Transportation Service Web Application

Background

- Client-server architecture
- Provides transportation services for goods in Austria
- The company has a fleet of vehicles with various characteristics (maximal weight and size) and parked in different places
- Customer requests the service, the server calculates the price and generates automatically an offer to the customer
- After the customer accepts the offer, the server issues moving orders to vehicles and drivers
- React for fronted, Spring boot for backend, MySQL as database

3 roles

- Manager: registers drivers and vehicles of the company by specifying some details for each of them
- Driver: sees the booking details if a booking is assigned to him. When he starts driving, he clicks the button “Start” in his webpage, when he ends driving, he clicks button “End”
- Customer: choses pickup and destination address of the good to be transported, specifies weight, length, width, height of the good and can accept the offer generated by the server

Assigning a vehicle and driver

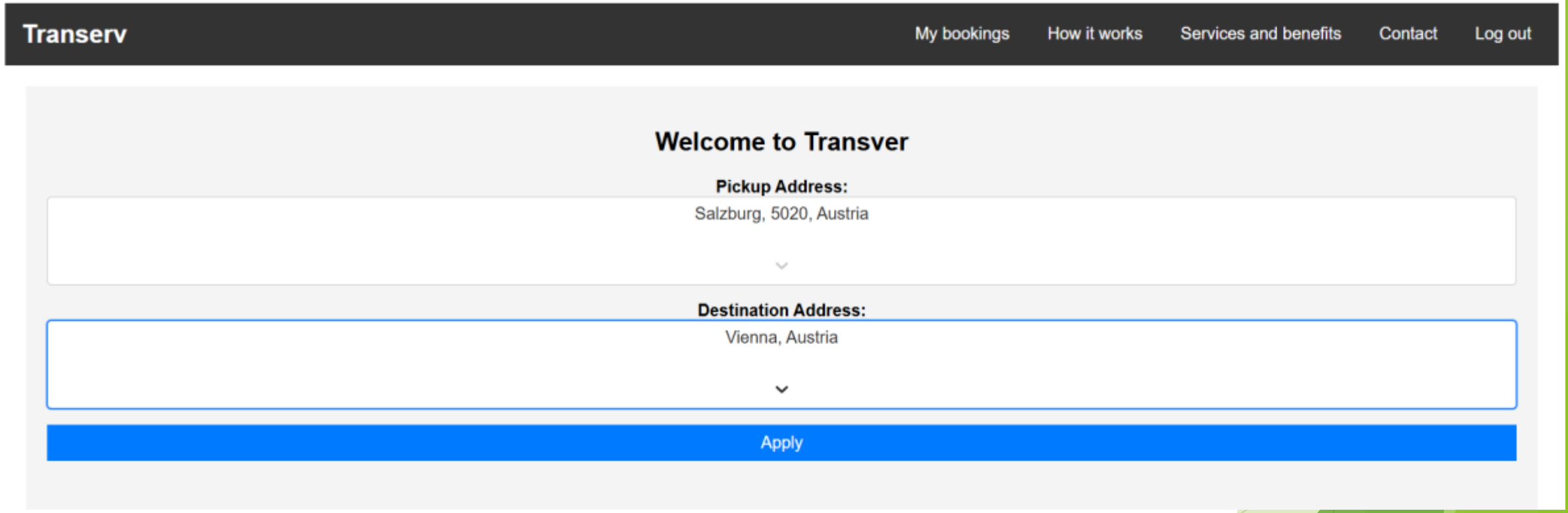
- Vehicle within 50km from pickup address and with a smaller volume is preferred (otherwise the nearest vehicle from pickup address is chosen). Weight, size and availability should also be satisfied.
- The driver who is the closest to the assigned vehicle's parking address is chosen. Availability should also be satisfied.

Cost calculation

- 0.7*distance(in km) + 0.05*weight(in kg) + 20*volume(in m)
- Distance includes the road made by the vehicle from the parking address, picking the good and driving to the destination
- Exact road distance is fetched from OpenStreetMap Nominatim API

Map

- With the help of OpenStreetMap, providing us with a list of route points in the map.
- A thread updates the current index (position in that list with route points) in the database
- When customer navigates to the map, the current index is fetched from the database and the current position of the vehicle is shown in the map


Transerv
My bookings
How it works
Services and benefits
Contact
Log out
Welcome to Transver
Pickup Address:
Salzburg, 5020, Austria
Destination Address:
Vienna, Austria
Apply

Transerv

Log out

Product Details

Pickup Address: Salzburg, 5020, Austria

Destination Address: Vienna, Austria

Weight (kg):

1000

Length (in m):

2

Width (in m):

3

Height (in m):

2

Submit

Back

Transerv

Log out

Offer Summary

Your email: jon.j@gmail.com

Driver's email: driver7.d@gmail.com

Vehicle's parking address: Braunau am Inn, Bezirk Braunau, Upper Austria, 5280, Austria

Pickup Address: Salzburg, 5020, Austria

Destination Address: Vienna, Austria

Weight: 1000 kg

Dimensions: 2 m x 3 m x 2 m

Duration: 6.63 hours

Cost: €541.81

Modify Details | Accept Offer

Transerv

Log out

Driver Page

Shipment Details

Shipment ID: 2

Origin: Salzburg, 5020, Austria

Destination: Vienna, Austria

Customer's Email: jon.j@gmail.com

Price to be paid by the customer: 541.81

Start End

Transerv

Log out

My bookings

Booking Details

Shipment ID: 2

Pickup Location: Salzburg, 5020, Austria

Destination: Vienna, Austria

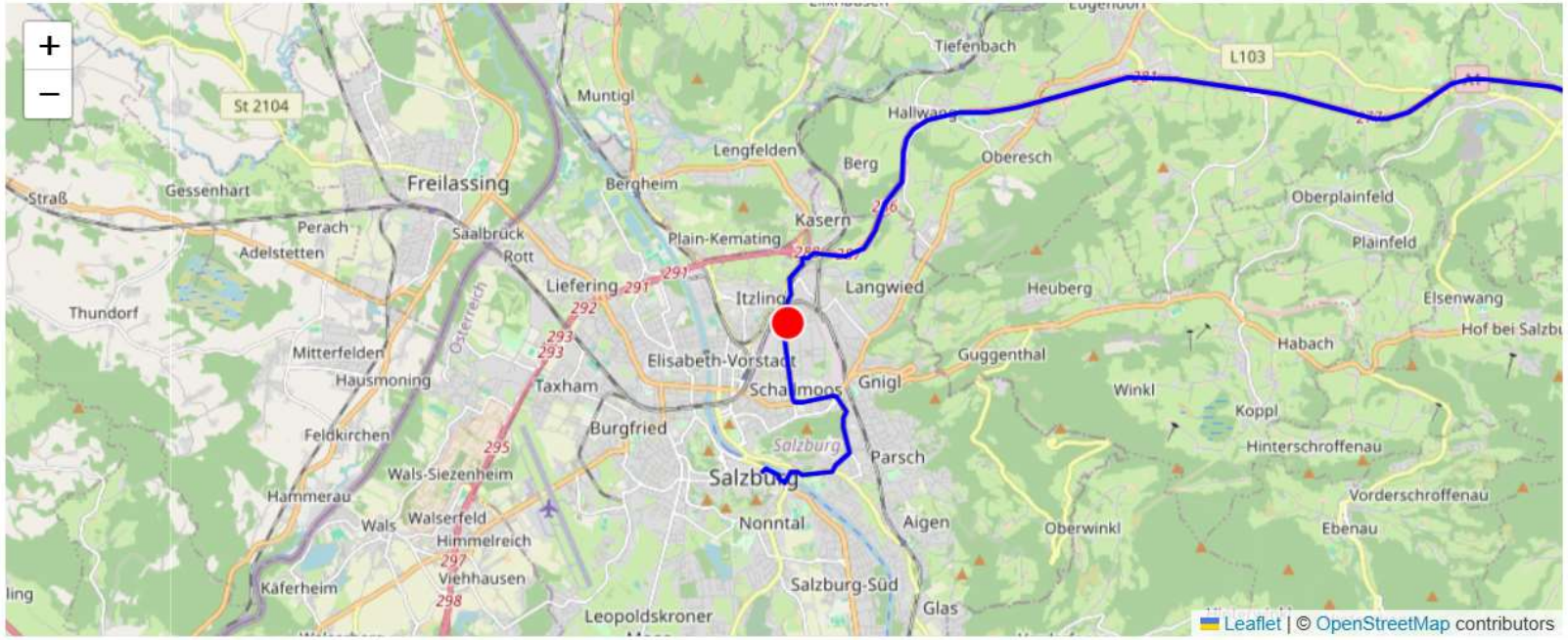
Driver's Email: driver7.d@gmail.com

Price: $541.81

Shipment's Status: ON_THE_WAY

Distance: 299.31 km

Duration: 198.15 minutes



Thank you!