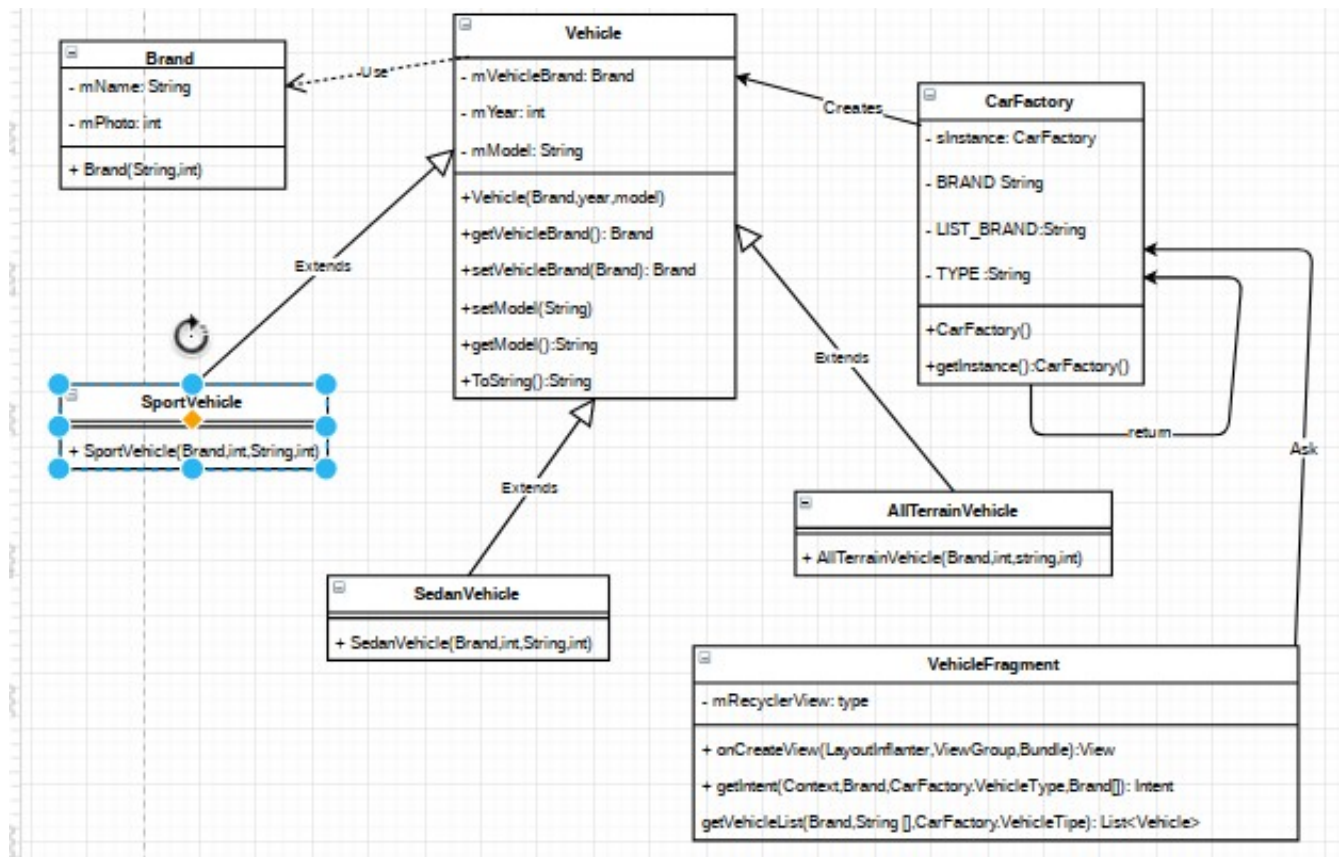


Nizar Sanchez (2018-6482)

Crear una aplicación que me de referencia de vehiculos deportivos, sedan, todo terreno. si quiero ver deportivos me muestre al menos 5 carros deportivos por marca para elegir si quiero ver sedan haga lo mismo y asi, si selecciono uno me muestre distintos años y modelo de ese. Usar uno de los tres patron de diseño mostrado en clase para resolver este problema. Crear un diagrama declase similiar al del ppt mostrando su resolusion de clases y organizar el código entendible. colocarlo en el WORD

Diagrama de clases UML:



AndroidManifest.xml

```
<?xml version="1.0" encoding="utf-8"?>
<manifest
xmlns:android="http://schemas.android.com/apk/res/android"
    package="com.example.tarea8">
    <application
        android:allowBackup="true"
        android:icon="@mipmap/ic_launcher"
        android:label="@string/app_name"
        android:roundIcon="@mipmap/ic_launcher_round"
        android:supportsRtl="true"
        android:theme="@style/AppTheme">
        <activity android:name=".TypeActivity">
            <intent-filter>
                <action
android:name="android.intent.action.MAIN" />
                <category
android:name="android.intent.category.LAUNCHER" />
            </intent-filter>
        </activity>
        <activity android:name=".BrandActivity">
        </activity>
        <activity android:name=".VehicleActivity">
        </activity>
    </application>
</manifest>
```

AllTerrainVehicle.java

```
package com.example.tarea8;
public class AllTerrainVehicle extends Vehicle {
    public AllTerrainVehicle(Brand brand,String model,int
year){
        super(brand,model,year);
    }
}
```

Brand.java

```
package com.example.tarea8;
import androidx.annotation.NonNull;
import java.io.Serializable;
public class Brand implements Serializable {
    private String mName;
    private int mPhoto;
    public Brand(String name, int photo) {
        mName = name;
        mPhoto = photo;
    }
    public String getName() {
        return mName;
    }
    public void setName(String name) {
        mName = name;
    }
    public int getPhoto() {
        return mPhoto;
    }
    public void setPhoto(int photo) {
        mPhoto = photo;
    }
    @NonNull
    @Override
    public String toString() {
        return getName();
    }
}
```

BrandActivity.java

```
package com.example.tarea8;
import androidx.fragment.app.Fragment;
public class BrandActivity extends SingleFragmentActivity {
    @Override
    protected Fragment createFragment() {
        return new BrandFragment();
    }
}
```

BrandFragment.java

```
package com.example.tarea8;
import android.content.Context;
import android.content.Intent;
import android.os.Bundle;
import android.view.LayoutInflater;
import android.view.View;
import android.view.ViewGroup;
import android.widget.ImageView;
import android.widget.TextView;
import androidx.annotation.NonNull;
import androidx.annotation.Nullable;
import androidx.fragment.app.Fragment;
import androidx.recyclerview.widget.LinearLayoutManager;
import androidx.recyclerview.widget.RecyclerView;
import java.util.ArrayList;
import java.util.List;
public class BrandFragment extends Fragment {
    private RecyclerView mRecyclerView;
    private List<Brand> mBrands;
    public static final String TYPE="Type";
    @Nullable
    @Override
    public View onCreateView(@NonNull LayoutInflater
inflater, @Nullable ViewGroup container, @Nullable Bundle
savedInstanceState) {
        View view =
inflater.inflate(R.layout.recycler_view,null,false);
        mBrands = new ArrayList<>();
    }
}
```

```

        mRecyclerView =
view.findViewById(R.id.recycler_view);
        mRecyclerView.setLayoutManager(new
LinearLayoutManager(getActivity()));
        CarFactory.VehicleType type =
(CarFactory.VehicleType)getActivity().getIntent().getSerial
izableExtra(TYPE);
        Brand brand1 = null;
        Brand brand2 = null;
        switch (type){
            case SPORTVEHICLE:
                brand1= new Brand("Ferrari",R.drawable.ferrari);
                brand2 = new
Brand("Lamborghini",R.drawable.lamborghini);
                break;
            case SEDAMVEHICLE:
                brand1 = new
Brand("Hyundai",R.drawable.hyundai);
                brand2 = new Brand("Honda",R.drawable.honda);
                break;
            case ALLTERRAINVEHICLE:
                brand1 = new Brand("Suzuki",R.drawable.suzuki);
                brand2 = new Brand("Yamaha",R.drawable.yamaha);
                break;
        }
        mBrands.add(brand1);
        mBrands.add(brand2);
        BrandAdapter brandAdapter = new
BrandAdapter(mBrands);
        mRecyclerView.setAdapter(brandAdapter);
        return view;
    }
    private class BrandAdapter extends
RecyclerView.Adapter<BrandHolder>{
        List<Brand> mBrands;
        public BrandAdapter( List<Brand> brands){
            mBrands= brands;
        }
        @NonNull
        @Override

```

```

        public BrandHolder onCreateViewHolder(@NonNull
ViewGroup parent, int viewType) {
            LayoutInflater inflater =
LayoutInflater.from(getContext());
            return new BrandHolder(inflater, parent, mBrands);
        }
        @Override
        public void onBindViewHolder(@NonNull BrandHolder
holder, int position) {
            holder.bind(mBrands.get(position));
        }
        @Override
        public int getItemCount() {
            return mBrands.size();
        }
    }
    private class BrandHolder extends
RecyclerView.ViewHolder implements View.OnClickListener {
        private ImageView mImageView;
        private TextView mTextView;
        private Brand mBrand;
        private List<Brand> mBrands;
        public BrandHolder(LayoutInflater inflater, ViewGroup
group, List<Brand> brands){
            super(inflater.inflate(R.layout.brand_list_item, group, false
));
            mImageView =
itemView.findViewById(R.id.image_view_brand);
            mTextView =
itemView.findViewById(R.id.text_view_name_brand);
            itemView.setOnClickListener(this);
            mBrands=brands;
        }
        @Override
        public void onClick(View v) {
            CarFactory.VehicleType vehicleType =
(CarFactory.VehicleType)
getActivity().getIntent().getSerializableExtra(TYPE);
            Brand [] brands = new Brand[2];
            for(int i=0; i<brands.length; i++){

```

```

        brands[i]= mBrands.get(i);
    }
    Intent intent =
VehicleFragment.getIntent(getContext(), mBrand,
vehicleType,brands);
    startActivity(intent);
}
    public void bind(Brand brand){
        mBrand= brand;
        mTextView.setText(brand.getName());
        mImageView.setImageResource(brand.getPhoto());
    }
}
    public static Intent getIntent(CarFactory.VehicleType
vehicleType, Context context){
        Intent intent = new
Intent(context,BrandActivity.class);
        intent.putExtra(TYPE,vehicleType);
        return intent;
    }
}
}

```

CarFactory.java

```

package com.example.tarea8;
public class CarFactory {
    private static CarFactory sCarFactory;
    private CarFactory(){
    }
    public static CarFactory get(){
        if(sCarFactory==null){
            sCarFactory = new CarFactory();
        }
        return sCarFactory;
    }
    public Vehicle getVehicle(VehicleType vehicleType,int
year,Brand brand,String model){
        switch (vehicleType){
            case SPORTVEHICLE:

```

```

        return new SportVehicle(brand,model,year);
    case SEDAMVEHICLE:
        return new SedanVehicle(brand,model,year);
    case ALLTERRAINVEHICLE:
        return new AllTerrainVehicle(brand,model,year);
    default: return null;
    }
}
public enum VehicleType {
    SPORTVEHICLE,SEDAMVEHICLE,ALLTERRAINVEHICLE
}
}

```

SedanVehicle.java

```

package com.example.tarea8;
public class SedanVehicle extends Vehicle {
    public SedanVehicle(Brand brand,String model,int year){
        super(brand,model,year);
    }
}

```

SingleFragmentActivity.java

```

package com.example.tarea8;
import android.os.Bundle;
import androidx.annotation.Nullable;
import androidx.appcompat.app.AppCompatActivity;
import androidx.fragment.app.Fragment;
import androidx.fragment.app.FragmentManager;
public abstract class SingleFragmentActivity extends
AppCompatActivity {
    protected Fragment mFragment;
    protected abstract Fragment createFragment();
    @Override
    protected void onCreate(@Nullable Bundle
savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.single_fragment_activity);
        FragmentManager fm = getSupportFragmentManager();
    }
}

```



```

        mFragment =
fm.findFragmentById(R.id.single_fragment_container);
        if(mFragment ==null){
            mFragment = createFragment();
fm.beginTransaction().add(R.id.single_fragment_container,mF
ragment).commit();
        }
    }
}

```

SportVehicle.java

```

package com.example.tarea8;
public class SportVehicle extends Vehicle {
    public SportVehicle(Brand brand,String model,int year){
        super(brand,model,year);
    }
}

```

TypeActivity.java

```

package com.example.tarea8;
import androidx.fragment.app.Fragment;
public class TypeActivity extends SingleFragmentActivity {
    @Override
    protected Fragment createFragment() {
        return new TypeFragment ();
    }
}

```

TypeFragment.java

```

package com.example.tarea8;
import android.content.Intent;
import android.os.Bundle;
import android.view.LayoutInflater;
import android.view.View;
import android.view.ViewGroup;
import android.widget.ImageView;
import android.widget.TextView;
import androidx.annotation.NonNull;

```

```

import androidx.annotation.Nullable;
import androidx.fragment.app.Fragment;
import androidx.recyclerview.widget.LinearLayoutManager;
import androidx.recyclerview.widget.RecyclerView;
public class TypeFragment extends Fragment {
    private RecyclerView mRecyclerView;
    @Nullable
    @Override
    public View onCreateView(@NonNull LayoutInflater
inflater, @Nullable ViewGroup container, @Nullable Bundle
savedInstanceState) {
        View view =
inflater.inflate(R.layout.recycler_view,null,false);
        mRecyclerView =
view.findViewById(R.id.recycler_view);
        mRecyclerView.setLayoutManager(new
LinearLayoutManager(getActivity()));
        mRecyclerView.setAdapter(new TypeAdapter());
        return view;
    }
    private class TypeAdapter extends
RecyclerView.Adapter<VehicleHolder>{
        private final int [] names =
{R.string.sport_cars,R.string.sedan_cars,R.string.all_terra
in_cars};
        private final int [] photo =
{R.drawable.sport_car,R.drawable.sedan_car,R.drawable.all_t
errain_auto};
        @NonNull
        @Override
        public VehicleHolder onCreateViewHolder(@NonNull
ViewGroup parent, int viewType) {
            LayoutInflater inflater =
LayoutInflater.from(getContext());
            return new VehicleHolder(inflater,parent);
        }
        @Override
        public void onBindViewHolder(@NonNull VehicleHolder
holder, int position) {
            holder.bind(photo[position],names[position]);
        }
    }
}

```

```

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

    private class ViewHolder extends
RecyclerView.ViewHolder implements View.OnClickListener {
        private ImageView mImageView;
        private TextView mTextView;
        private int mName;
        public ViewHolder(LayoutInflater inflater,
RecyclerView group){
            super(inflater.inflate(R.layout.type_list_item,group,false)
);
            mImageView =
itemView.findViewById(R.id.image_view_type);
            mTextView =
itemView.findViewById(R.id.text_view_type);
            itemView.setOnClickListener(this);
        }
        @Override
        public void onClick(View v) {
            Intent intent ;
            if(mName==R.string.sport_cars){
                intent =
BrandFragment.getIntent(CarFactory.VehicleType.SPORTVEHICLE
,getContext());
            } else if (mName == R.string.sedan_cars) {
                intent =
BrandFragment.getIntent(CarFactory.VehicleType.SEDAMVEHICLE
,getContext());
            }else{
                intent =
BrandFragment.getIntent(CarFactory.VehicleType.ALLTERRAINVE
HICLE,getContext());
            }
            startActivity(intent);
        }
        public void bind(int image,int name){
            mName = name;

```

```

        mTextView.setText(name);
        mImageView.setImageResource(image);
    }
}

```

```

package com.example.tarea8;
import androidx.annotation.NonNull;
public abstract class Vehicle {
    private Brand mVehicleBrand;
    private int mYear;
    private String mModel;
    public Vehicle(Brand vehicleBrand,String model,int year)
{
    this.mVehicleBrand= vehicleBrand;
    this.mModel = model;
    this.mYear = year;
}
    public Brand getVehicleBrand() {
        return mVehicleBrand;
    }
    public void setVehicleBrand(Brand vehicleBrand) {
        mVehicleBrand = vehicleBrand;
    }
    public int getYear() {
        return mYear;
    }
    public void setYear(int year) {
        mYear = year;
    }
    public String getModel() {
        return mModel;
    }
    public void setModel(String model) {
        mModel = model;
    }
    @NonNull
    @Override
    public String toString() {

```

```
        return getVehicleBrand().toString() + " " + getModel()  
+" "+getYear();  
    }  
}
```

Vehicle.java

```
package com.example.tarea8;  
import androidx.annotation.NonNull;  
public abstract class Vehicle {  
    private Brand mVehicleBrand;  
    private int mYear;  
    private String mModel;  
    public Vehicle(Brand vehicleBrand,String model,int year)  
{  
        this.mVehicleBrand= vehicleBrand;  
        this.mModel = model;  
        this.mYear = year;  
    }  
    public Brand getVehicleBrand() {  
        return mVehicleBrand;  
    }  
    public void setVehicleBrand(Brand vehicleBrand) {  
        mVehicleBrand = vehicleBrand;  
    }  
    public int getYear() {  
        return mYear;  
    }  
    public void setYear(int year) {  
        mYear = year;  
    }  
    public String getModel() {  
        return mModel;  
    }  
    public void setModel(String model) {  
        mModel = model;  
    }  
    @NonNull  
    @Override  
    public String toString() {
```

```

        return getVehicleBrand().toString() + " " + getModel()
+" "+getYear();
    }
}

```

VehicleActivity.java

```

package com.example.tarea8;
import androidx.fragment.app.Fragment;
public class VehicleActivity extends SingleFragmentActivity
{
    @Override
    protected Fragment createFragment() {
        return new VehicleFragment();
    }
}

```

VehicleFragment.java

```

package com.example.tarea8;
import android.content.Context;
import android.content.Intent;
import android.os.Bundle;
import android.view.LayoutInflater;
import android.view.View;
import android.view.ViewGroup;
import android.widget.ImageView;
import android.widget.TextView;
import androidx.annotation.NonNull;
import androidx.annotation.Nullable;
import androidx.fragment.app.Fragment;
import androidx.recyclerview.widget.LinearLayoutManager;
import androidx.recyclerview.widget.RecyclerView;
import java.io.Serializable;
import java.util.ArrayList;
import java.util.List;
public class VehicleFragment extends Fragment {
    private static final String BRAND
="com.example.tarea8.Brand";
    private static final String TYPE="Type";
    private static final String LIST_BRAND = "ListBrand";

```

```

private RecyclerView mRecyclerView;
@Nullable
@Override
public View onCreateView(@NonNull LayoutInflater
inflater, @Nullable ViewGroup container, @Nullable Bundle
savedInstanceState) {
    View view =
inflater.inflate(R.layout.recycler_view,null,false);
    mRecyclerView =
view.findViewById(R.id.recycler_view);
    mRecyclerView.setLayoutManager(new
LinearLayoutManager(getContext()));
    Brand brandSelected =
(Brand) getActivity().getIntent().getSerializableExtra(BRAND
);
    CarFactory.VehicleType vehicleType =
(CarFactory.VehicleType) getActivity().
getIntent().getSerializableExtra(TYPE);
    String[] brands =
getActivity().getIntent().getStringArrayExtra(LIST_BRAND);
    String [] models1 = null;
    switch (vehicleType){
        case SPORTVEHICLE:
            if(brandSelected.toString().equals(brands[0])){
                String [] models =
{"812superfast","812gts","sf90stradle","f8tributo","f8spide
r"};
                models1=models;
            }else{
                String [] models =
{"Veneno","Centenario","Aventador","Huracan","Urus"};
                models1=models;
            }
        case SEDAMVEHICLE:
            if(brandSelected.toString().equals(brands[1])){
                String [] models =
{"Sonata","Ioniq","Elantra","Accent","Grandeur"};
                models1=models;
            }else{
                String [] models =
{"Civic","Insight","Accord","Clarity","Urus"};

```

```

        models1=models;
    }
    case ALLTERRAINVEHICLE:
        if(brandSelected.toString().equals(brands[2])){
            String [] models =
{"Z400","Z250","Z90","Z50","R450"};
            models1=models;
        }else{
            String [] models = {"Raptor
90","YFZ50","700R","YFZ450R","Raptor 700"};
            models1=models;
        }
    }
    List<Vehicle> vehicles =
getVehicleList(brandSelected,models1,vehicleType);
    VehicleAdapter adapter = new
VehicleAdapter(vehicles);
    mRecyclerView.setAdapter(adapter);
    return view;
}
private class VehicleAdapter extends
RecyclerView.Adapter<VehicleFragment.VehicleHolder>{
    private List<Vehicle> mVehicles;
    public VehicleAdapter(List<Vehicle> vehicles){
        this.mVehicles=vehicles;
    }
    @NonNull
    @Override
    public VehicleFragment.VehicleHolder
onCreateViewHolder(@NonNull ViewGroup parent, int viewType)
{
        LayoutInflater inflater =
LayoutInflater.from(getContext());
        return new
VehicleFragment.VehicleHolder(inflater,parent);
    }
    @Override
    public void onBindViewHolder(@NonNull
VehicleFragment.VehicleHolder holder, int position) {
        holder.bind(mVehicles.get(position));
    }
}

```



```

        @Override
        public int getItemCount() {
            return mVehicles.size();
        }
    }
    private class ViewHolder extends
RecyclerView.ViewHolder {
        private TextView mTextView;
        public ViewHolder(LayoutInflater inflater,
        ViewGroup group){
            super(inflater.inflate(R.layout.vehicle_list_item,group,false));
            mTextView =
            itemView.findViewById(R.id.text_view_vehicle);
        }
        public void bind(Vehicle vehicle){
            mTextView.setText(vehicle.toString());
        }
    }
    public static Intent getIntent(Context context, Brand
brandSelected,
                                CarFactory.VehicleType
vehicleType,Brand[] brands)
    {
        String[] brandStringArray= new String
[brands.length];
        for(int i=0;i<brands.length;i++){
            brandStringArray[i] =brands[i].toString();
        }
        Intent intent = new
Intent(context,VehicleActivity.class);
        intent.putExtra(BRAND,brandSelected);
        intent.putExtra(TYPE,vehicleType);
        intent.putExtra(LIST_BRAND,brandStringArray);
        return intent;
    }
    private List<Vehicle> getVehicleList(Brand brand, String
[] models, CarFactory.VehicleType type){
        int [] years ={2010,2012,2016,2018,2014};
        List<Vehicle> vehicles = new ArrayList<>();
    }

```

```

        for (int i=0;i<models.length;i++){
            for(int j=0;j<years.length;j++){
vehicles.add(CarFactory.get().getVehicle(type,years[j],brand,models[i]));
            }
        }
        return vehicles;
    }
}

```

ExampleInstrumentedUnitTest.java

```

package com.example.tarea8;
import android.content.Context;
import androidx.test.platform.app.InstrumentationRegistry;
import androidx.test.ext.junit.runners.AndroidJUnit4;
import org.junit.Test;
import org.junit.runner.RunWith;
import static org.junit.Assert.*;
/**
 * Instrumented test, which will execute on an Android
 * device.
 *
 * @see <a
href="http://d.android.com/tools/testing">Testing
documentation</a>
 */
@RunWith(AndroidJUnit4.class)
public class ExampleInstrumentedTest {
    @Test
    public void useAppContext() {
        // Context of the app under test.
        Context appContext =
InstrumentationRegistry.getInstrumentation().getTargetContext();
        assertEquals("com.example.tarea8",
appContext.getPackageName());
    }
}

```

```
}  
}
```

ExampleUnitTest.java

```
package com.example.tarea8;  
import android.content.Context;  
import androidx.test.platform.app.InstrumentationRegistry;  
import androidx.test.ext.junit.runners.AndroidJUnit4;  
import org.junit.Test;  
import org.junit.runner.RunWith;  
import static org.junit.Assert.*;  
/**  
 * Instrumented test, which will execute on an Android  
 * device.  
 *  
 * @see <a  
 * href="http://d.android.com/tools/testing">Testing  
 * documentation</a>  
 */  
@RunWith(AndroidJUnit4.class)  
public class ExampleInstrumentedTest {  
    @Test  
    public void useAppContext() {  
        // Context of the app under test.  
        Context appContext =  
InstrumentationRegistry.getInstrumentation().getTargetContext();  
        assertEquals("com.example.tarea8",  
appContext.getPackageName());  
    }  
}
```

brand_list_item.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:orientation="vertical"
    android:layout_width="match_parent"
        android:layout_height="wrap_content">
        <TextView
            android:id="@+id/text_view_name_brand"
            android:layout_width="221dp"
            android:layout_height="25dp"
            android:textSize="14sp"
            app:layout_constraintBottom_toBottomOf="parent"
            app:layout_constraintEnd_toEndOf="@+id/image_view_brand"
            app:layout_constraintHorizontal_bias="0.356"
            app:layout_constraintStart_toStartOf="parent"
            app:layout_constraintTop_toTopOf="parent"
            app:layout_constraintVertical_bias="0.555" />
        <ImageView
            android:id="@+id/image_view_brand"
            android:layout_width="92dp"
            android:layout_height="94dp"
            app:layout_constraintBottom_toBottomOf="parent"
            app:layout_constraintEnd_toEndOf="parent"
            app:layout_constraintTop_toTopOf="parent"
            app:layout_constraintVertical_bias="0.0"
            tools:srcCompat="@tools:sample/avatars[5]" />
    </androidx.constraintlayout.widget.ConstraintLayout>

```

recyclerview.xml

```

<?xml version="1.0" encoding="utf-8"?>
<androidx.recyclerview.widget.RecyclerView
    xmlns:android="http://schemas.android.com/apk/res/android"
        android:orientation="vertical"
    android:layout_width="match_parent"
        android:layout_height="match_parent"
        android:id="@+id/recycler_view"
    >
</androidx.recyclerview.widget.RecyclerView>

```

single_fragment_activity.xml

```
<?xml version="1.0" encoding="utf-8"?>
<FrameLayout

xmlns:android="http://schemas.android.com/apk/res/android"
    android:orientation="vertical"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:id="@+id/single_fragment_container"
    >
</FrameLayout>
```

type_list_item.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:orientation="horizontal"
    android:layout_width="match_parent"
    android:layout_height="wrap_content">
    <TextView
        android:id="@+id/text_view_type"
        android:layout_width="261dp"
        android:layout_height="27dp"
        android:layout_marginStart="136dp"
        android:layout_marginLeft="136dp"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.0"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.505" />
    <ImageView
        android:id="@+id/image_view_type"
        android:layout_width="101dp"
```

```

        android:layout_height="122dp"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        tools:srcCompat="@tools:sample/avatars[1]" />
</androidx.constraintlayout.widget.ConstraintLayout>

```

vehicle_list_item.xml

```

<?xml version="1.0" encoding="utf-8"?>
<LinearLayout
xmlns:android="http://schemas.android.com/apk/res/android"
xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:orientation="vertical"
    >
    <TextView
        android:id="@+id/text_view_vehicle"
        android:layout_width="match_parent"
        android:layout_height="33dp">
    </TextView>
</LinearLayout>

```

colors.xml

```

<?xml version="1.0" encoding="utf-8"?>
<resources>
    <color name="colorPrimary">#008577</color>
    <color name="colorPrimaryDark">#00574B</color>
    <color name="colorAccent">#D81B60</color>
</resources>

```

strings.xml

```

<resources>
    <string name="app_name">Tarea8</string>
    <string name="sport_cars">Sport cars</string>
    <string name="sedan_cars">Sedan cars</string>
    <string name="all_terrain_cars">All terrain
cars</string>
</resources>

```

styles.xml

<resources>

```
    <!-- Base application theme. -->
    <style name="AppTheme"
parent="Theme.AppCompat.Light.DarkActionBar">
    <!-- Customize your theme here. -->
    <item name="colorPrimary">@color/colorPrimary</item>
    <item
name="colorPrimaryDark">@color/colorPrimaryDark</item>
    <item name="colorAccent">@color/colorAccent</item>
    </style>
</resources>
```

ic_launcher_background.xml

<?xml version="1.0" encoding="utf-8"?>

```
<vector
xmlns:android="http://schemas.android.com/apk/res/android"
    android:width="108dp"
    android:height="108dp"
    android:viewportWidth="108"
    android:viewportHeight="108">
    <path
        android:fillColor="#008577"
        android:pathData="M0,0h108v108h-108z" />
    <path
        android:fillColor="#00000000"
        android:pathData="M9,0L9,108"
        android:strokeWidth="0.8"
        android:strokeColor="#33FFFFFF" />
    <path
        android:fillColor="#00000000"
        android:pathData="M19,0L19,108"
        android:strokeWidth="0.8"
        android:strokeColor="#33FFFFFF" />
    <path
        android:fillColor="#00000000"
        android:pathData="M29,0L29,108"
        android:strokeWidth="0.8"
        android:strokeColor="#33FFFFFF" />
```

```
<path
    android:fillColor="#00000000"
    android:pathData="M39,0L39,108"
    android:strokeWidth="0.8"
    android:strokeColor="#33FFFFFF" />
<path
    android:fillColor="#00000000"
    android:pathData="M49,0L49,108"
    android:strokeWidth="0.8"
    android:strokeColor="#33FFFFFF" />
<path
    android:fillColor="#00000000"
    android:pathData="M59,0L59,108"
    android:strokeWidth="0.8"
    android:strokeColor="#33FFFFFF" />
<path
    android:fillColor="#00000000"
    android:pathData="M69,0L69,108"
    android:strokeWidth="0.8"
    android:strokeColor="#33FFFFFF" />
<path
    android:fillColor="#00000000"
    android:pathData="M79,0L79,108"
    android:strokeWidth="0.8"
    android:strokeColor="#33FFFFFF" />
<path
    android:fillColor="#00000000"
    android:pathData="M89,0L89,108"
    android:strokeWidth="0.8"
    android:strokeColor="#33FFFFFF" />
<path
    android:fillColor="#00000000"
    android:pathData="M99,0L99,108"
    android:strokeWidth="0.8"
    android:strokeColor="#33FFFFFF" />
<path
    android:fillColor="#00000000"
    android:pathData="M0,9L108,9"
    android:strokeWidth="0.8"
    android:strokeColor="#33FFFFFF" />
<path
```



```
        android:fillColor="#00000000"
        android:pathData="M0,19L108,19"
        android:strokeWidth="0.8"
        android:strokeColor="#33FFFFFF" />
<path
    android:fillColor="#00000000"
    android:pathData="M0,29L108,29"
    android:strokeWidth="0.8"
    android:strokeColor="#33FFFFFF" />
<path
    android:fillColor="#00000000"
    android:pathData="M0,39L108,39"
    android:strokeWidth="0.8"
    android:strokeColor="#33FFFFFF" />
<path
    android:fillColor="#00000000"
    android:pathData="M0,49L108,49"
    android:strokeWidth="0.8"
    android:strokeColor="#33FFFFFF" />
<path
    android:fillColor="#00000000"
    android:pathData="M0,59L108,59"
    android:strokeWidth="0.8"
    android:strokeColor="#33FFFFFF" />
<path
    android:fillColor="#00000000"
    android:pathData="M0,69L108,69"
    android:strokeWidth="0.8"
    android:strokeColor="#33FFFFFF" />
<path
    android:fillColor="#00000000"
    android:pathData="M0,79L108,79"
    android:strokeWidth="0.8"
    android:strokeColor="#33FFFFFF" />
<path
    android:fillColor="#00000000"
    android:pathData="M0,89L108,89"
    android:strokeWidth="0.8"
    android:strokeColor="#33FFFFFF" />
<path
    android:fillColor="#00000000"
```

```
        android:pathData="M0,99L108,99"
        android:strokeWidth="0.8"
        android:strokeColor="#33FFFFFF" />
    <path
        android:fillColor="#00000000"
        android:pathData="M19,29L89,29"
        android:strokeWidth="0.8"
        android:strokeColor="#33FFFFFF" />
    <path
        android:fillColor="#00000000"
        android:pathData="M19,39L89,39"
        android:strokeWidth="0.8"
        android:strokeColor="#33FFFFFF" />
    <path
        android:fillColor="#00000000"
        android:pathData="M19,49L89,49"
        android:strokeWidth="0.8"
        android:strokeColor="#33FFFFFF" />
    <path
        android:fillColor="#00000000"
        android:pathData="M19,59L89,59"
        android:strokeWidth="0.8"
        android:strokeColor="#33FFFFFF" />
    <path
        android:fillColor="#00000000"
        android:pathData="M19,69L89,69"
        android:strokeWidth="0.8"
        android:strokeColor="#33FFFFFF" />
    <path
        android:fillColor="#00000000"
        android:pathData="M19,79L89,79"
        android:strokeWidth="0.8"
        android:strokeColor="#33FFFFFF" />
    <path
        android:fillColor="#00000000"
        android:pathData="M29,19L29,89"
        android:strokeWidth="0.8"
        android:strokeColor="#33FFFFFF" />
    <path
        android:fillColor="#00000000"
        android:pathData="M39,19L39,89"
```

```

        android:strokeWidth="0.8"
        android:strokeColor="#33FFFFFF" />
    <path
        android:fillColor="#00000000"
        android:pathData="M49,19L49,89"
        android:strokeWidth="0.8"
        android:strokeColor="#33FFFFFF" />
    <path
        android:fillColor="#00000000"
        android:pathData="M59,19L59,89"
        android:strokeWidth="0.8"
        android:strokeColor="#33FFFFFF" />
    <path
        android:fillColor="#00000000"
        android:pathData="M69,19L69,89"
        android:strokeWidth="0.8"
        android:strokeColor="#33FFFFFF" />
    <path
        android:fillColor="#00000000"
        android:pathData="M79,19L79,89"
        android:strokeWidth="0.8"
        android:strokeColor="#33FFFFFF" />
</vector>

```

ic_launcher_foreground.xml

```

<vector
xmlns:android="http://schemas.android.com/apk/res/android"
xmlns:aapt="http://schemas.android.com/aapt"
    android:width="108dp"
    android:height="108dp"
    android:viewportWidth="108"
    android:viewportHeight="108">
    <path
        android:fillType="evenOdd"
        android:pathData="M32,64C32,64 38.39,52.99
44.13,50.95C51.37,48.37 70.14,49.57
70.14,49.57L108.26,87.69L108,109.01L75.97,107.97L32,64Z"
        android:strokeWidth="1"
        android:strokeColor="#00000000">
        <aapt:attr name="android:fillColor">

```

```

        <gradient
            android:endX="78.5885"
            android:endY="90.9159"
            android:startX="48.7653"
            android:startY="61.0927"
            android:type="linear">
            <item
                android:color="#44000000"
                android:offset="0.0" />
            <item
                android:color="#00000000"
                android:offset="1.0" />
            </gradient>
        </aapt:attr>
    </path>
    <path
        android:fillColor="#FFFFFF"
        android:fillType="nonZero"
        android:pathData="M66.94,46.02L66.94,46.02C72.44,50.07
76,56.61 76,64L32,64C32,56.61 35.56,50.11
40.98,46.06L36.18,41.19C35.45,40.45 35.45,39.3
36.18,38.56C36.91,37.81 38.05,37.81
38.78,38.56L44.25,44.05C47.18,42.57 50.48,41.71
54,41.71C57.48,41.71 60.78,42.57
63.68,44.05L69.11,38.56C69.84,37.81 70.98,37.81
71.71,38.56C72.44,39.3 72.44,40.45
71.71,41.19L66.94,46.02ZM62.94,56.92C64.08,56.92 65,56.01
65,54.88C65,53.76 64.08,52.85 62.94,52.85C61.8,52.85
60.88,53.76 60.88,54.88C60.88,56.01 61.8,56.92
62.94,56.92ZM45.06,56.92C46.2,56.92 47.13,56.01
47.13,54.88C47.13,53.76 46.2,52.85 45.06,52.85C43.92,52.85
43,53.76 43,54.88C43,56.01 43.92,56.92 45.06,56.92Z"
        android:strokeWidth="1"
        android:strokeColor="#00000000" />
</vector>

```

ic_launcher.xml

```
<?xml version="1.0" encoding="utf-8"?>
```

```
<adaptive-icon
```

```
xmlns:android="http://schemas.android.com/apk/res/android">
```

```
    <background  
android:drawable="@drawable/ic_launcher_background" />  
    <foreground  
android:drawable="@drawable/ic_launcher_foreground" />  
</adaptive-icon>
```

ic_launcher_round.xml

```
<?xml version="1.0" encoding="utf-8"?>  
<adaptive-icon  
xmlns:android="http://schemas.android.com/apk/res/android">  
    <background  
android:drawable="@drawable/ic_launcher_background" />  
    <foreground  
android:drawable="@drawable/ic_launcher_foreground" />  
</adaptive-icon>
```