Android Quiz/Test 2 – Favourite Locations Assessment

Map

Description automatically generatedGraphical user interface, application

Description automatically generatedMap

Description automatically generated

Java

MapsActivity

UserRating Fragment

Interface

XML

Maps

Rating Fragment

Java Code:

package com.example.androidlabassessment2;  
  
import androidx.annotation.NonNull;  
import androidx.fragment.app.FragmentActivity;  
import androidx.fragment.app.FragmentManager;  
import androidx.fragment.app.FragmentTransaction;  
  
import android.content.Intent;  
import android.database.sqlite.SQLiteDatabase;  
import android.os.Bundle;  
import android.util.Log;  
import android.widget.Toast;  
  
import com.google.android.gms.maps.CameraUpdateFactory;  
import com.google.android.gms.maps.GoogleMap;  
import com.google.android.gms.maps.OnMapReadyCallback;  
import com.google.android.gms.maps.SupportMapFragment;  
import com.google.android.gms.maps.model.LatLng;  
import com.google.android.gms.maps.model.Marker;  
import com.google.android.gms.maps.model.MarkerOptions;  
import com.example.androidlabassessment2.databinding.ActivityMapsBinding;  
  
import java.util.Arrays;  
  
public class MapsActivity extends FragmentActivity implements OnMapReadyCallback, OnMarkerInfoEnteredListener {  
  
 private GoogleMap mMap;  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
  
 com.example.androidlabassessment2.databinding.ActivityMapsBinding binding = ActivityMapsBinding.*inflate*(getLayoutInflater());  
 setContentView(binding.getRoot());  
  
 // Obtain the SupportMapFragment and get notified when the map is ready to be used.  
 SupportMapFragment mapFragment = (SupportMapFragment) getSupportFragmentManager()  
 .findFragmentById(R.id.*map*);  
 assert mapFragment != null;  
 mapFragment.getMapAsync(this);  
 }  
  
 @Override  
 public void onMapReady(@NonNull GoogleMap googleMap) {  
 mMap = googleMap;  
  
 LatLng school = new LatLng(43.724330436,-79.605497578);  
 mMap.addMarker(new MarkerOptions().position(school).title("Humber College").snippet("School\n4.0"));  
 mMap.moveCamera(CameraUpdateFactory.*newLatLng*(school));  
 mMap.moveCamera(CameraUpdateFactory.*newLatLngZoom*(school, 10));  
  
 mMap.setOnMapClickListener(new GoogleMap.OnMapClickListener() {  
 @Override  
 public void onMapClick(@NonNull LatLng latLng) {  
 openMarkerInfoFragment(latLng);  
 }  
 });  
 mMap.setOnMarkerClickListener(new GoogleMap.OnMarkerClickListener() {  
 @Override  
 public boolean onMarkerClick(@NonNull Marker marker) {  
 Marker newMarkerData = marker;  
 marker.remove();  
 openOldMarkerInfoFragment(newMarkerData);  
 return false;  
 }  
 });  
  
 mMap.setOnMarkerDragListener(new GoogleMap.OnMarkerDragListener() {  
 @Override  
 public void onMarkerDragStart(Marker marker) {  
 // Show the details of the marker  
 // You can get the details from the marker's snippet or title  
 String title = marker.getTitle();  
 String snippet = marker.getSnippet();  
  
 // Show the details in a Toast message  
 Toast.*makeText*(MapsActivity.this, title + ": " + snippet, Toast.*LENGTH\_SHORT*).show();  
 }  
  
 @Override  
 public void onMarkerDrag(Marker marker) {  
 // Do nothing  
 }  
  
 @Override  
 public void onMarkerDragEnd(Marker marker) {  
 // Do nothing  
 }  
 });  
  
 }  
 private void openMarkerInfoFragment(LatLng latLng) {  
 UserInputRating fragment = new UserInputRating();  
 Bundle args = new Bundle();  
 args.putParcelable("latLng", latLng);  
 args.putBoolean("newMarker", true);  
 fragment.setArguments(args);  
 fragment.setOnMarkerInfoEnteredListener(this);  
 getSupportFragmentManager().beginTransaction()  
 .replace(R.id.*map*, fragment)  
 .addToBackStack(null)  
 .commit();  
 }  
  
@Override  
public void onMarkerInfoEntered(String title, String description, float rating, LatLng latLng) {  
 mMap.addMarker(new MarkerOptions()  
 .position(latLng)  
 .title(title)  
 .snippet(description + "\n" + rating));  
}  
  
 public void openOldMarkerInfoFragment(Marker marker) {  
 String snip = marker.getSnippet();  
 String [] snipSplit = snip.split("\n");  
 String description = snipSplit[0];  
 String rating = snipSplit[1];  
  
 // now send over to Fragment and hope  
 UserInputRating fragment = new UserInputRating();  
 Bundle args = new Bundle();  
 args.putString("title", marker.getTitle());  
 args.putString("description", description);  
 args.putFloat("rating", Float.*parseFloat*(rating));  
 args.putParcelable("latLng", marker.getPosition());  
 args.putBoolean("newMarker", false); // this should trigger something  
 fragment.setArguments(args);  
 fragment.setOnMarkerInfoEnteredListener(this);  
 getSupportFragmentManager().beginTransaction()  
 .replace(R.id.*map*, fragment)  
 .addToBackStack(null)  
 .commit();  
  
 }  
  
 @Override  
 public void updateMarker(MarkerOptions oldMarker) {  
 LatLng position = oldMarker.getPosition();  
 String title = oldMarker.getTitle();  
 String snippet = oldMarker.getSnippet();  
  
 mMap.addMarker(new MarkerOptions().position(position).title(title).snippet(snippet));  
 }  
  
}

package com.example.androidlabassessment2;  
  
import android.content.Context;  
import android.media.Rating;  
import android.os.Bundle;  
  
import androidx.annotation.NonNull;  
import androidx.annotation.Nullable;  
import androidx.fragment.app.Fragment;  
  
import android.util.Log;  
import android.view.LayoutInflater;  
import android.view.View;  
import android.view.ViewGroup;  
import android.widget.Button;  
import android.widget.EditText;  
import android.widget.RatingBar;  
import android.widget.TextView;  
  
import com.google.android.gms.maps.CameraUpdateFactory;  
import com.google.android.gms.maps.GoogleMap;  
import com.google.android.gms.maps.MapView;  
import com.google.android.gms.maps.OnMapReadyCallback;  
import com.google.android.gms.maps.model.LatLng;  
import com.google.android.gms.maps.model.Marker;  
import com.google.android.gms.maps.model.MarkerOptions;  
  
import org.w3c.dom.Text;  
  
public class UserInputRating extends Fragment {  
  
 private EditText mTitleEditText, mDescriptionEditText;  
 private RatingBar mRatingBar;  
 private LatLng mLatLng;  
 private GoogleMap mGoogleMap;  
 private MapView mMapView;  
 private OnMarkerInfoEnteredListener mListener;  
  
 public UserInputRating() {  
 // Required empty public constructor  
 }  
 @Override  
 public void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 }  
  
  
  
 @Override  
 public void onResume() {  
 super.onResume();  
 mMapView.onResume();  
 }  
  
 @Override  
 public void onPause() {  
 super.onPause();  
 mMapView.onPause();  
 }  
  
 @Override  
 public void onDestroy() {  
 super.onDestroy();  
 mMapView.onDestroy();  
 }  
  
 @Override  
 public void onLowMemory() {  
 super.onLowMemory();  
 mMapView.onLowMemory();  
 }  
  
 @Override  
 public View onCreateView(LayoutInflater inflater, ViewGroup container, Bundle savedInstanceState) {  
 View view = inflater.inflate(R.layout.*fragment\_user\_input\_rating*, container, false);  
 mTitleEditText = view.findViewById(R.id.*et\_title*);  
 mDescriptionEditText = view.findViewById(R.id.*et\_description*);  
 mRatingBar = view.findViewById(R.id.*ratingBar2*);  
 Button saveButton = view.findViewById(R.id.*button2*);  
 Button cancelButton = view.findViewById(R.id.*button*);  
 mMapView = view.findViewById(R.id.*lite\_listrow\_map*);  
 mMapView.onCreate(savedInstanceState);  
 mMapView.getMapAsync(new OnMapReadyCallback() {  
 @Override  
 public void onMapReady(GoogleMap googleMap) {  
 mGoogleMap = googleMap;  
 }  
 });  
  
 Bundle args = getArguments();  
 mLatLng = args.getParcelable("latLng");  
 mMapView.getMapAsync(new OnMapReadyCallback() {  
 @Override  
 public void onMapReady(GoogleMap googleMap) {  
 // Set the location of the map  
 LatLng location = mLatLng;  
 googleMap.moveCamera(CameraUpdateFactory.*newLatLngZoom*(location, 16));  
  
 // Make the map static  
 googleMap.getUiSettings().setScrollGesturesEnabled(false);  
 googleMap.getUiSettings().setZoomGesturesEnabled(false);  
 googleMap.getUiSettings().setRotateGesturesEnabled(false);  
 googleMap.getUiSettings().setTiltGesturesEnabled(false);  
 googleMap.addMarker(new MarkerOptions().position(mLatLng));  
 }  
 });  
  
  
 if (args.getBoolean("newMarker")) {  
 saveButton.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View v) {  
 String title = mTitleEditText.getText().toString();  
 String description = mDescriptionEditText.getText().toString();  
 float rating = mRatingBar.getRating();  
 if (mListener != null) {  
 mListener.onMarkerInfoEntered(title, description, rating, mLatLng);  
 }  
  
 Bundle result = args;  
 result.putString("title", title);  
 result.putString("description", description);  
 result.putFloat("rating", rating);  
 result.putBoolean("isNewMarker", false);  
 getParentFragmentManager().setFragmentResult("markerInfo", result);  
 getParentFragmentManager().popBackStack();  
 }  
 });  
 } else {  
 mTitleEditText.setText(args.getString("title"));  
 mDescriptionEditText.setText(args.getString("description"));  
 mRatingBar.setRating(args.getFloat("rating"));  
 mLatLng = args.getParcelable("latLng");  
 saveButton.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View view) {  
 String title = mTitleEditText.getText().toString();  
 String description = mDescriptionEditText.getText().toString();  
 float rating = mRatingBar.getRating();  
  
 MarkerOptions oldMarker = new MarkerOptions()  
 .position(args.getParcelable("latLng"))  
 .title(title)  
 .snippet(description + "\n" + rating);  
  
 if (mListener != null) {  
 mListener.updateMarker(oldMarker);  
 }  
 Bundle result = args;  
 result.putString("title", title);  
 result.putString("description", description);  
 result.putFloat("rating", rating);  
 getParentFragmentManager().setFragmentResult("markerInfo", result);  
 getParentFragmentManager().popBackStack();  
 }  
 });  
 }  
  
 cancelButton.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View view) {  
 //return to page and return the marker if one exists  
 if (!args.getBoolean("newMarker")) {  
 String title = mTitleEditText.getText().toString();  
 String description = mDescriptionEditText.getText().toString();  
 float rating = mRatingBar.getRating();  
  
 MarkerOptions oldMarker = new MarkerOptions()  
 .position(args.getParcelable("latLng"))  
 .title(title)  
 .snippet(description + "\n" + rating);  
  
 if (mListener != null) {  
 mListener.updateMarker(oldMarker);  
 }  
 Bundle result = args;  
 result.putString("title", title);  
 result.putString("description", description);  
 result.putFloat("rating", rating);  
 getParentFragmentManager().setFragmentResult("markerInfo", result);  
 getParentFragmentManager().popBackStack();  
  
 } else {  
 //return empty  
 getParentFragmentManager().popBackStack();  
 }  
  
 }  
 });  
  
 return view;  
 }  
  
 public void setOnMarkerInfoEnteredListener(OnMarkerInfoEnteredListener listener) {  
 mListener = listener;  
 }  
}

package com.example.androidlabassessment2;  
  
import com.google.android.gms.maps.model.LatLng;  
import com.google.android.gms.maps.model.MarkerOptions;  
  
public interface OnMarkerInfoEnteredListener {  
 void onMarkerInfoEntered(String title, String description, float rating, LatLng latLng);  
 void updateMarker(MarkerOptions OldMarker);  
  
}

XML

<?xml version="1.0" encoding="utf-8"?>  
<fragment xmlns:android="http://schemas.android.com/apk/res/android"  
 xmlns:map="http://schemas.android.com/apk/res-auto"  
 xmlns:tools="http://schemas.android.com/tools"  
 android:id="@+id/map"  
 android:name="com.google.android.gms.maps.SupportMapFragment"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 tools:context=".MapsActivity" />

<?xml version="1.0" encoding="utf-8"?>  
<FrameLayout 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=".UserInputRating">  
  
 <androidx.cardview.widget.CardView  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_gravity="center"  
 app:cardCornerRadius="20dp"  
 android:layout\_margin="20dp"  
 >  
  
 <androidx.constraintlayout.widget.ConstraintLayout  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 android:layout\_margin="5dp">  
  
  
 <LinearLayout  
 android:id="@+id/linearLayout"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:orientation="vertical"  
 android:layout\_margin="10dp"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent">  
  
 <com.google.android.gms.maps.MapView  
 android:id="@+id/lite\_listrow\_map"  
 android:layout\_width="match\_parent"  
 android:layout\_height="150dp"  
 android:layout\_margin="5dp"/>  
  
  
 <RelativeLayout  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content">  
  
 <TextView  
 android:id="@+id/textView5"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="Title"  
 android:textSize="20dp"  
 android:layout\_alignParentLeft="true" />  
  
 <EditText  
 android:id="@+id/et\_title"  
 android:layout\_width="0dp"  
 android:layout\_height="wrap\_content"  
 android:layout\_toRightOf="@+id/textView5"  
 android:hint="Add Name Here"  
 android:layout\_weight="1"  
 android:layout\_alignParentRight="true" />  
  
 </RelativeLayout>  
  
 <RelativeLayout  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content">  
  
 <TextView  
 android:id="@+id/textView7"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="Desc"  
 android:textSize="20dp"  
 android:layout\_alignParentLeft="true" />  
  
 <EditText  
 android:id="@+id/et\_description"  
 android:layout\_width="0dp"  
 android:layout\_height="wrap\_content"  
 android:layout\_toRightOf="@+id/textView7"  
 android:hint="Add Name Here"  
 android:gravity="top"  
 android:lines="3"  
 android:layout\_weight="1"  
 android:layout\_alignParentRight="true" />  
  
 </RelativeLayout>  
  
  
<!-- <RelativeLayout-->  
<!-- android:layout\_width="wrap\_content"-->  
<!-- android:layout\_height="wrap\_content">-->  
  
<!-- <TextView-->  
<!-- android:id="@+id/textView7"-->  
<!-- android:layout\_width="wrap\_content"-->  
<!-- android:layout\_height="wrap\_content"-->  
<!-- android:foregroundGravity="top"-->  
<!-- android:text="Add a Description"-->  
<!-- android:textSize="20dp"-->  
<!-- android:layout\_alignParentLeft="true"/>-->  
  
<!-- <EditText-->  
<!-- android:id="@+id/et\_description"-->  
<!-- android:layout\_width="match\_parent"-->  
<!-- android:layout\_height="wrap\_content"-->  
<!-- android:hint="Add Description Here"-->  
<!-- android:layout\_alignParentRight="true"/>-->  
<!-- </RelativeLayout>-->  
  
  
  
  
  
 <RelativeLayout  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content">  
 <TextView  
 android:id="@+id/textView6"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="Rate It!"  
 android:textSize="20dp"  
 android:layout\_alignParentLeft="true"/>  
  
 <RatingBar  
 android:id="@+id/ratingBar2"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_alignParentRight="true"/>  
 </RelativeLayout>  
  
  
 <RelativeLayout  
 android:layout\_width="fill\_parent"  
 android:layout\_height="fill\_parent"  
 android:padding="10dp">  
  
 <Button  
 android:id="@+id/button"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_alignParentLeft="true"  
 android:text="cancel" />  
  
 <Button  
 android:id="@+id/button2"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_alignParentRight="true"  
 android:text="save" />  
  
 </RelativeLayout>  
  
 </LinearLayout>  
 </androidx.constraintlayout.widget.ConstraintLayout>  
 </androidx.cardview.widget.CardView>  
  
</FrameLayout>