

## SWE 212 PROJECT STUDY 1 (2026)

**Due date:** 24 February 2026, class time.

In this project you will develop a JavaFX application with JDBC database connectivity as shown in the Figure 1. The application will work with Postgresql (or MySQL) database server, and the GUI will be implemented using JavaFX (version 25) as shown in the class. Figure 1 shows example GUIs for car-rental problem, however you are expected to work on your own problem.

The figure displays two separate JavaFX GUI windows. The left window is titled 'CUSTOMER' and contains three text input fields labeled 'User Id:', 'Name:', and 'Address:'. A 'Fetch' button is positioned to the right of the 'User Id' field. At the bottom of the window are four buttons: 'Save', 'Update', 'Delete', and 'Close'. The right window is titled 'CAR' and contains three text input fields labeled 'Car Id:', 'Brand:', and 'Model:'. A 'Fetch' button is positioned to the right of the 'Car Id' field. At the bottom of this window are also four buttons: 'Save', 'Update', 'Delete', and 'Close'.

**Figure 1:** Example GUIs for car-rental project.

### Grading:

No	Task	Grade
1	Creating the database and tables in Postgresql or MySQL server	20
2	Creating first and second table GUIs (each GUI is 15 points)	20
3	Implementation all button methods (10 points each)	40
4	Everything work as described with no error, exceptions handled properly	20
5	Implementation of relation table and associated GUI (such as reservation table and its GUI for this problem) will get applause in the class!	

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