

- **AndroidManifest.xml**

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

    <uses-permission android:name="android.permission.INTERNET"
/>
    <uses-permission
android:name="android.permission.ACCESS_FINE_LOCATION" />
    <uses-permission
android:name="android.permission.ACCESS_COARSE_LOCATION"
/>
    <uses-permission
android:name="android.permission.ACCESS_NETWORK_STATE" />

    <application
        android:allowBackup="true"
        android:icon="@drawable/logo"
        android:label="@string/app_name"
        android:supportsRtl="true"
        android:theme="@style/AppTheme"
        android:usesCleartextTraffic="true">
        <uses-library
            android:name="org.apache.http.legacy"
            android:required="false" />

        <meta-data
            android:name="com.google.android.geo.API_KEY"
            android:value="AlzaSyCmniVYVmg3fux0bA-3Qi5xTdpc5tAZaGg" />
        <meta-data
            android:name="com.google.android.gms.version"
```

```

        android:value="@integer/google_play_services_version" />

<activity android:name=".Splash">
    <intent-filter>
        <action android:name="android.intent.action.MAIN" />

        <category
android:name="android.intent.category.LAUNCHER" />
    </intent-filter>
</activity>
<activity android:name=".LoginActivity" />
<activity android:name=".testActivity" />
<activity android:name=".DriverSignUpActivity" />
<activity android:name=".RiderSignUpActivity" />
<activity android:name=".MapActivity" />
<activity android:name=".RiderActivity"></activity>
</application>

</manifest>

```

- **DriverList.java**

```

package com.example.mypackage.carpool;

import android.app.Activity;
import android.support.annotation.NonNull;
import android.view.LayoutInflater;
import android.view.View;
import android.view.ViewGroup;
import android.widget.AdapterView;
import android.widget.AdapterView;
import android.widget.TextView;

import java.util.List;

```

```

public class DriverList extends ArrayAdapter<ProfileInformation> {

    private Activity context;
    private List<ProfileInformation> driverList;

    public DriverList(Activity context, List<ProfileInformation>
driverList) {
        super(context, R.layout.list_layout, driverList);
        this.driverList = driverList;
        this.context=context;
    }

    @NonNull
    @Override
    public View getView(int position,View convertView,ViewGroup
parent) {
        LayoutInflater inflater = context.getLayoutInflater();
        View listViewItem = inflater.inflate(R.layout.list_layout,null,true);

        TextView textViewName =
listViewItem.findViewById(R.id.textViewName);
        TextView textViewDest =
listViewItem.findViewById(R.id.textViewDestination);
        TextView textViewContact =
listViewItem.findViewById(R.id.textViewContact);
        TextView textviewTime =
listViewItem.findViewById(R.id.textViewTime);
        TextView textviewAddress =
listViewItem.findViewById(R.id.textViewAddress);

        ProfileInformation driver = driverList.get(position);

        textViewName.setText(driver.gettheName());

```

```

        textViewContact.setText(driver.getthePhone_no());
        textViewDest.setText(driver.gettheDestination());
        textviewTime.setText(driver.gettheTime());
        textviewAddress.setText(driver.gettheAddress());

        return listViewItem;
    }
}

```

- **Drivers.java**

```

package com.example.mypackage.carpool;

public class Drivers{

    private String driverDestination;
    private String driverName;
    private String driverPhone_no;
    private String driverTime;

    public Drivers(){

    }

    public Drivers(String destination, String name, String phone_no,
String time) {
        this.driverDestination = destination;
        this.driverName = name;
        this.driverPhone_no = phone_no;
        this.driverTime = time;
    }

    public String getDestination() {
        return driverDestination;
    }
}

```

```

    }

    public String getName() {
        return driverName;
    }

    public String getPhone_no() {
        return driverPhone_no;
    }

    public String getTime() {
        return driverTime;
    }

}

```

- **DriverSignUpActivity.java**

```
package com.example.mypackage.carpool;
```

```

import android.content.Intent;
import android.support.annotation.NonNull;
import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.text.TextUtils;
import android.util.Log;
import android.view.View;
import android.widget.EditText;
import android.widget.Toast;

import com.google.android.gms.tasks.OnCompleteListener;
import com.google.android.gms.tasks.Task;
import com.google.firebase.auth.AuthResult;
import com.google.firebase.auth.FirebaseAuth;

```

```

import com.google.firebase.auth.FirebaseAuth;
import com.google.firebase.database.DataSnapshot;
import com.google.firebase.database.DatabaseReference;
import com.google.firebase.database.FirebaseDatabase;
import com.google.firebase.database.ValueEventListener;

public class DriverSignUpActivity extends AppCompatActivity {

    private FirebaseAuth firebaseAuth;
    private DatabaseReference databaseReference;

    private EditText name, phone_no, destination,time,address;
    private EditText newUsrName, newPswd;

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

        firebaseAuth = FirebaseAuth.getInstance();
        databaseReference =
        FirebaseDatabase.getInstance().getReference("drivers");

        name = findViewById(R.id.name);
        phone_no = findViewById(R.id.phone_no);
        destination = findViewById(R.id.destination);
        time = findViewById(R.id.time);
        address = findViewById(R.id.address);
        newUsrName = findViewById(R.id.createUsernm);
        newPswd = findViewById(R.id.createPswd);
    }
}

```

```
}
```

```
public void cancelBtn(View view){  
    Log.d("Postion","Inside driver create profile. Cancel button  
clicked");  
    Intent i = new  
Intent(DriverSignUpActivity.this, LoginActivity.class);  
    startActivity(i);  
}
```

```
public void createBtn(View view){  
    Log.d("Postion","Inside driver create profile");  
  
    //Getting values  
    String n = name.getText().toString().trim();  
    String pno = phone_no.getText().toString().trim();  
    String d = destination.getText().toString().trim();  
    String t = time.getText().toString().trim();  
    String r = "Driver";  
    String a = address.getText().toString().trim();  
    String user = newUsrName.getText().toString().trim();  
    String pass = newPswd.getText().toString().trim();  
  
    if(TextUtils.isEmpty(user)){  
        Toast.makeText(this, "Enter a  
username", Toast.LENGTH_SHORT).show();  
        return;  
    }  
    if(TextUtils.isEmpty(pass)){  
        Toast.makeText(this, "Enter a  
password", Toast.LENGTH_SHORT).show();  
        return;  
    }  
}
```

```
    }
    if(pass.length()<6){
        Toast.makeText(this, "Password must be atleast 6
characters",Toast.LENGTH_SHORT).show();
        return;
    }
    if(TextUtils.isEmpty(n)){
        Toast.makeText(this, "Enter a
name",Toast.LENGTH_SHORT).show();
        return;
    }
    if(TextUtils.isEmpty(pno)){
        Toast.makeText(this, "Enter a
phone.no",Toast.LENGTH_SHORT).show();
        return;
    }
    if(pno.length()!=10){
        Toast.makeText(this, "Please enter 10 digits for phone
number please",Toast.LENGTH_SHORT).show();
        return;
    }
    if(TextUtils.isEmpty(d)){
        Toast.makeText(this, "Enter
destination",Toast.LENGTH_SHORT).show();
        return;
    }
    if(TextUtils.isEmpty(t)){
        Toast.makeText(this, "Enter the
time",Toast.LENGTH_SHORT).show();
        return;
    }
    if(TextUtils.isEmpty(a)){
        Toast.makeText(this, "Enter an address
```



```

exists.",Toast.LENGTH_LONG).show();
        }
    }
});

}

public boolean deleteExtra(String id){
    databaseReference.child(id).child("theName").setValue(null);
    databaseReference.child(id).child("theAddress").setValue(null);

    databaseReference.child(id).child("theDestination").setValue(null);

    databaseReference.child(id).child("thePhone_no").setValue(null);
    databaseReference.child(id).child("theTime").setValue(null);
    return true;
}

}

```

- **LoginActivity.java**

```

package com.example.mypackage.carpool;

import android.content.Intent;
import android.os.Bundle;
import android.support.annotation.NonNull;
import android.support.v7.app.AppCompatActivity;
import android.text.TextUtils;
import android.util.Log;
import android.view.View;
import android.widget.EditText;
import android.widget.ProgressBar;
import android.widget.Toast;

```

```
import com.google.android.gms.tasks.OnCompleteListener;
import com.google.android.gms.tasks.Task;
import com.google.firebase.auth.AuthResult;
import com.google.firebase.auth.FirebaseAuth;
import com.google.firebase.auth.FirebaseUser;
import com.google.firebase.database.DataSnapshot;
import com.google.firebase.database.DatabaseError;
import com.google.firebase.database.DatabaseReference;
import com.google.firebase.database.FirebaseDatabase;
import com.google.firebase.database.ValueEventListener;
```

```
public class LoginActivity extends AppCompatActivity {
```

```
    private EditText username, password;
    private FirebaseAuth firebaseAuth;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_login);

        username = findViewById(R.id.usernm);
        password = findViewById(R.id.pswd);
        firebaseAuth = FirebaseAuth.getInstance();
        Log.d("Position", "Inside onCreate LoginActivity");

        if(firebaseAuth.getCurrentUser() != null){
            finish();
            checkWhatUser();
        }
    }
}
```

```
    public void signIn(View view) {
```

```

Log.d("Position","Inside signIn()");

String user = username.getText().toString().trim();
String pass = password.getText().toString().trim();

if(TextUtils.isEmpty(user)){
    Toast.makeText(this, "Enter an
username",Toast.LENGTH_SHORT).show();
    return;
}
if(TextUtils.isEmpty(pass)){
    Toast.makeText(this, "Enter a
password",Toast.LENGTH_SHORT).show();
    return;
}

firebaseAuth.signInWithEmailAndPassword(user,pass)
    .addOnCompleteListener(this, new
OnCompleteListener<AuthResult>() {
    @Override
    public void onComplete(@NonNull Task<AuthResult>
task) {
        if(task.isSuccessful()){
            //add progress bar functionality
            Log.d("Success","SignIn successful");
            checkWhatUser();
        }
        else{
            Log.d("Fail","SignIn unsuccessful");
            Toast.makeText(LoginActivity.this, "Wrong
credentials",Toast.LENGTH_LONG).show();

        }
    }
}

```

```

        }
    });
}

```

```

public void checkWhatUser(){
    FirebaseDatabase database = FirebaseDatabase.getInstance();
    DatabaseReference myRef = database.getReference();
    FirebaseUser user = firebaseAuth.getCurrentUser();

```

```

myRef.child("riders").child(user.getUid()).child("Role").addValueEventListener(new ValueEventListener() {

```

```

    @Override

```

```

    public void onDataChange(@NonNull DataSnapshot
dataSnapshot) {

```

```

        try{

```

```

            if(dataSnapshot.getValue()!=null){

```

```

                try{

```

```

                    if("Rider".equals(dataSnapshot.getValue().toString())){

```

```

                        finish();

```

```

                        Intent i = new Intent(LoginActivity.this,
RiderActivity.class);

```

```

                        startActivity(i);

```

```

                    }

```

```

                    else{

```

```

                        Log.d("Rider Not Found","Value with rider user-id
not found");

```

```

                    }

```

```

                }catch(Exception e){

```

```

                    Log.d("Rider Error in Log-In identity Line 1",""+e);

```

```

                }

```

```

    }
    else{
        Log.d("Rider dataSnapshot.getValue()", "is null");
    }
}catch(Exception e){
    Log.d("Rider Error in Log-In identity Line 2", ""+e);
}
}

```

```

@Override
public void onCancelled(@NonNull DatabaseError
databaseError) {
    Log.d("Rider onCancelled", "Cancelled");
}
});

```

```

myRef.child("drivers").child(user.getUid()).child("Role").addValueEventListener(new ValueEventListener() {

```

```

    @Override
    public void onDataChange(@NonNull DataSnapshot
dataSnapshot) {

```

```

        try{
            if(dataSnapshot.getValue()!=null){
                try{

```

```

                    if("Driver".equals(dataSnapshot.getValue().toString())){
                        finish();
                        Intent i = new Intent(LoginActivity.this,
testActivity.class);
                        startActivity(i);
                    }
                    else{

```

```

        Log.d("Driver Not Found","Value with user-id not
found");
    }
    }catch(Exception e){
        Log.d("Driver Error in Log-In identity Line 1","",e);
    }
}
else{
    Log.d("Driver dataSnapshot.getValue()", "is null");
}
}catch(Exception e){
    Log.d("Driver Error in Log-In identity Line 2","",e);
}
}
}

```

```

@Override
public void onCancelled(@NonNull DatabaseError
databaseError) {
    Log.d("Driver onCancelled","Cancelled");
}
});
}
}

```

```

public void driverSignUp(View view){
    Log.d("Position","Inside driver signUp()");
    finish();
    Intent i = new Intent(LoginActivity.this,
DriverSignUpActivity.class);
    startActivity(i);

}

```

```

public void riderSignUp(View view){

```

```

        Log.d("Position", "Inside rider signUp()");
        finish();
        Intent i = new Intent(LoginActivity.this,
RiderSignUpActivity.class);
        startActivity(i);

    }

}

```

- **MapActivity.java**

```

package com.example.mypackage.carpool;

import android.Manifest;
import android.content.pm.PackageManager;
import android.location.Address;
import android.location.Geocoder;
import android.location.Location;
import android.os.Bundle;
import android.support.annotation.NonNull;
import android.support.annotation.Nullable;
import android.support.v4.app.ActivityCompat;
import android.support.v4.content.ContextCompat;
import android.support.v7.app.AppCompatActivity;
import android.util.Log;
import android.view.KeyEvent;
import android.view.View;
import android.view.inputmethod.EditorInfo;
import android.widget.EditText;
import android.widget.ImageView;
import android.widget.TextView;
import android.widget.Toast;

```



```
import
com.google.android.gms.location.FusedLocationProviderClient;
import com.google.android.gms.location.LocationServices;
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.LatLngBounds;
import com.google.android.gms.maps.model.MarkerOptions;
import com.google.android.gms.tasks.OnCompleteListener;
import com.google.android.gms.tasks.Task;
```

```
import java.io.IOException;
import java.util.ArrayList;
import java.util.List;
```

```
public class MapActivity extends AppCompatActivity implements
OnMapReadyCallback{
```

```
    private static final String FINE_LOCATION =
Manifest.permission.ACCESS_FINE_LOCATION;
    private static final String COARSE_LOCATION =
Manifest.permission.ACCESS_COARSE_LOCATION;
```

```
    private static final LatLngBounds LAT_LNG_BOUNDS = new
LatLngBounds(
        new LatLng(-40,-168),new LatLng(71,136));
```

```
    private Boolean locationPermissionGranted= false;
    private static final int LOCATION_REQUEST_CODE =1234;
    private GoogleMap mMap;
```

```

    private FusedLocationProviderClient
mFusedLocationProviderClient;
    private float DEFAULT_ZOOM = 15f;


//Widgets
    private EditText mSearchText;
    private ImageView mGps;


@Override
protected void onCreate(@Nullable Bundle savedInstanceState) {
    super.onCreate(savedInstanceState);
    setContentView(R.layout.activity_map);
    mSearchText = (EditText) findViewById(R.id.input_search);
    mGps = (ImageView) findViewById(R.id.ic_gps);
    getPermission();

}


    private void getPermission(){
        Log.d("Map Status","Getting permission");
        String[] permissions = {
            Manifest.permission.ACCESS_FINE_LOCATION,
            Manifest.permission.ACCESS_COARSE_LOCATION};

        if(ContextCompat.checkSelfPermission(this.getApplicationContext(),
            FINE_LOCATION) ==
            PackageManager.PERMISSION_GRANTED){

            if(ContextCompat.checkSelfPermission(this.getApplicationContext(),
                COARSE_LOCATION) ==
                PackageManager.PERMISSION_GRANTED) {
                locationPermissionGranted=true;
            }
        }
    }

```

```

        initMap();
    }else{
        ActivityCompat.requestPermissions(this,permissions,
LOCATION_REQUEST_CODE);
    }
}
else{
    ActivityCompat.requestPermissions(this,permissions,
LOCATION_REQUEST_CODE);
}
}

```

```

private void initMap(){
    Log.d("Map Status","Initializing");
    SupportMapFragment mapFragment=(SupportMapFragment)
getSupportFragmentManager().findFragmentById(R.id.map);
    mapFragment.getMapAsync(MapActivity.this);
}

```

```

@Override
public void onMapReady(GoogleMap googleMap) {
    Log.d("Map Status", "Ready");
    Toast.makeText(MapActivity.this, "Map is ready",
Toast.LENGTH_LONG).show();
    mMap = googleMap;

    if (locationPermissionGranted) {
        getDeviceLocation();

        if (ActivityCompat.checkSelfPermission(this,
Manifest.permission.ACCESS_FINE_LOCATION)
            != PackageManager.PERMISSION_GRANTED &&
            ActivityCompat.checkSelfPermission(this,

```

```

Manifest.permission.ACCESS_COARSE_LOCATION) !=
PackageManager.PERMISSION_GRANTED) {
    // TODO: Consider calling
    //    ActivityCompat#requestPermissions
    // here to request the missing permissions, and then
    overriding
    //    public void onRequestPermissionsResult(int
requestCode, String[] permissions,
        //                                int[] grantResults)
        // to handle the case where the user grants the permission.
    See the documentation
        // for ActivityCompat#requestPermissions for more details.
    return;
}
mMap.setMyLocationEnabled(true);
mMap.getUiSettings().setMyLocationButtonEnabled(false);

    init();
}
}

```

```

private void getDeviceLocation(){
    Log.d("Get location","Getting");
    mfusedLocationProviderClient =
LocationServices.getFusedLocationProviderClient(this);
    try{
        if(locationPermissionGranted){
            Task location =
mfusedLocationProviderClient.getLastLocation();
            location.addListener(new
OnCompleteListener() {
                @Override
                public void onComplete(@NonNull Task task) {

```

```

        if(task.isSuccessful()){
            Log.d("Get location","Found");
            Location currentLocation =
(Location)task.getResult();
            moveCamera(new
LatLng(currentLocation.getLatitude(),currentLocation.getLongitude()),
DEFAULT_ZOOM,"Me");
        }else{
            Log.d("Get location","Cannot find");
            Toast.makeText(MapActivity.this,"Unable to get
current location",Toast.LENGTH_LONG).show();
        }
    }
});
}
}
catch(SecurityException e){
    Log.d("Get Location","Exception" + e);
}
}
}

```

```

private void moveCamera(LatLng latLng, float zoom, String title){
    Log.d("Camera","Moving to lat ::" + latLng.latitude + " lon
::"+latLng.longitude);

```

```

mMap.moveCamera(CameraUpdateFactory.newLatLngZoom(latLng,
zoom));
    if(!title.equals("Me")) {
        MarkerOptions options = new
MarkerOptions().position(latLng).title(title);
        mMap.addMarker(options);
    }
}
}

```

```

private void init(){
    Log.d("Msg","Initializing");
    mSearchText.setOnEditorActionListener(new
    TextView.OnEditorActionListener() {
        @Override
        public boolean onEditorAction(TextView v, int actionId,
        KeyEvent keyEvent) {
            if(actionId== EditorInfo.IME_ACTION_SEARCH
                || actionId==EditorInfo.IME_ACTION_DONE
                || keyEvent.getAction()==KeyEvent.ACTION_DOWN
//Enter option in keyboard
                ||
keyEvent.getAction()==KeyEvent.KEYCODE_ENTER)
            {
                geoLocate();
            }
            return false;
        }
    });

```

```

    mGps.setOnClickListener(new View.OnClickListener() {
        @Override
        public void onClick(View v) {
            Log.d("Action","Get my location");
            getDeviceLocation();
        }
    });
}

```

```

private void geoLocate(){
    Log.d("GeoLocate func","Locating");

```

```

String searchString = mSearchText.getText().toString();

Geocoder geocoder = new Geocoder(MapActivity.this);
List<Address> list = new ArrayList<>();
try{
    list=geocoder.getFromLocationName(searchString,1);

}catch(IOException e){
    Log.d("Geolocation func error","",e.getMessage());
}

if(list.size()>0){
    Address address =list.get(0);
    Log.d("GeoLocation","Found this ::"+address.toString());

//Toast.makeText(MapActivity.this,""+address.toString(),Toast.LENGTH_SHORT).show();
    moveCamera(new
LatLng(address.getLatitude(),address.getLongitude()),DEFAULT_ZOOM,address.getAddressLine(0));
    }
}

```

```

@Override
public void onRequestPermissionsResult(int requestCode,
@NonNull String[] permissions, @NonNull int[] grantResults) {
    Log.d("Map Status","On request Permission result called");
    locationPermissionGranted = false;
    switch(requestCode){
        case LOCATION_REQUEST_CODE:
            {

```

```

        if(grantResults.length>0){
            for(int i= 0;i<grantResults.length;i++){

if(grantResults[i]!=PackageManager.PERMISSION_GRANTED){
                    locationPermissionGranted=false;
                    Log.d("Map Status","On request permission -
failed");
                                return;
                            }
                        }
                    locationPermissionGranted=true;
                    Log.d("Map Status","On request permission - success");
                    initMap();
                }
            }
        }
    }
}

```

- **ProfileInformation.java**

```

package com.example.mypackage.carpool;

public class ProfileInformation {
    public String Name, Destination, Time, Role, Phone_no, Address;

    public ProfileInformation(){ }

    public ProfileInformation(String name, String destination, String
time, String role, String phone_no, String address){
        this.Name = name;
        this.Destination = destination;
        this.Role = role;
    }
}

```



```
        this.Time = time;
        this.Phone_no = phone_no;
        this.Address = address;

    }

    public ProfileInformation(String name, String phone_no, String role
){
        this.Name = name;
        this.Role = role;
        this.Phone_no = phone_no;
    }

    public String gettheName() {
        return Name;
    }

    public String gettheDestination() {
        return Destination;
    }

    public String gettheTime() {
        return Time;
    }

    public String gettheAddress() {
        return Address;
    }

    public String getthePhone_no() {
        return Phone_no;
    }
}
```

```
}
```

- **RiderActivity.java**

```
package com.example.mypackage.carpool;

import android.app.Dialog;
import android.content.Intent;
import android.os.Bundle;
import android.support.annotation.NonNull;
import android.support.v7.app.AppCompatActivity;
import android.util.Log;
import android.view.View;
import android.widget.Button;
import android.widget.ListView;
import android.widget.Toast;

import com.google.android.gms.common.ConnectionResult;
import com.google.android.gms.common.GoogleApiAvailability;
import com.google.firebase.auth.FirebaseAuth;
import com.google.firebase.auth.FirebaseUser;
import com.google.firebase.database.DataSnapshot;
import com.google.firebase.database.DatabaseError;
import com.google.firebase.database.DatabaseReference;
import com.google.firebase.database.FirebaseDatabase;
import com.google.firebase.database.ValueEventListener;

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

public class RiderActivity extends AppCompatActivity {
```

```
ListView listViewDrivers;  
List<ProfileInformation> driversList;
```

```
DatabaseReference databaseReference;  
FirebaseAuth firebaseAuth;
```

```
@Override
```

```
protected void onCreate(Bundle savedInstanceState) {  
    super.onCreate(savedInstanceState);  
    setContentView(R.layout.activity_rider);  
    databaseReference =  
    FirebaseDatabase.getInstance().getReference("drivers");  
  
    listViewDrivers = findViewById(R.id.listViewDrivers);  
    driversList = new ArrayList<>();  
    firebaseAuth = FirebaseAuth.getInstance();  
  
    if(firebaseAuth.getCurrentUser() == null){  
        finish();  
        Intent i = new Intent(this, LoginActivity.class);  
        startActivity(i);  
    }  
    if(isServicesOk())  
        callMap();  
}
```

```
@Override
```

```
protected void onStart() {  
    super.onStart();  
  
    databaseReference.addValueEventListener(new  
    ValueEventListener() {
```

```

        @Override
        public void onDataChange(@NonNull DataSnapshot
dataSnapshot) {

            driversList.clear();
            for( DataSnapshot driverSnapshot :
dataSnapshot.getChildren()){
                ProfileInformation driver =
driverSnapshot.getValue(ProfileInformation.class);
                driversList.add(driver);
            }
            DriverList adapter = new DriverList(RiderActivity.this,
driversList);
            listViewDrivers.setAdapter(adapter);
        }
        @Override
        public void onCancelled(@NonNull DatabaseError
databaseError) {

        }

    });

}

private void callMap(){
    Button b = (Button)findViewById(R.id.button);
    b.setOnClickListener(new View.OnClickListener() {
        @Override
        public void onClick(View v) {
            Intent i = new Intent(RiderActivity.this,MapActivity.class);
            startActivity(i);
        }
    });
}

```

```

    }

    //Checking google services
    public boolean isServicesOk(){
        Log.d("Yes","Checking services");

        int available =
        GoogleApiAvailability.getInstance().isGooglePlayServicesAvailable(Ri
        derActivity.this);
        if(available == ConnectionResult.SUCCESS){
            Log.d("Yes","Connection and Services exist");
            return true;
        }
        else
        if(GoogleApiAvailability.getInstance().isUserResolvableError(availabl
        e)){
            Log.d("Yes","Works but has errors");
            int n1=0;
            Dialog dialog =
            GoogleApiAvailability.getInstance().getErrorDialog(RiderActivity.this,
            available,n1);
            dialog.show();
        }
        else{
            Toast.makeText(RiderActivity.this, "NO",
            Toast.LENGTH_SHORT).show();
        }
        return false;
    }

    public void logout(View view){
        firebaseAuth.signOut();
        Toast.makeText(this, "Log out successful",
        Toast.LENGTH_LONG).show();
    }

```

```

        finish();
        Intent i = new Intent(this, LoginActivity.class);
        startActivity(i);
    }

}

```

- **RiderSignUpActivity.java**

```

package com.example.mypackage.carpool;

import android.content.Intent;
import android.support.annotation.NonNull;
import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.text.TextUtils;
import android.util.Log;
import android.view.View;
import android.widget.EditText;
import android.widget.Toast;

import com.google.android.gms.tasks.OnCompleteListener;
import com.google.android.gms.tasks.Task;
import com.google.firebase.auth.AuthResult;
import com.google.firebase.auth.FirebaseAuth;
import com.google.firebase.auth.FirebaseUser;
import com.google.firebase.database.DatabaseReference;
import com.google.firebase.database.FirebaseDatabase;

public class RiderSignUpActivity extends AppCompatActivity {

    private FirebaseAuth firebaseAuth;
    private DatabaseReference databaseReference;

```

```
private EditText name, phone_no;  
private EditText newUsrName, newPswd;
```

```
@Override
```

```
protected void onCreate(Bundle savedInstanceState) {  
    super.onCreate(savedInstanceState);  
    setContentView(R.layout.activity_rider_sign_up);
```

```
    firebaseAuth = FirebaseAuth.getInstance();  
    databaseReference =  
    FirebaseDatabase.getInstance().getReference("riders");
```

```
    name = findViewById(R.id.name);  
    phone_no = findViewById(R.id.phone_no);  
    newUsrName = findViewById(R.id.createUsernm);  
    newPswd = findViewById(R.id.createPswd);
```

```
}
```

```
public void cancelBtn(View view){  
    Log.d("Postion", "Inside driver create profile. Cancel button  
clicked");
```

```
    Intent i = new  
Intent(RiderSignUpActivity.this, LoginActivity.class);  
    startActivity(i);  
}
```

```
public void createBtn(View view){  
    Log.d("Postion", "Inside driver create profile");
```

```
//Getting values
```

```
String n = name.getText().toString().trim();
```

```
String pno = phone_no.getText().toString().trim();
String r = "Rider";
String user = newUsrName.getText().toString().trim();
String pass = newPswd.getText().toString().trim();
```

```
    if(TextUtils.isEmpty(n)){
        Toast.makeText(this, "Enter a
name",Toast.LENGTH_SHORT).show();
        return;
    }
    if(TextUtils.isEmpty(pno)){
        Toast.makeText(this, "Enter a
phone.no",Toast.LENGTH_SHORT).show();
        return;
    }
    if(pno.length()!=10){
        Toast.makeText(this, "Please enter 10 digits for phone
number please",Toast.LENGTH_SHORT).show();
        return;
    }
    if(TextUtils.isEmpty(user)){
        Toast.makeText(this, "Enter a
username",Toast.LENGTH_SHORT).show();
        return;
    }
    if(TextUtils.isEmpty(pass)){
        Toast.makeText(this, "Enter a
password",Toast.LENGTH_SHORT).show();
        return;
    }
    if(pass.length()<6){
        Toast.makeText(this, "Password must be atleast 6
```



```

characters",Toast.LENGTH_SHORT).show();
        return;
    }

    final ProfileInformation profileInformation = new
    ProfileInformation(n,pno,r);
    firebaseAuth.createUserWithEmailAndPassword(user,pass)
        .addOnCompleteListener(this, new
    OnCompleteListener<AuthResult>() {
        @Override
        public void onComplete(@NonNull Task<AuthResult>
task) {
            if(task.isSuccessful()){
                FirebaseUser user = firebaseAuth.getCurrentUser();

                databaseReference.child(user.getUid()).setValue(profileInformation);
                Log.d("Success","Rider Creation successful");

                Toast.makeText(getApplicationContext(),"Successful Rider
                Registration.Please login to
                continue",Toast.LENGTH_LONG).show();
                finish();
                Intent i = new Intent(RiderSignUpActivity.this,
                LoginActivity.class);
                startActivity(i);
            }
            else{
                Log.d("Failure","Rider Registration successful");
                Toast.makeText(RiderSignUpActivity.this,"Error :
                Email format is wrong or it already
                exists.",Toast.LENGTH_LONG).show();
            }
        }
    }
}

```

```

        });

    }
}

```

- **Splash.java**

```

package com.example.mypackage.carpool;

import android.content.Intent;
import android.os.Bundle;
import android.os.Handler;
import android.support.annotation.Nullable;
import android.support.v7.app.AppCompatActivity;

public class Splash extends AppCompatActivity {
    @Override
    public void onCreate(@Nullable Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.splash_layout);

        new Handler().postDelayed(new Runnable() {
            @Override
            public void run() {
                Intent i = new Intent(Splash.this, LoginActivity.class);
                startActivity(i);

                finish();
            }
        }, 3000);
    }
}

```

- **testActivity.java**

```
package com.example.mypackage.carpool;
```

```
import android.content.Intent;
import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.view.View;
import android.widget.Toast;
```

```
import com.google.firebase.auth.FirebaseAuth;
import com.google.firebase.auth.FirebaseUser;
import com.google.firebase.database.DatabaseReference;
import com.google.firebase.database.FirebaseDatabase;
```

```
public class testActivity extends AppCompatActivity {
```

```
    private FirebaseAuth firebaseAuth;
    private DatabaseReference databaseReference;
```

```
    @Override
```

```
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_test);
```

```
        firebaseAuth = FirebaseAuth.getInstance();
        databaseReference =
```

```
        FirebaseDatabase.getInstance().getReference("drivers");
```

```
        //firebaseAuth.getCurrentUser();
```

```
        if(firebaseAuth.getCurrentUser() == null){
            finish();
```

```

        Intent i = new Intent(this, LoginActivity.class);
        startActivity(i);
    }
}

public void logout(View view){
    firebaseAuth.signOut();
    finish();
    Intent i = new Intent(this, LoginActivity.class);
    startActivity(i);
}

public void delete(View view){
    FirebaseUser user = firebaseAuth.getCurrentUser();
    databaseReference.child(user.getId()).setValue(null);
    user.delete();
    Toast.makeText(this, "Successful profile deletion",
Toast.LENGTH_LONG).show();
    logout(view);
}

}

```

- **white_border.xml**

```

<?xml version="1.0" encoding="utf-8"?>
<layer-list
xmlns:android="http://schemas.android.com/apk/res/android">
    <item>
        <shape android:shape="rectangle">
            <solid android:color="#fff"/>
            <corners android:radius="5dp"/>
        </shape>
    </item>
</layer-list>

```

</item>

</layer-list>

- **activity_driver_sign_up.xml**

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

```
<android.support.constraint.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"
```

```
tools:context=".DriverSignUpActivity"
```

```
tools:layout_editor_absoluteY="25dp">
```

```
<TextView
```

```
android:id="@+id/textView3"
```

```
android:layout_width="wrap_content"
```

```
android:layout_height="wrap_content"
```

```
android:layout_marginStart="16dp"
```

```
android:text="@string/dsignup"
```

```
android:textColor="@color/greenBg"
```

```
android:textSize="50sp"
```

```
android:textStyle="bold"
```

```
app:layout_constraintStart_toStartOf="parent"
```

```
app:layout_constraintTop_toTopOf="parent" />
```

```
<TextView
```

```
android:id="@+id/textView10"
```

```
android:layout_width="wrap_content"
```

```
android:layout_height="wrap_content"
```

```
android:layout_marginStart="4dp"
```

```
android:layout_marginTop="14dp"
```

```
android:text="@string/username_box"
```

```
android:textColor="@color/greenBg"
android:textSize="25sp"
android:textStyle="bold"
app:layout_constraintStart_toStartOf="@+id/createUsernm"
app:layout_constraintTop_toBottomOf="@+id/textView3" />
```

<TextView

```
android:id="@+id/textView11"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:layout_marginTop="11dp"
android:layout_marginEnd="7dp"
android:text="@string/password_box"
android:textColor="@color/greenBg"
android:textSize="25sp"
android:textStyle="bold"
app:layout_constraintEnd_toEndOf="@+id/textView14"
app:layout_constraintTop_toBottomOf="@+id/textView14" />
```

<Button

```
android:id="@+id/createBtn"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:layout_marginStart="84dp"
android:layout_marginBottom="16dp"
android:background="@color/greenBg"
android:onClick="createBtn"
android:text="@string/create"
app:layout_constraintBottom_toBottomOf="parent"
app:layout_constraintStart_toStartOf="parent" />
```

<Button

```
android:id="@+id/cancelBtn"
```

```
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:layout_marginStart="79dp"
android:layout_marginEnd="79dp"
android:layout_marginBottom="16dp"
android:background="@color/greenBg"
android:onClick="cancelBtn"
android:text="@string/cancel"
app:layout_constraintBottom_toBottomOf="parent"
app:layout_constraintEnd_toEndOf="parent"
app:layout_constraintStart_toStartOf="@+id/address" />
```

<EditText

```
android:id="@+id/createUsernm"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:layout_marginEnd="3dp"
android:layout_marginBottom="12dp"
android:ems="10"
android:hint="@string/username_hint"
android:inputType="textPersonName"
app:layout_constraintBottom_toBottomOf="@+id/textView14"
app:layout_constraintEnd_toEndOf="@+id/textView14" />
```

<EditText

```
android:id="@+id/createPswd"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:layout_marginTop="23dp"
android:layout_marginEnd="1dp"
android:ems="10"
android:inputType="textPassword"
```

```
app:layout_constraintEnd_toEndOf="@+id/textView11"  
app:layout_constraintTop_toTopOf="@+id/textView11" />
```

```
<TextView
```

```
    android:id="@+id/textView14"  
    android:layout_width="wrap_content"  
    android:layout_height="wrap_content"  
    android:layout_marginTop="26dp"  
    android:text="@string/username_box_hint"  
    android:textColor="@color/greenBg"  
    android:textStyle="bold"  
    app:layout_constraintEnd_toEndOf="parent"  
    app:layout_constraintStart_toStartOf="parent"  
    app:layout_constraintTop_toBottomOf="@+id/textView10" />
```

```
<TextView
```

```
    android:id="@+id/textView15"  
    android:layout_width="wrap_content"  
    android:layout_height="wrap_content"  
    android:layout_marginStart="3dp"  
    android:text="@string/password_box_hint"  
    android:textColor="@color/greenBg"  
    android:textStyle="bold"  
    app:layout_constraintBottom_toBottomOf="@+id/createPswd"  
    app:layout_constraintStart_toStartOf="@+id/createPswd"  
    app:layout_constraintTop_toBottomOf="@+id/createPswd" />
```

```
<TextView
```

```
    android:id="@+id/textView5"  
    android:layout_width="wrap_content"  
    android:layout_height="wrap_content"  
    android:layout_marginTop="4dp"  
    android:text="@string/phone"
```



```
android:textColor="@color/greenBg"
android:textSize="15sp"
android:textStyle="bold"
app:layout_constraintEnd_toStartOf="@+id/textView4"
app:layout_constraintStart_toStartOf="@+id/textView4"
app:layout_constraintTop_toBottomOf="@+id/name" />
```

<TextView

```
android:id="@+id/textView7"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:layout_marginTop="4dp"
android:text="@string/destination"
android:textColor="@color/greenBg"
android:textSize="15sp"
android:textStyle="bold"
app:layout_constraintEnd_toStartOf="@+id/textView9"
app:layout_constraintStart_toStartOf="@+id/textView9"
app:layout_constraintTop_toBottomOf="@+id/phone_no" />
```

<TextView

```
android:id="@+id/textView4"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:layout_marginEnd="3dp"
android:text="@string/name"
android:textColor="@color/greenBg"
android:textSize="15sp"
android:textStyle="bold"
app:layout_constraintBottom_toTopOf="@+id/phone_no"
app:layout_constraintEnd_toStartOf="@+id/name" />
```

<TextView

```
android:id="@+id/textView8"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:layout_marginStart="9dp"
android:text="@string/example"
android:textColor="@color/greenBg"
android:textSize="15sp"
android:textStyle="bold"
app:layout_constraintBottom_toBottomOf="@+id/destination"
app:layout_constraintStart_toStartOf="@+id/destination"
app:layout_constraintTop_toBottomOf="@+id/destination" />
```

<TextView

```
android:id="@+id/textView9"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:layout_marginEnd="17dp"
android:layout_marginBottom="8dp"
android:text="@string/time"
android:textColor="@color/greenBg"
android:textSize="15sp"
android:textStyle="bold"
app:layout_constraintBottom_toBottomOf="@+id/time"
app:layout_constraintEnd_toStartOf="@+id/time" />
```

<EditText

```
android:id="@+id/name"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:layout_marginEnd="31dp"
android:ems="10"
android:hint="@string/name_hint"
android:inputType="textPersonName"
```

```
app:layout_constraintBaseline_toBaselineOf="@+id/textView4"  
app:layout_constraintEnd_toEndOf="parent" />
```

```
<EditText  
    android:id="@+id/phone_no"  
    android:layout_width="wrap_content"  
    android:layout_height="wrap_content"  
    android:layout_marginTop="56dp"  
    android:ems="10"  
    android:hint="@string/phone_hint"  
    android:inputType="number|phone"  
    app:layout_constraintStart_toStartOf="@+id/name"  
    app:layout_constraintTop_toBottomOf="@+id/textView15" />
```

```
<EditText  
    android:id="@+id/destination"  
    android:layout_width="wrap_content"  
    android:layout_height="wrap_content"  
    android:layout_marginTop="20dp"  
    android:ems="10"  
    android:hint="@string/destination_hint"  
    android:inputType="textPersonName"  
    app:layout_constraintStart_toStartOf="@+id/phone_no"  
    app:layout_constraintTop_toTopOf="@+id/textView5" />
```

```
<EditText  
    android:id="@+id/time"  
    android:layout_width="wrap_content"  
    android:layout_height="wrap_content"  
    android:ems="10"  
    android:hint="@string/time_hint"  
    android:inputType="time"  
    app:layout_constraintStart_toStartOf="@+id/destination"
```

```
app:layout_constraintTop_toBottomOf="@+id/destination" />
```

```
<TextView
```

```
    android:id="@+id/textView"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginTop="14dp"
    android:layout_marginEnd="15dp"
    android:text="@string/address"
    android:textColor="@color/greenBg"
    android:textStyle="bold"
    app:layout_constraintEnd_toStartOf="@+id/address"
    app:layout_constraintTop_toBottomOf="@+id/time" />
```

```
<EditText
```

```
    android:id="@+id/address"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:ems="10"
    android:inputType="textMultiLine"
    app:layout_constraintBaseline_toBaselineOf="@+id/textView"
    app:layout_constraintStart_toStartOf="@+id/time" />
```

```
</android.support.constraint.ConstraintLayout>
```

- **activity_login.xml**

```
<?xml version="1.0" encoding="utf-8"?>
<android.support.constraint.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"
tools:context=".LoginActivity"
tools:layout_editor_absoluteY="25dp">
```

```
<ImageView
```

```
    android:id="@+id/imageView"
    android:layout_width="0dp"
    android:layout_height="0dp"
    android:layout_marginStart="67dp"
    android:layout_marginTop="25dp"
    android:layout_marginEnd="67dp"
    android:layout_marginBottom="47dp"
    android:contentDescription="@string/empty"
    app:layout_constraintBottom_toTopOf="@+id/textViewName"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:srcCompat="@drawable/logo" />
```

```
<TextView
```

```
    android:id="@+id/textViewName"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginEnd="37dp"
    android:layout_marginBottom="6dp"
    android:clickable="false"
    android:text="@string/username"
    android:textColor="@color/greenBg"
    android:textStyle="bold"
    app:layout_constraintBottom_toTopOf="@+id/usernm"
    app:layout_constraintEnd_toEndOf="@+id/textView13"
    app:layout_constraintTop_toBottomOf="@+id/imageView" />
```

```
<TextView
    android:id="@+id/textView2"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginBottom="11dp"
    android:text="@string/password"
    android:textColor="@color/greenBg"
    android:textStyle="bold"
    app:layout_constraintBottom_toTopOf="@+id/pswd"
    app:layout_constraintEnd_toEndOf="@+id/pswd"
    app:layout_constraintStart_toStartOf="@+id/pswd"
    app:layout_constraintTop_toBottomOf="@+id/usernm" />
```

```
<EditText
    android:id="@+id/usernm"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginBottom="13dp"
    android:ems="10"
    android:hint="@string/username_hint"
    android:inputType="textPersonName"
    app:layout_constraintBottom_toTopOf="@+id/textView2"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toBottomOf="@+id/textViewName" />
```

```
<EditText
    android:id="@+id/pswd"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginBottom="7dp"
    android:ems="10"
    android:hint="@string/password_hint"
```

```
android:inputType="textPassword"
app:layout_constraintBottom_toTopOf="@+id/signInBtn"
app:layout_constraintStart_toStartOf="@+id/username"
app:layout_constraintTop_toBottomOf="@+id/textView2" />
```

<Button

```
android:id="@+id/signInBtn"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:layout_marginBottom="42dp"
android:backgroundTint="@color/greenBg"
android:onClick="signIn"
android:text="@string/signin"
app:layout_constraintBottom_toTopOf="@+id/textView12"
app:layout_constraintEnd_toEndOf="parent"
app:layout_constraintStart_toStartOf="parent"
app:layout_constraintTop_toBottomOf="@+id/pwd" />
```

<TextView

```
android:id="@+id/textView12"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:layout_marginBottom="26dp"
android:text="@string/new_member"
android:textSize="20sp"
android:visibility="visible"
app:layout_constraintBottom_toTopOf="@+id/textView17"
app:layout_constraintStart_toEndOf="@+id/textView16"
app:layout_constraintTop_toBottomOf="@+id/signInBtn" />
```

<TextView

```
android:id="@+id/textView16"
android:layout_width="wrap_content"
```

```
android:layout_height="wrap_content"
android:layout_marginStart="3dp"
android:layout_marginTop="26dp"
android:layout_marginEnd="6dp"
android:clickable="true"
android:onClick="driverSignUp"
android:text="@string/driver_member"
android:textColor="@color/greenBg"
android:textSize="20sp"
app:layout_constraintEnd_toStartOf="@+id/textView17"
app:layout_constraintStart_toStartOf="parent"
app:layout_constraintTop_toBottomOf="@+id/textView12" />
```

<TextView

```
android:id="@+id/textView17"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:layout_marginBottom="44dp"
android:clickable="true"
android:onClick="riderSignUp"
android:text="@string/rider_member"
android:textColor="@color/greenBg"
android:textSize="20sp"
app:layout_constraintBottom_toBottomOf="parent"
app:layout_constraintEnd_toEndOf="parent"
app:layout_constraintStart_toEndOf="@+id/textView16"
app:layout_constraintTop_toBottomOf="@+id/textView12" />
```

<TextView

```
android:id="@+id/textView13"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
```



```
    android:layout_marginBottom="13dp"
    android:text="@string/app_name"
    android:textColor="@color/black"
    android:textSize="40sp"
    android:textStyle="bold"
    app:layout_constraintBottom_toTopOf="@+id/textViewName"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintStart_toStartOf="parent" />
```

```
</android.support.constraint.ConstraintLayout>
```

- **activity_map.xml**

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

```
<RelativeLayout
```

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

```
        android:layout_width="match_parent"
```

```
        android:layout_height="match_parent">
```

```
    <fragment
```

```
        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:id="@+id/map"
```

```
        tools:context=".MapsActivity"
```

```
        android:name="com.google.android.gms.maps.SupportMapFragment"
    " />
```

```
    <RelativeLayout
```

```
        android:layout_width="match_parent"
```

```
        android:layout_height="50dp"
```

```
        android:layout_marginTop="10dp"
```

```
android:layout_marginLeft="10dp"
android:layout_marginRight="10dp"
android:elevation="10dp"
android:background="@drawable/white_border"
android:id="@+id/relLayout1">
```

```
<ImageView
    android:layout_width="15dp"
    android:layout_height="15dp"
    android:id="@+id/ic_magnify"
    android:layout_centerVertical="true"
    android:layout_marginLeft="10dp"
    android:src="@drawable/ic_magnify"/>
```

```
<EditText
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:layout_toRightOf="@+id/ic_magnify"
    android:layout_centerVertical="true"
    android:textSize="15sp"
    android:textColor="#000"
    android:id="@+id/input_search"
    android:background="@null"
    android:hint="Enter the address here"
    android:imeOptions="actionSearch"/>
```

```
</RelativeLayout>
```

```
<ImageView
    android:layout_width="40dp"
    android:layout_height="40dp"
    android:layout_below="@id/relLayout1"
    android:layout_alignParentRight="true"
```

```

        android:layout_marginRight="10dp"
        android:layout_marginTop="10dp"
        android:scaleType="centerCrop"
        android:id="@+id/ic_gps"
        android:src="@drawable/ic_gps"/>
    </RelativeLayout>

```

- **activity_rider.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"
    tools:context=".RiderActivity">

```

```

    <Button
        android:id="@+id/button"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_alignParentTop="true"
        android:layout_alignParentEnd="true"
        android:layout_marginTop="22dp"
        android:layout_marginEnd="230dp"
        android:background="@color/greenBg"
        android:text="@string/maps_link" />

```

```

    <Button
        android:id="@+id/logoutRdrBtn"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"

```

```
android:layout_alignTop="@+id/button"
android:layout_alignParentStart="true"
android:layout_marginStart="221dp"
android:layout_marginTop="1dp"
android:background="@color/greenBg"
android:onClick="logout"
android:text="@string/logout"
tools:onClick="logout" />
```

<TextView

```
android:id="@+id/textView18"
android:layout_width="match_parent"
android:layout_height="match_parent"
android:layout_alignParentTop="true"
android:layout_centerHorizontal="true"
android:layout_marginTop="87dp"
android:text="@string/add_list"
android:textColor="@color/greenBg"
android:textSize="25sp"
android:textStyle="bold"
android:textAlignment="center"/>
```

<ListView

```
android:id="@+id/listViewDrivers"
android:layout_width="match_parent"
android:layout_height="match_parent"
android:layout_alignParentStart="true"
android:layout_alignParentTop="true"
android:layout_marginStart="0dp"
android:layout_marginTop="120dp"
/>
```

</RelativeLayout>

- **activity_rider_sign_up.xml**

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

```
<android.support.constraint.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"
```

```
tools:context=".RiderSignUpActivity"
```

```
tools:layout_editor_absoluteY="25dp">
```

```
<TextView
```

```
android:id="@+id/textView3"
```

```
android:layout_width="wrap_content"
```

```
android:layout_height="wrap_content"
```

```
android:layout_marginTop="30dp"
```

```
android:text="@string/rsignup"
```

```
android:textColor="@color/greenBg"
```

```
android:textSize="40sp"
```

```
android:textStyle="bold"
```

```
app:layout_constraintEnd_toEndOf="parent"
```

```
app:layout_constraintStart_toStartOf="parent"
```

```
app:layout_constraintTop_toTopOf="parent" />
```

```
<TextView
```

```
android:id="@+id/textView10"
```

```
android:layout_width="wrap_content"
```

```
android:layout_height="wrap_content"
```

```
android:layout_marginStart="10dp"
```

```
android:layout_marginBottom="37dp"
```

```
android:text="@string/username_box"
```

```
android:textColor="@color/greenBg"
android:textSize="25sp"
android:textStyle="bold"
app:layout_constraintBottom_toBottomOf="@+id/createUsernm"
app:layout_constraintStart_toStartOf="@+id/createUsernm" />
```

<TextView

```
android:id="@+id/textView11"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:layout_marginStart="1dp"
android:layout_marginTop="11dp"
android:text="@string/password_box"
android:textColor="@color/greenBg"
android:textSize="25sp"
android:textStyle="bold"
app:layout_constraintStart_toStartOf="@+id/createPswd"
app:layout_constraintTop_toBottomOf="@+id/textView14" />
```

<Button

```
android:id="@+id/createBtn"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:layout_marginStart="86dp"
android:layout_marginBottom="43dp"
android:background="@color/greenBg"
android:onClick="createBtn"
android:text="@string/create"
app:layout_constraintBottom_toBottomOf="parent"
app:layout_constraintStart_toStartOf="parent" />
```

<Button

```
android:id="@+id/cancelBtn"
```

```
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:layout_marginStart="79dp"
android:layout_marginEnd="79dp"
android:layout_marginBottom="43dp"
android:background="@color/greenBg"
android:onClick="cancelBtn"
android:text="@string/cancel"
app:layout_constraintBottom_toBottomOf="parent"
app:layout_constraintEnd_toEndOf="parent"
app:layout_constraintStart_toStartOf="@+id/phone_no" />
```

<EditText

```
android:id="@+id/createUsernm"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:layout_marginStart="9dp"
android:layout_marginBottom="18dp"
android:ems="10"
android:hint="@string/username_hint"
android:inputType="textPersonName"
app:layout_constraintBottom_toBottomOf="@+id/textView14"
app:layout_constraintStart_toStartOf="@+id/textView14" />
```

<EditText

```
android:id="@+id/createPswd"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:layout_marginTop="24dp"
android:layout_marginEnd="8dp"
android:ems="10"
android:inputType="textPassword"
```

```
app:layout_constraintEnd_toEndOf="@+id/textView14"  
app:layout_constraintTop_toTopOf="@+id/textView11" />
```

```
<TextView
```

```
    android:id="@+id/textView14"  
    android:layout_width="wrap_content"  
    android:layout_height="wrap_content"  
    android:layout_marginTop="167dp"  
    android:layout_marginBottom="167dp"  
    android:text="@string/username_box_hint"  
    android:textColor="@color/greenBg"  
    android:textStyle="bold"  
    app:layout_constraintBottom_toBottomOf="@+id/name"  
    app:layout_constraintEnd_toEndOf="parent"  
    app:layout_constraintStart_toStartOf="parent"  
    app:layout_constraintTop_toTopOf="@+id/textView3" />
```

```
<TextView
```

```
    android:id="@+id/textView15"  
    android:layout_width="wrap_content"  
    android:layout_height="wrap_content"  
    android:layout_marginTop="45dp"  
    android:text="@string/password_box_hint"  
    android:textColor="@color/greenBg"  
    android:textStyle="bold"  
    app:layout_constraintEnd_toEndOf="@+id/createPswd"  
    app:layout_constraintTop_toTopOf="@+id/createPswd" />
```

```
<TextView
```

```
    android:id="@+id/textView5"  
    android:layout_width="wrap_content"  
    android:layout_height="wrap_content"  
    android:layout_marginBottom="151dp"
```



```
android:text="@string/phone"
android:textColor="@color/greenBg"
android:textSize="15sp"
android:textStyle="bold"
app:layout_constraintBottom_toBottomOf="parent"
app:layout_constraintEnd_toStartOf="@+id/textView4"
app:layout_constraintStart_toStartOf="@+id/textView4" />
```

<TextView

```
android:id="@+id/textView4"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:layout_marginEnd="2dp"
android:layout_marginBottom="11dp"
android:text="@string/name"
android:textColor="@color/greenBg"
android:textSize="15sp"
android:textStyle="bold"
app:layout_constraintBottom_toTopOf="@+id/phone_no"
app:layout_constraintEnd_toStartOf="@+id/name" />
```

<EditText

```
android:id="@+id/name"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:layout_marginEnd="31dp"
android:ems="10"
android:hint="@string/name_hint"
android:inputType="textPersonName"
app:layout_constraintBaseline_toBaselineOf="@+id/textView4"
app:layout_constraintEnd_toEndOf="parent" />
```

<EditText

```
android:id="@+id/phone_no"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:ems="10"
android:hint="@string/phone_hint"
android:inputType="number|phone"
app:layout_constraintBaseline_toBaselineOf="@+id/textView5"
app:layout_constraintStart_toStartOf="@+id/name" />
```

```
</android.support.constraint.ConstraintLayout>
```

- **activity_test.xml**

```
<?xml version="1.0" encoding="utf-8"?>
<android.support.constraint.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"
tools:context=".testActivity"
tools:layout_editor_absoluteY="25dp">
```

```
<Button
    android:id="@+id/button3"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginEnd="1dp"
    android:layout_marginBottom="56dp"
    android:background="@color/greenBg"
    android:onClick="logout"
    android:text="Logout"
    app:layout_constraintBottom_toBottomOf="parent"
```

```
app:layout_constraintEnd_toEndOf="parent"
app:layout_constraintHorizontal_bias="0.5"
app:layout_constraintStart_toEndOf="@+id/button2" />
```

```
<TextView
```

```
    android:id="@+id/textView6"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginTop="98dp"
    android:layout_marginBottom="109dp"
    android:text="@string/information"
    android:textAlignment="center"
    android:textColor="@color/greenBg"
    android:textSize="25sp"
    android:textStyle="italic"
    app:layout_constraintBottom_toBottomOf="@+id/button2"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent" />
```

```
<Button
```

```
    android:id="@+id/button2"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginBottom="56dp"
    android:background="@color/greenBg"
    android:onClick="delete"
    android:text="Delete Account"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintEnd_toStartOf="@+id/button3"
    app:layout_constraintHorizontal_bias="0.5"
    app:layout_constraintStart_toStartOf="parent" />
```

```
</android.support.constraint.ConstraintLayout>
```

- **list_layout.xml**

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

```
<LinearLayout
```

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

```
    android:orientation="vertical" android:layout_width="match_parent"
```

```
    android:layout_height="match_parent">
```

```
    <TextView
```

```
        android:id="@+id/textViewDestination"
```

```
        android:layout_width="match_parent"
```

```
        android:layout_height="wrap_content"
```

```
        android:text="TextView"
```

```
        android:textAlignment="center"
```

```
        android:textAppearance="@style/Base.TextAppearance.AppCompat.
        Large"/>
```

```
    <TextView
```

```
        android:id="@+id/textViewName"
```

```
        android:layout_width="match_parent"
```

```
        android:layout_height="wrap_content"
```

```
        android:text="TextView"
```

```
        android:textAlignment="center"
```

```
        android:textSize="20sp"/>
```

```
    <TextView
```

```
        android:id="@+id/textViewContact"
```

```
        android:layout_width="match_parent"
```

```
        android:layout_height="wrap_content"
```

```
        android:text="TextView"
```

```
        android:textAlignment="center"
```

```
        android:textSize="20sp"/>
```

```
<TextView
    android:id="@+id/textViewTime"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:text="TextView"
    android:textAlignment="center"
    android:textSize="20sp"/>
```

```
<TextView
    android:id="@+id/textViewAddress"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:text="TextView"
    android:textAlignment="center"
    android:textSize="20sp" />
```

```
</LinearLayout>
```

- **splash_layout.xml**

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

```
<LinearLayout
```

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

```
    android:layout_width="match_parent"
```

```
    android:layout_height="match_parent"
```

```
    android:background="@drawable/splash">
```

```
</LinearLayout>
```

- **color.xml**

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

```
<resources>
```

```
    <color name="colorPrimary">#008577</color>
```

```
    <color name="colorPrimaryDark">#00574B</color>
```

```
    <color name="colorAccent">#D81B60</color>
```

```
    <color name="greenBg">#56b000</color>
```

```
<color name="black">#000000</color>
</resources>
```

- **strings.xml**

```
<resources>
    <string name="app_name">CarPool</string>

    <!-- SignIn Screen-->
    <string name="username">Username</string>
    <string name="username_hint">lpadhu@gmail.com</string>
    <string name="password">Password</string>
    <string name="password_hint">itmd555</string>
    <string name="empty"></string>
    <string name="signin">Sign-In</string>
    <string name="signup">Sign-Up</string>
    <string name="dsignup">Driver Sign-Up</string>
    <string name="rsignup">Rider Sign-Up</string>
    <string name="new_member">New user?</string>
    <string name="driver_member">Driver</string>
    <string name="rider_member">Rider</string>

    <!-- SignUp Screen Common-->
    <string name="username_box">Enter an email-id</string>
    <string name="username_box_hint">Should contain "'@' followed
by '.com'"</string>
    <string name="password_box">Create a password</string>
    <string name="password_box_hint">Must be atleast 6 characters
long</string>
    <string name="name">Name</string>
    <string name="name_hint">John Doe</string>
    <string name="phone">Phone.No</string>
    <string name="phone_hint">Enter 10 digits</string>
    <string name="create">Create</string>
```

<string name="cancel">Cancel</string>

<!-- Driver Sign-up-->

<string name="role">Role</string>

<string name="ownCar">I have a car to give rides</string>

<string name="needCar">I need a car to take rides</string>

<string name="destination">Destination</string>

<string name="destination_hint">Enter a landmark</string>

<string name="time">Time</string>

<string name="time_hint">8:00am</string>

<string name="example">E.g Union Station</string>

<string name="save">Save and Continue </string>

<string name="setup">Profile Set-Up</string>

<string name="address">Address</string>

<!-- Test Activity-->

<string name="information">

Thank you for signing up with us and promising to help the community."\\n"

Your information has been recorded."\\n"Riders will contact you if they are close-by "\\n\\n\\n"

Happy Driving !!!

</string>

<!-- Maps -->

<string

name="api_key">AlzaSyCmniVYVmg3fux0bA-3Qi5xTdpc5tAZaGg</string>

<!--Rider Activity-->

<string name="maps_link">Maps</string>

<string name="logout">Logout</string>

<string name="add_list">List of Addresses</string>

```
</resources>
```

- **styles.xml**

```
<resources>
```

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

```
</resources>
```

- **Build.gradle - Project**

```
<resources>
```

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

```
</resources>
```


- **Build.gradle - app**

apply plugin: 'com.android.application'

```
android {
    compileSdkVersion 28
    defaultConfig {
        applicationId "com.example.mypackage.carpool"
        minSdkVersion 24
        targetSdkVersion 28
        versionCode 1
        versionName "1.0"
        testInstrumentationRunner
            "android.support.test.runner.AndroidJUnitRunner"
    }
    buildTypes {
        release {
            minifyEnabled false
            proguardFiles getDefaultProguardFile('proguard-android.txt'),
                'proguard-rules.pro'
        }
    }
}

dependencies {
    implementation fileTree(dir: 'libs', include: ['*.jar'])
    implementation 'com.android.support:appcompat-v7:28.0.0'
    implementation
        'com.android.support.constraint:constraint-layout:1.1.3'
    implementation 'com.google.firebase:firebase-core:16.0.5'
    testImplementation 'junit:junit:4.12'
    androidTestImplementation 'com.android.support.test:runner:1.0.2'
    androidTestImplementation
        'com.android.support.test.espresso:espresso-core:3.0.2'
```

```
    implementation 'com.google.firebase:firebase-auth:16.0.5'
    implementation 'com.google.firebase:firebase-core:16.0.5'
    implementation 'com.google.firebase:firebase-database:16.0.5'
    implementation
'com.google.android.gms:play-services-maps:16.0.0'
    implementation
'com.google.android.gms:play-services-location:16.0.0'
    implementation
'com.google.android.gms:play-services-places:16.0.0'

}
```

```
apply plugin: 'com.google.gms.google-services'
apply plugin: 'com.google.gms.google-services'
```