

Individual Report: Rate My Teammate (ver.CWRU)

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1 Project Responsibilities

- Participated in the UI design and functionality of the web application.
- Participated in the design and development of the database, including the ER diagram and sample queries.
- Set up maven template code for the backend, added necessary dependencies to pom.xml. Configured for JaCoCo and Apache.
- Assisted in the development of **ReviewController.java** and **ProfileController.java**
- Developed unit tests connecting the backend SpringBoot and the MySQL database.
- Generated and compiled JaCoCo coverage reports, demonstrate sufficient coverage for all entities.

2 Achieving Objectives

This project was the first time I would work with a SpringBoot Web Application merged with React frontend components. In my previous experience and projects, I assisted in the creation of SpringBoot and Django projects connected to basic HTML and CSS. Additionally, I had less experience in developing with maven projects, as my academic Java programming focused on

projects with Gradle and AntBuild. Additionally, SpringBoot syntax changes quite frequently, so even with prior experience from years ago, I found myself frequently looking up issues on StackOverflow and Baeldung. Fortunately, after sufficient self-study, I was able to work past the quirks of the both the framework and VSCode, I was able to test the basic functionality of the main project entities.

3 Issues

Throughout the course of the project, I encountered several issues:

- I was initially using IntelliJ Ultimate during development; however, there were nagging issues in compiling the project from a shared repository. These issues were resolved from switching instead to VSCode.
- Occasionally, I would get code formatting errors due to differing line endings between Unix and Windows systems working concurrently on a shared repository. I resolved these issues by occasionally switching to a Linux system using VirtualBox.
- During testing, the team noted an issue with the date format in both the database and the Review Controller. I noticed that the format had to be converted to epoch, and resolved the issue during testing.
- Testing revealed inconsistencies between the formatting of the SQL database, and the backend entities. During testing, I resolved the issues and was able to establish concurrent database connection while testing the backend.

4 Lessons Learned

Overall, I learned quite a lot during the project, and believe this experience will make me more comfortable as a software engineer in a professional setting. I am indebted to the rest of the team for the hardwork and commitment that was exemplified throughout the course of the project. Aside from the technicals, I will share some vital lessons I learned that will be useful in my future looking ahead.

- **It's not about the number of tools you know:** Even though I had prior experience with SpringBoot, this framework is constantly updating. As such, I found myself in unfamiliar territory with the project specifications during testing. However, I eventually discovered that I only needed to think logically, and utilize my problem solving skills to tackle my tasks at hand, and not necessarily worry about syntax for a fickle language. Syntax comes as second nature through experience. As such, the language you know is just a tool to get the job done.

- **Be Meticulous:**

Despite my studying of Code Complete, I never realized the full extent of the importance of clean, easy to read code. As a personal example, when writing test queries and unit tests in Java, the inconsistencies resulted in time wasted debugging, and getting the server to run again. I learned at this moment that you never know when you'll ever have to work with a piece code again, and productivity can be impacted even by the smallest inconsistencies with the smallest snippets of code. If your code is messy, whoever works on it next will not be able to add features or maintain it.

- **Networking/Teamwork:**

Group projects offer the opportunity to learn from the peers around you. Even though we did alot of self study, it turned out that I would learn the most from other teammates during our group meetings throughout the course of the project. As such, I had gained individual software engineering experience, supplemented with valuable communication and collaboration skills.

5 Insights

Overall, it was pleasure working with the team, and the craftsmanship of the finished product cannot be undermined. Even though we had never before worked together, there was a consistent aura of professionalism and mutual responsibility that delivered us an application that sufficiently met our expectations. Despite our collective limited experience with SpringBoot and React, we had managed to develop a rating website with basic functionality

within a very limited time frame. This website is geared with a similar objective to RateMyProfessor and RateMyDorm, and I hope Case students will find this application to be a useful tool in finding group project teammates.