

CO-4

Experiment-1

Develop an application that use GridView with images and display Alert box on selection

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">

    <GridView
        android:layout_width="match_parent"
        android:layout_height="match_parent"
        android:id="@+id/gvitem"
        android:horizontalSpacing="6dp"
        android:verticalSpacing="6dp"
        android:numColumns="2"/>

</androidx.constraintlayout.widget.ConstraintLayout>
```

Card_item.xml

```
<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout
xmlns:android="http://schemas.android.com/apk/res/android"
xmlns:tools="http://schemas.android.com/tools"
android:layout_width="match_parent"
android:layout_height="120dp"
android:layout_gravity="center"
android:layout_margin="5dp"
android:elevation="5dp">
    <LinearLayout
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:orientation="vertical"
        tools:ignore="MissingConstraints">
        <ImageView
            android:layout_width="100dp"
            android:layout_height="100dp"
            android:id="@+id/ivimage"
            android:layout_gravity="center"
            android:src="@mipmap/ic_launcher"/>
        <TextView
            android:layout_width="match_parent"
```

```

        android:layout_height="wrap_content"
        android:id="@+id/tvtext"
        android:text="@string/app_name"
        android:textAlignment="center"/>
    </LinearLayout>

</androidx.constraintlayout.widget.ConstraintLayout>

```

ImageModel.java

```

package com.example.gridview;

public class ImageModel {
    private String img_name;
    private int imgid;
    public ImageModel(String img_name,int imgid){
        this.img_name=img_name;
        this.imgid=imgid;
    }
    public String getImg_name(){
        return img_name;
    }
    public void setImg_name(String img_name){
        this.img_name=img_name;
    }
    public int getImgid(){
        return imgid;
    }
    public void setImgid(int imgid){
        this.imgid=imgid;
    }
}

```

ImGVAdapter.java

```

package com.example.gridview;

import android.content.Context;
import android.view.LayoutInflater;
import android.view.View;
import android.view.ViewGroup;
import android.widget.ArrayAdapter;
import android.widget.ImageView;
import android.widget.TextView;

import androidx.annotation.NonNull;
import androidx.annotation.Nullable;

import java.util.ArrayList;

public class ImGVAdapter extends ArrayAdapter<ImageModel> {

    public ImGVAdapter(@NonNull Context context, ArrayList<ImageModel>
    imageModelArrayList) {

```

```

        super(context, 0,imageModelArrayList);
    }
    @NonNull
    @Override
    public View getView(int position, @Nullable View convertView, @NonNull ViewGroup
parent){

        View listitemView=convertView;
        if (listitemView==null){
            listitemView= LayoutInflater.from(getContext()).inflate(R.layout.card_item,parent,false);
        }
        ImageModel imageModel=getItem(position);
        TextView imTV=listitemView.findViewById(R.id.tvtext);
        ImageView imIV=listitemView.findViewById(R.id.ivimage);
        imTV.setText(imageModel.getImg_name());
        imIV.setImageResource(imageModel.getImgid());
        return listitemView;
    }
}

```

Activity_Main.java

```

package com.example.gridview;

import androidx.appcompat.app.AppCompatActivity;

import android.os.Bundle;
import android.widget.GridView;

import java.util.ArrayList;

public class MainActivity extends AppCompatActivity {
    GridView imageGV;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        imageGV=findViewById(R.id.gvitem);
        ArrayList<ImageModel>imageModelArrayList=new ArrayList<ImageModel>();
        imageModelArrayList.add(new ImageModel("Medicine",R.drawable.image));
        imageModelArrayList.add(new ImageModel("Doctor",R.drawable.image2));
        imageModelArrayList.add(new ImageModel("Booking",R.drawable.image3));
        imageModelArrayList.add(new ImageModel("Hands",R.drawable.main));
        imageModelArrayList.add(new ImageModel("Appointment Booking",R.drawable.med2));
        imageModelArrayList.add(new ImageModel("Time",R.drawable.top));
        ImGVAdapter adapter=new ImGVAdapter(this,imageModelArrayList);
        imageGV.setAdapter(adapter);
    }
}

```

OUTPUT

