ASSIGNMENT-2

Create an app to help customer to reserve a rental car. The app requests the time length in days for car rental, and preference for the requested car as a sedan, suv, or a minivan. The car rental company charges $30/day for sedan, $40/day for suv, and $45/day for minivan. Use radio buttons to let customer to select the desired car model

This app should let customer to select the brand of car too. Use spinner to let customer to choose from Chevrolet, Chrysler, Dodge, Ford, GMC, Honda, Hyundai, Kia, Mazda, Nissan, Toyota, and Volkswagen.

If the requested time length more than 30 days, your app should display a toast message to inform the customer about the rental time length limit.

# MainActivity.java

package com.example.Second\_Assignment;

import android.os.Bundle; import android.view.View;

import android.widget.AdapterView; import android.widget.ArrayAdapter; import android.widget.Button; import android.widget.EditText; import android.widget.RadioButton; import android.widget.RadioGroup; import android.widget.Spinner; import android.widget.Toast;

import androidx.appcompat.app.AppCompatActivity; public class MainActivity extends AppCompatActivity {

private EditText rentalDays;

private RadioGroup carTypeGroup; private Spinner carBrandSpinner; private Button reserveButton;

private static final int MAX\_RENTAL\_DAYS = 30; @Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState); setContentView(R.layout.activity\_main);

rentalDays = findViewById(R.id.rental\_days); carTypeGroup = findViewById(R.id.car\_type\_group); carBrandSpinner = findViewById(R.id.car\_brand\_spinner); reserveButton = findViewById(R.id.reserve\_button);

// Set up the spinner with car brands

ArrayAdapter<CharSequence> adapter = ArrayAdapter.createFromResource(this, R.array.car\_brands, android.R.layout.simple\_spinner\_item);

adapter.setDropDownViewResource(android.R.layout.simple\_spinner\_dropdown\_item); carBrandSpinner.setAdapter(adapter);

reserveButton.setOnClickListener(new View.OnClickListener() { @Override

public void onClick(View v) { handleReservation();

}

});

}

private void handleReservation() {

String daysStr = rentalDays.getText().toString(); if (daysStr.isEmpty()) {

Toast.makeText(this, "Please enter the rental days", Toast.LENGTH\_SHORT).show(); return;

}

int days = Integer.parseInt(daysStr); if (days > MAX\_RENTAL\_DAYS) {

Toast.makeText(this, "Rental time length limit is 30 days", Toast.LENGTH\_SHORT).show();

return;

}

int selectedCarTypeId = carTypeGroup.getCheckedRadioButtonId(); if (selectedCarTypeId == -1) {

Toast.makeText(this, "Please select a car type", Toast.LENGTH\_SHORT).show(); return;

}

RadioButton selectedCarType = findViewById(selectedCarTypeId); String carType = selectedCarType.getText().toString();

String carBrand = carBrandSpinner.getSelectedItem().toString(); int costPerDay = 0;

switch (carType) { case "Sedan":

costPerDay = 30; break;

case "SUV": costPerDay = 40; break;

case "Minivan": costPerDay = 45; break;

}

int totalCost = costPerDay \* days;

String message = "Car Type: " + carType + "\nBrand: " + carBrand + "\nTotal Cost: $" + totalCost;

Toast.makeText(this, message, Toast.LENGTH\_LONG).show();

}

}

# Activity\_main.xml

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

<RelativeLayout 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"

tools:context=".MainActivity">

<EditText android:id="@+id/rental\_days" android:layout\_width="match\_parent"

android:layout\_height="wrap\_content" android:hint="Enter rental days" android:inputType="number" />

<RadioGroup android:id="@+id/car\_type\_group" android:layout\_width="match\_parent" android:layout\_height="wrap\_content" android:layout\_below="@id/rental\_days" android:orientation="horizontal">

<RadioButton android:id="@+id/sedan"

android:layout\_width="wrap\_content" android:layout\_height="wrap\_content" android:text="Sedan" />

<RadioButton android:id="@+id/suv"

android:layout\_width="wrap\_content" android:layout\_height="wrap\_content" android:text="SUV" />

<RadioButton android:id="@+id/minivan" android:layout\_width="wrap\_content" android:layout\_height="wrap\_content" android:text="Minivan" />

</RadioGroup>

<Spinner android:id="@+id/car\_brand\_spinner" android:layout\_width="match\_parent" android:layout\_height="wrap\_content"

android:layout\_below="@id/car\_type\_group" />

<Button

android:id="@+id/reserve\_button" android:layout\_width="wrap\_content" android:layout\_height="wrap\_content" android:layout\_below="@id/car\_brand\_spinner" android:text="Reserve" />

</RelativeLayout>

# Strings.xml

<resources>

<string name="app\_name">CarRental</string>

<string-array name="car\_brands">

<item>Chevrolet</item>

<item>Chrysler</item>

<item>Dodge</item>

<item>Ford</item>

<item>GMC</item>

<item>Honda</item>

<item>Hyundai</item>

<item>Kia</item>

<item>Mazda</item>

<item>Nissan</item>

<item>Toyota</item>

<item>Volkswagen</item>

</string-array>

</resources>

**Results**



