

# RecyclerView-

## ActivityMain.java-

```
package com.madlab.recyclerview;

import androidx.appcompat.app.AppCompatActivity;
import androidx.recyclerview.widget.LinearLayoutManager;
import androidx.recyclerview.widget.RecyclerView;
import android.os.Bundle;

public class MainActivity extends AppCompatActivity {

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);

        MyListData[] myListData = new MyListData[] {
            new MyListData("Email", android.R.drawable.ic_dialog_email),
            new MyListData("Info", android.R.drawable.ic_dialog_info),
            new MyListData("Delete", android.R.drawable.ic_delete),
            new MyListData("Dialer", android.R.drawable.ic_dialog_dialer),
            new MyListData("Alert", android.R.drawable.ic_dialog_alert),
            new MyListData("Map", android.R.drawable.ic_dialog_map),
            new MyListData("Email", android.R.drawable.ic_dialog_email),
            new MyListData("Info", android.R.drawable.ic_dialog_info),
            new MyListData("Delete", android.R.drawable.ic_delete),
            new MyListData("Dialer", android.R.drawable.ic_dialog_dialer),
            new MyListData("Alert", android.R.drawable.ic_dialog_alert),
            new MyListData("Map", android.R.drawable.ic_dialog_map),
        };

        RecyclerView recyclerView = (RecyclerView) findViewById(R.id.recyclerView);
        MyListAdapter adapter = new MyListAdapter(myListData);
        recyclerView.setHasFixedSize(true);
        recyclerView.setLayoutManager(new LinearLayoutManager(this));
        recyclerView.setAdapter(adapter);
    }
}
```

## MyListAdapter.java-

```
package com.madlab.recyclerview;

import android.view.LayoutInflater;
import android.view.View;
import android.view.ViewGroup;
import android.widget.ImageView;
import android.widget.RelativeLayout;
import android.widget.TextView;
import android.widget.Toast;

import androidx.recyclerview.widget.RecyclerView;

public class MyListAdapter extends RecyclerView.Adapter<MyListAdapter.ViewHolder>{
    private MyListData[] listdata;

    // RecyclerView recyclerView;
    public MyListAdapter(MyListData[] listdata) {
        this.listdata = listdata;
    }
}
```

```
}
@Override
public ViewHolder onCreateViewHolder(ViewGroup parent, int viewType) {
    LayoutInflater inflater = LayoutInflater.from(parent.getContext());
    View listItem = inflater.inflate(R.layout.list_items, parent, false);
    ViewHolder viewHolder = new ViewHolder(listItem);
    return viewHolder;
}

@Override
public void onBindViewHolder(ViewHolder holder, int position) {
    final MyListData myListData = listdata[position];
    holder.textView.setText(listdata[position].getDescription());
    holder.imageView.setImageResource(listdata[position].getImgId());
    holder.relativeLayout.setOnClickListener(new View.OnClickListener() {
        @Override
        public void onClick(View view) {
            Toast.makeText(view.getContext(), "click on item:
"+myListData.getDescription(), Toast.LENGTH_LONG).show();
        }
    });
}

@Override
public int getItemCount() {
    return listdata.length;
}

public static class ViewHolder extends RecyclerView.ViewHolder {
    public ImageView imageView;
    public TextView textView;
    public RelativeLayout relativeLayout;
    public ViewHolder(View itemView) {
        super(itemView);
        this.imageView = (ImageView) itemView.findViewById(R.id.imageView);
        this.textView = (TextView) itemView.findViewById(R.id.textView);
        relativeLayout =
(RelativeLayout) itemView.findViewById(R.id.relativeLayout);
    }
}
```

## MyListData.java-

```
package com.madlab.recyclerview;

public class MyListData{
    private String description;
    private int imgId;
    public MyListData(String description, int imgId) {
        this.description = description;
        this.imgId = imgId;
    }
    public String getDescription() {
        return description;
    }
    public void setDescription(String description) {
        this.description = description;
    }
    public int getImgId() {
        return imgId;
    }
    public void setImgId(int imgId) {
```

```
        this.imgId = imgId;
    }
}
```

## 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"
    android:background="#161616"
    tools:context=".MainActivity">

    <androidx.recyclerview.widget.RecyclerView
        xmlns:android="http://schemas.android.com/apk/res/android"
        xmlns:tools="http://schemas.android.com/tools"
        android:layout_width="match_parent"
        android:layout_height="match_parent"
        android:scrollbars="vertical"
        android:id="@+id/recyclerView"
        tools:context="example.javatpoint.com.recyclerviewlist.MainActivity"/>
</androidx.constraintlayout.widget.ConstraintLayout>
```

## List items.xml-

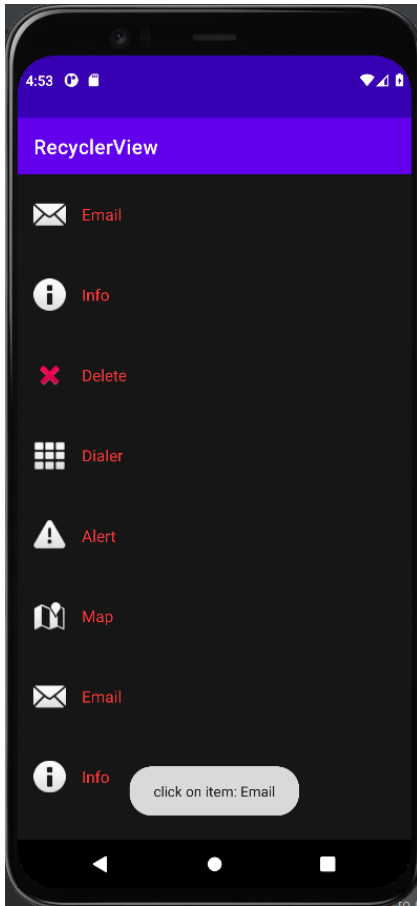
```
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    android:id="@+id/relativeLayout"
    android:layout_width="match_parent"
    android:layout_height="?android:attr/listPreferredItemHeightLarge"
    android:background="@drawable/border">

    <ImageView
        android:id="@+id/imageView"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_centerVertical="true"
        android:layout_alignParentStart="true"
        android:layout_alignParentLeft="true"
        android:layout_marginStart="@dimen/activity_horizontal_margin"
        android:layout_marginEnd="@dimen/activity_horizontal_margin"
        android:contentDescription="Icon" />

    <TextView
        android:id="@+id/textView"
        android:layout_width="wrap_content"
        android:layout_height="match_parent"
        android:layout_toEndOf="@id/imageView"
        android:layout_toRightOf="@id/imageView"
        android:gravity="center_vertical"
        android:textColor="#fe3839"
        android:textSize="16sp" />

</RelativeLayout>
```

## Output-



## SharedPreferences-

### ActivityMain.java-

```
package com.madlab.sharedpreference;

import androidx.appcompat.app.AppCompatActivity;

import android.content.SharedPreferences;
import android.os.Bundle;
import android.widget.EditText;
import android.widget.ImageView;

public class MainActivity extends AppCompatActivity {
    ImageView imageView;
    private EditText name, age;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        name = (EditText) findViewById(R.id.name);
        age = (EditText) findViewById(R.id.age);
    }
    @Override
```

```
protected void onResume() {
    super.onResume();
    SharedPreferences sh = getSharedPreferences("MySharedPref", MODE_PRIVATE);
    String s1 = sh.getString("name", "");
    int a = sh.getInt("age", 0);
    name.setText(s1);
    age.setText(String.valueOf(a));
}
@Override
protected void onPause() {
    super.onPause();
    SharedPreferences sharedPreferences = getSharedPreferences("MySharedPref",
MODE_PRIVATE);
    SharedPreferences.Editor myEdit = sharedPreferences.edit();
    myEdit.putString("name", name.getText().toString());
    myEdit.putInt("age", Integer.parseInt(age.getText().toString()));
    myEdit.apply();
}
}
```

### 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"
android:background="#e3e2de"
tools:context=".MainActivity">

    <TextView
        android:id="@+id/textview"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginTop="50dp"
        android:text="Shared Preference"
        android:textColor="@color/black"
        android:textSize="34sp"
        android:textStyle="bold"
        app:layout_constraintLeft_toLeftOf="parent"
        app:layout_constraintRight_toRightOf="parent"
        app:layout_constraintTop_toTopOf="parent" />

    <EditText
        android:id="@+id/name"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_below="@+id/textview"
        android:layout_marginTop="50dp"
        android:hint="Enter your Name"
        android:padding="10dp"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toBottomOf="@+id/age" />

    <EditText
        android:id="@+id/age"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_below="@+id/name"
        android:layout_marginTop="50dp"
        android:hint="Enter your Age"
        android:inputType="number"
        android:padding="10dp"
        app:layout_constraintEnd_toEndOf="parent"
```

```
app:layout_constraintStart_toStartOf="parent"
app:layout_constraintTop_toBottomOf="@+id/textview" />

<ImageView
    android:id="@+id/imageView"
    android:layout_width="493dp"
    android:layout_height="601dp"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.5"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toBottomOf="@+id/name"
    app:layout_constraintVertical_bias="0.0"
    app:srcCompat="@drawable/abc" />

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

## Output-

