

DAY-8

Name: Desai Sneha Sagarbhai

College: Government Engineering College, Modasa

activity_home.xml

```
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout 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:orientation="vertical"
    tools:context=".HomeActivity">

    <android.widget.SearchView android:id="@+id/search_bar"
        android:layout_width="match_parent"
        android:layout_height="50dp"
        app:queryHint="serch"
        android:drawablePadding="10dp"
        android:background="#0F0F0F"
        android:layout_marginVertical="10dp"
        android:layout_marginHorizontal="10dp"
        android:paddingHorizontal="10dp"/>

    <TextView
        android:id="@+id/textView"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:text="products"
        android:textSize="25dp"
        android:layout_below="@id/search_bar"
        style="@style/TextAppearance.AppCompat.Body2"
        android:padding="10dp"/>

    <androidx.recyclerview.widget.RecyclerView
        android:id="@+id/products_recycler_view"
        android:layout_below="@id/textView"
        android:layout_width="match_parent"
        android:layout_height="match_parent"/>

</RelativeLayout>
```

HomeActivity.java

```
package com.example.sneha_task1;

import androidx.annotation.NonNull;
import androidx.appcompat.app.AppCompatActivity;
import androidx.core.content.ContextCompat;
import androidx.recyclerview.widget.DefaultItemAnimator;
import androidx.recyclerview.widget.RecyclerView;
import androidx.recyclerview.widget.StaggeredGridLayoutManager;

import android.content.Context;
import android.os.Bundle;
import android.view.LayoutInflater;
import android.view.View;
import android.view.ViewGroup;
import android.widget.ArrayAdapter;
import android.widget.ImageView;
```

```
import android.widget.SearchView;
import android.widget.TextView;

import java.util.ArrayList;
import java.util.List;
import java.util.Locale;

public class HomeActivity extends AppCompatActivity {
    RecyclerView recyclerView;
    SearchView searchView;
    String[] productsNames = new String[]{"Apple", "kiwi", "watermelon",
"Orange"};
    int[] imgIndex = {
        R.drawable.apple,
        R.drawable.kiwi,
        R.drawable.watermelon,
        R.drawable.orange
    };

    private List<ProductModel> productModels = new ArrayList<>();
    private ProductsAdapter adapter;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_home);
        getSupportActionBar().setTitle("Home");
        searchView = findViewById(R.id.search_bar);

        recyclerView = findViewById(R.id.products_recycler_view);
        recyclerView.setLayoutManager(new StaggeredGridLayoutManager(2,
StaggeredGridLayoutManager.VERTICAL
));
        recyclerView.setItemAnimator(new DefaultItemAnimator());

        int c = -1;
        for (String str : productsNames) {
            c++;
            productModels.add(new ProductModel(str, imgIndex[c]));
        }

        adapter = new ProductsAdapter(this, productModels);
        recyclerView.setAdapter(adapter);

        searchView = findViewById(R.id.search_bar);
        searchView.setOnQueryTextListener(new SearchView.OnQueryTextListener() {
            @Override
            public boolean onQueryTextSubmit(String s) {
                return false;
            }

            @Override
            public boolean onQueryTextChange(String s) {
                adapter.filter(s);
                return false;
            }
        });
    }
}
```

```

private static class ProductsAdapter extends
RecyclerView.Adapter<ProductsAdapter.Myholder> {
    Context context;
    List<ProductModel> productModelList;
    List<ProductModel> searchList = new ArrayList<>();

    public ProductsAdapter(Context context, List<ProductModel>
productModelList) {
        this.context = context;
        this.productModelList = productModelList;
        searchList.addAll(productModelList);
    }

    public void filter(String newText){
        if(newText.length() == 0){
            productModelList = searchList;
        }

        List<ProductModel> tempList = new ArrayList<>();
        for(ProductModel model : searchList){

            if(model.getName().toLowerCase().contains(newText.toLowerCase().trim()))
                tempList.add(model);
        }

        if(tempList.size() > 0)
            productModelList = tempList;

        notifyDataSetChanged();
    }

    @NonNull
    @Override
    public ProductsAdapter.Myholder onCreateViewHolder(@NonNull ViewGroup
parent, int viewType) {
        return new
Myholder(LayoutInflater.from(context).inflate(R.layout.activity_product__card,pare
nt,false));
    }

    @Override
    public void onBindViewHolder(@NonNull ProductsAdapter.Myholder holder, int
position) {
        holder.productImage.setImageDrawable(ContextCompat.getDrawable(context,productMode
lList.get(position).getImage()));
        holder.productText.setText(productModelList.get(position).getName());
    }

    @Override
    public int getItemCount() {
        return productModelList.size();
    }

    public static class Myholder extends RecyclerView.ViewHolder {
        TextView productText;
        ImageView productImage;

        public Myholder(@NonNull View itemView) {

```

```

        super(itemView);

        productText = itemView.findViewById(R.id.productText);
        productImage = itemView.findViewById(R.id.productImage);
    }
}
}

```

activity_product_card.xml

```

<?xml version="1.0" encoding="utf-8"?>
<androidx.cardview.widget.CardView
    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="wrap_content"
    android:layout_marginHorizontal="5dp"
    android:layout_marginVertical="5dp"
    android:elevation="8dp"
    app:cardCornerRadius="5dp"
    app:cardElevation="3.5dp">

    <LinearLayout
        android:id="@+id/linearlayout"
        android:layout_width="match_parent"
        android:layout_height="match_parent"
        android:orientation="vertical">

        <ImageView
            android:id="@+id/productImage"
            android:layout_width="match_parent"
            android:layout_height="160dp"
            android:scaleType="fitXY" />

        <FrameLayout
            android:layout_width="match_parent"
            android:layout_height="match_parent">

            <TextView
                android:id="@+id/productText"
                style="@style/TextAppearance.AppCompat.Body2"
                android:layout_width="match_parent"
                android:layout_height="wrap_content"
                android:background="#F8E6E6"
                android:paddingHorizontal="10dp"
                android:paddingVertical="10dp"
                android:textColor="@color/black"
                android:textSize="15dp" />

        </FrameLayout>
    </LinearLayout>
</androidx.cardview.widget.CardView>

```

AndroidManifest.xml

```
<?xml version="1.0" encoding="utf-8"?>
<manifest xmlns:android="http://schemas.android.com/apk/res/android"
    package="com.example.sneha_task1">

    <application
        android:allowBackup="true"
        android:icon="@drawable/ic_launcher_foreground"
        android:label="@string/app_name"
        android:roundIcon="@mipmap/ic_launcher_round"
        android:supportsRtl="true"
        android:theme="@style/Theme.Sneha_task1">
        <activity android:name=".ProductList"></activity>
        <activity android:name=".Product_Card" />
        <activity android:name=".HomeActivity" />
        <activity android:name=".SignupActivity" />
        <activity android:name=".LoginActivity" />
        <activity android:name=".splashmain">
            <intent-filter>
                <action android:name="android.intent.action.MAIN" />

                <category android:name="android.intent.category.LAUNCHER" />
            </intent-filter>
        </activity>
    </application>

</manifest>
```

