**SE 577: Software Architecture**

### Group Homework Assignment 1: Train Ticket System

The objective of this project is to understand and practice service-oriented architecture concepts.

The user scenarios can be found at: <https://docs.google.com/document/d/17qXcQV29qGFcG-WD5if1wZUmjGl9ywvFJMxEpQ1JR8Y/edit>

A sample repo can be found at: <https://github.com/jlefever/trainsim-public>

* The technology stack used in this repo can be found at: <https://docs.google.com/document/d/1WhoX8VBsCPh30F7JLFrziZixos8u0khtBQs5RrHIjGA/edit>
* The database schema used in by this repo can be found at: <https://dbdiagram.io/d/60df44220b1d8a6d39649bfa>

\*If you are not familiar with React for interactive web development, you can choose another frontend framework/technology.

**Submission Guidelines:**

We will grade based on your project repository, which should have the following:

1. An issue tracking system that records all the features (including user scenarios), bug fixes, quality attribute scenarios, etc.
   1. Each issue should be assigned to a developer
   2. Each commit should be linked to an issue id
2. Implemented artifacts: source code, configuration files, etc.
3. The design documents, including:
   1. Component diagram for the overall system (Part of the component diagram will be provided. You need to extend or elaborate on it.)
   2. Sequence diagrams for each implemented user scenario (Two sample sequence diagrams for two scenarios will be provided, and these two will not be graded.)
   3. Class diagram for the server-side
   4. Quality attribute utility tree
   5. Tactics applied for the quality attributes specified in the utility tree

\*All the diagrams have to be generated from a computer program.