  
  
 *public* Builder setHasPowerMirrors(*boolean* hasPowerMirrors) {  
 *this*.hasPowerMirrors = hasPowerMirrors;  
 *return this*;  
 }  
  
 *public* Builder setHasPowerStarting(*boolean* hasPowerStarting) {  
 *this*.hasPowerStarting = hasPowerStarting;  
 *return this*;  
 }  
  
 *public* Builder setModel(*short* model) {  
 *this*.model = model;  
 *return this*;  
 }  
  
 *public* Builder setBuild(String build) {  
 *this*.build = build;  
 *return this*;  
 }  
  
 *public* Builder setCarGearType(String carGearType) {  
 *this*.carGearType = carGearType;  
 *return this*;  
 }  
  
 *public* Car build() {  
 Car car = *new* Car(*this*);  
 *return* car;  
 }  
 }  
  
  
 *public* String getFuelType() {  
 *return* fuelType;  
 }  
  
 *public boolean* isHasPowerMirrors() {  
 *return* hasPowerMirrors;  
 }  
  
 *public boolean* isHasPowerStarting() {  
 *return* hasPowerStarting;  
 }  
  
 *public short* getModel() {  
 *return* model;  
 }  
  
 *public* String getBuild() {  
 *return* build;  
 }  
  
 *public* String getCarGearType() {  
 *return* carGearType;  
 }  
  
}

**Action Registered**

*package* com.example.implicitintent;  
  
*import* androidx.activity.result.ActivityResult;  
*import* androidx.activity.result.*ActivityResultCallback*;  
*import* androidx.activity.result.ActivityResultLauncher;  
*import* androidx.activity.result.contract.ActivityResultContract;  
*import* androidx.activity.result.contract.ActivityResultContracts;  
*import* androidx.annotation.NonNull;  
*import* androidx.annotation.Nullable;  
*import* androidx.appcompat.app.AppCompatActivity;  
  
*import* android.content.Context;  
*import* android.content.Intent;  
*import* android.net.Uri;  
*import* android.os.Bundle;  
*import* android.view.View;  
*import* android.widget.Button;  
*import* android.widget.EditText;  
*import* android.widget.Toast;  
  
*public class* MainActivity *extends* AppCompatActivity {  
 EditText etMessage;  
 Button btnSend;  
  
 @Override  
 *protected void* onCreate(Bundle savedInstanceState) {  
 *super*.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_main*);  
  
 etMessage = findViewById(R.id.*et\_message*);  
 btnSend = findViewById(R.id.*btn\_send*);  
  
 btnSend.setOnClickListener(*new* View.OnClickListener() {  
 @Override  
 *public void* onClick(View v) {  
 Intent intent = *new* Intent();  
 intent.setAction(Intent.*ACTION\_SEND*);  
 String message = etMessage.getText().toString();  
 intent.putExtra(Intent.*EXTRA\_TEXT*, message);  
 intent.setType("text/plain");  
  
 *if* (intent.resolveActivity(getPackageManager()) != *null*) {  
 startActivity(intent);  
 } *else* {  
 Toast.*makeText*(MainActivity.*this*, "No activity found", Toast.*LENGTH\_SHORT*).show();  
 }  
 }  
 });  
  
  
  
 }  
}