

SWE 212 PROJECT STUDY 2 (2024)

Due date: 16 April 2024, class time.

In this project you will develop a Java Spring-Boot web application using code-first approach with PostgreSQL database connectivity. Your group subject was distributed in the beginning of semester. Figure 1. shows some example views which will be developed in the class for car-rental example. However, you are expected to work on your own subject and create similar functional views based on your problem. This is kind of art and engineering, show your skills!

Customers

| Name | Address | Operations |
|--------|---------|--|
| Ahmet | Sakarya | Update Delete Rent |
| Mehmet | Ankara | Update Delete Rent |
| Betül | Izmir | Update Delete Rent |
| Sinan | Bursa | Update Delete Rent |

Cars

| Id | Brand | Model | Operations |
|----|-------------------|-------|--|
| 1 | Fiat-Egea | 2023 | Update Delete Rent |
| 2 | Volkswagen-Passat | 2024 | Update Delete Rent |

Rentals

| Customer | Car | Start | Days | End | IsReturned? | Operations |
|----------|------------------|------------|------|------------|-------------|---|
| Ahmet | Fiat-Egea - 2023 | 07-03-2024 | 2 | 09-03-2024 | NO | Return Update Delete Rent |

Add Customer

Name:
City:
[Save](#) [Close](#)

Update Customer

Ahmet
Sakarya
[Save](#) [Close](#)

Delete Customer

Ahmet
Sakarya
[Delete](#) [Close](#)

Add Car

Brand:
Model:
[Save](#) [Close](#)

Update Car

Fiat-Egea
2023
[Save](#) [Close](#)

Delete Car

Volkswagen-Passat
2024
[Delete](#) [Close](#)

Rent a Car

Ahmet
Cars: Fiat-Egea - 2023
Date: mm/dd/yyyy
Days: 0
[Save](#) [Close](#)

Rent a Car

Fiat-Egea - 2023
Customer: Ahmet
Date: mm/dd/yyyy
Days: 0
[Save](#) [Close](#)

Figure 1: Example web views for car-rental project. Top three are index views for the tables, and the following six views are for CRUD operations. The last two views are for relation table. Observe that the “Rent” buttons on both views provides quick accesses.

Grading:

| No | Task | Grade |
|----|--|-------|
| 1 | Creating the database and tables in PostgreSQL server. | 5 |
| 2 | Creating model entities and required DTOs (or view-models). | 20 |
| 2 | Creating all controllers and CRUD methods. | 20 |
| 3 | Creating repositories that implements standard methods and queries for special SQL operations if needed. | 20 |
| 4 | Creating functional views with HTML, CSS and JavaScripts. | 20 |
| 5 | Everything works as described with no error, exceptions handled properly. | 15 |

PS: Group presentation is required, group members must show up to in presentation to collect points.