



3/15/18

From:	Team 22
To:	CS4500 Course Staff
Re:	Sprint 3 Project Requirements Memo

As our team heads into the fourth sprint, certain experiences have illuminated the presence of both matches and gaps with respect to our team's experiences and skills as compared to the needs of the project. Overall, there is a significant amount of previous experience to tackle most of the challenges we have faced in building the Spoiled Tomatillos application. In particular, every individual on the team has at least introductory experience with the NodeJS runtime. This is a large factor contributing to our success because every individual is capable of writing their own functions, converting their ideas into code, as well as building/running the project for testing purposes.

In order to successfully complete this project for Spoiled Tomatillos, we have conducted an assessment of project needs and each team member's experiences and skills in order to identify gaps in knowledge and skills that need to be developed to succeed. In addition, we have identified ways in which we can overcome these gaps in knowledge to become a successful team. As a whole, the project will need a team with members competent in back-end, front-end, and dev-ops development. We have divided ourselves so that Oli, Onjae, and Lexy are working on front-end tasks, Spencer, Campbell, and Lexy are working on back-end tasks, and Spencer and Campbell are working on dev-ops tasks.

We have identified one area of concern where our team's skills and project needs do not necessarily match. The front-end developers of the team have all had experience in HTML, CSS, and JavaScript, however the integration of the Angular 5 framework to the client application has lead to skillset gaps for some of the members. Formerly, these members experiencing issues have used

older versions (e.g. v1.x) of the technology, but due to major changes related to the release of v5, using the framework seems unfamiliar. However, the front-end developers are actively addressing this issue by consistently meeting and conversing online whenever they run into Angular-related hurdles. Additionally, the more experienced members have been able to mentor and recommend tutorials to the less experienced web development member as they come up to speed. To date, there has not been a problem we have not been able to solve once we put our heads together to share information and ideas with each other.

The main sources of difficulty regarding the backend have stemmed from shifting database schemas. Initially, we attempted to implement our own ORM for interfacing with our MySQL database, however, this proved challenging and ultimately unnecessary. We shifted the source of our data to MovieLens and moved our database management to the Sequelize library. Sequelize provides a flexible and easy to use JavaScript interface to our database. Additionally, it manages the SQL schema and handles migrations. None of the team members had prior experience with this library, but we have been able to learn to use and implement it. Moving forward, adaptations to the backend should be more hassle free.

Overall, much of the team will need to spend time learning to work with new tools throughout the stack (including dev-ops tools like jenkins), but there are definitely members within the team that can provide insight for different problems that arise. Thus, the main focus going forward to address these problems will be better communication (even among team members not necessarily working on the same part of the stack), and better accuracy in planning the time requirements for different tasks based on what individuals know about the technology they are using. However, using the information we have gathered so far and what we came into the project knowing, the team is more than capable of developing a complete, well-designed project.