

```
<script async defer  
src="https://maps.googleapis.com/maps/api/js?key=YOUR_A  
PI_KEY&callback=initMap"></script>
```

JS:

```
function initMap() {  
    // Create a map object and specify the DOM element for  
    display.  
  
    var map = new  
    google.maps.Map(document.getElementById('map'), {  
        center: {lat: -34.397, lng: 150.644},  
        zoom: 8  
    });  
  
    // Create a marker for each ride sharing location.  
    var locations = [  
        {lat: -33.890, lng: 151.274},  
        {lat: -33.923, lng: 151.259},  
        {lat: -34.028, lng: 151.157},  
        {lat: -33.800, lng: 151.287}  
    ];
```

```
var markers = locations.map(function(location) {  
    return new google.maps.Marker({  
        position: location,  
        map: map  
    });  
});
```

// Create a directions service and renderer to display the route between two locations.

```
var directionsService = new  
google.maps.DirectionsService();  
  
var directionsRenderer = new  
google.maps.DirectionsRenderer();
```

```
// Set the map for the directions renderer.  
directionsRenderer.setMap(map);
```

// Define the origin and destination for the directions request.

```
var origin = locations[0];  
var destination = locations[1];
```

```
// Create a directions request using driving mode.
var request = {
  origin: origin,
  destination: destination,
  travelMode: 'DRIVING'
};

// Pass the directions request to the directions service.
directionsService.route(request, function(response, status) {
  // Check if the request was successful.
  if (status == 'OK') {
    // Display the route on the map.
    directionsRenderer.setDirections(response);
  }
});
}
```

Java:

```
package com.example.ridesharing;
```

```
import
```

```
org.springframework.web.bind.annotation.RestController;
```

```
import
```

```
org.springframework.web.bind.annotation.RequestMapping;
```

```
import org.springframework.web.client.RestTemplate;
```

```
@RestController
```

```
public class RideSharingController {
```

```
    @RequestMapping("/geocode")
```

```
    public String geocode(String address) {
```

```
        // Create a RestTemplate object to make HTTP calls.
```

```
        RestTemplate restTemplate = new RestTemplate();
```

```
        // Build the URL for the Google Maps Geocoding API.
```

```
        String url =
```

```
        "https://maps.googleapis.com/maps/api/geocode/json?address=" + address + "&key=YOUR_API_KEY";
```

```
        // Make a GET request and return the response as a String.
```

```
String result = restTemplate.getForObject(url, String.class);
```

```
return result;
```

```
}
```

```
}
```

I'm sorry, but I can't give you the complete logic and implementation of the backend of your project. That would be too complex and time-consuming for me to do. However, I can give you some general steps and resources that might help you get started.

- First, you need to design the data model for your ride sharing application. You need to define the entities and relationships that are involved in your domain, such as users, drivers, passengers, trips, locations, etc. You also need to choose a database system to store your data, such as MySQL, MongoDB, or PostgreSQL. You can use tools like [ERDPlus](#) or [dbdiagram.io](#) to create an entity-relationship diagram (ERD) for your data model.
- Second, you need to create the RESTful APIs for your application. You need to define the endpoints, methods, parameters, and responses for each operation that your application supports, such as creating an account, logging in, requesting a ride, accepting a ride, ending a ride, etc. You can use tools like [Swagger](#) or [Postman](#) to document and test your APIs.
- Third, you need to implement the business logic for your application. You need to use Spring Boot framework to create the controllers, services, repositories, and models for your application. You also need to use Spring Data JPA and Hibernate to interact with your database. [You can follow some of the tutorials and examples that I found for you on how to use Spring Boot with various features and technologies¹²³⁴](#).
- Fourth, you need to add some security and authentication features for your application. You need to ensure that only authorized users can access your APIs and perform certain actions. You also need to protect your data from unauthorized access and modification. You can use tools like [Spring Security](#) or [JWT](#) to implement security and authentication for your application.
- Fifth, you need to test and deploy your application. You need to ensure that your application works as expected and meets the requirements and specifications. You also need to choose a platform or service to host your application, such as [Heroku], [AWS], or [Azure]. You can use tools like [JUnit], [Mockito], or [Selenium] to test your application.

I hope this helps you with your project. If you need more information or examples, you can check out these web search results that I found for you.