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FROM: Coders Unlimited (Team 26): George Abinader, Joseph Donovan, Benjamin

Faucher, Madeline Leger

**TO:** Clients – Spoiled Tomatillos

**RE:** Team Skills Assessment

To our clients.

Thank you for choosing Coders Unlimited to develop your new product, Spoiled Tomatillos. We have included in this memo an analysis of our team's strengths and weaknesses so that you can better understand how we are equipped to work on this product. We have divided the project into 4 distinct parts – the database, the back-end, the front-end, and development operations – appointing a lead member to each based on their individual strengths.

#### <u>George Abinader – Database Architect</u>

George is an expert in designing and implementing databases, particularly SQL-based, so he has taken the lead on database architecture. George has past experience working with databases on co-ops, enabling him to make intelligent decisions for our project's database schema without lots of time spent on research.

Because George is focused on the database architecture per his expertise, he will have a harder time jumping in to other parts of the project as needed. To mitigate this, we plan on dividing sprint work up in a way that keeps George on the back-end (directly interacting with the database) with minor front-end work so that he can learn about other parts of the software stack while using his familiarity with our database schema.

#### <u>Joseph Donovan – Back End Architect</u>

Joe, having worked on agile teams on past co-ops, has familiarity with rapidly iterating on vertical parts of a product and the "user story" model we are using to track our work. He is comfortable in Java, the back-end of our program, and has a thorough understanding of the project's overall architecture. Also, he is well-versed in data modeling, UML, and standard architecture practices, thus he was appointed to design our API and back-end.

Joe's weakness as a team member is in estimating the time it will take him to complete tasks. Because the database and front-end both rely on the architecture and functionality of the back-end, Joe under-estimating the time it will take him to complete a task can bottleneck the development of the project. Because the team is aware of this, we are dividing our user stories in a way that the front-end and database can be built separate from the API, and simply hooked in towards the end of the sprint when the back-end work

is completed. This makes our development process appear heavy towards the end of the sprint when there is actually work being completed throughout the 2 weeks.

## <u>Madeline Leger – Front End Architect</u>

Maddy has worked on various agile software projects through co-ops and extracurricular activities. She has served as the Scrum Master of 3 teams on her co-ops, so she is comfortable setting up Jira and creating meaningful user stories. Her focus through her work has been on front-end design and implementation, and thus she is creating the UI/UX for Spoiled Tomatillos. This includes leveraging her experience with Javascript, HTML, and CSS (particularly Bootstrap) to create an intuitive interface.

Maddy has a basic understanding of Java and SQL but has never worked on a social media type site before. Thus, user profile display and handling many users will involve a lot of research and time. To mitigate this, the team is handling as much user/session management as possible through the back-end and database, so that the front-end merely displays the results and requires less logic.

## <u>Ben Faucher – Development Operations</u>

On previous co-ops, Ben became familiar with automated build servers and versioning, thus making him a natural fit for the DevOps role on the team. He has quickly become familiar with Jenkins and SonarQube, our continuous integration and testing system, and set those up appropriately for the team's needs.

Ben does not have as much experience in Java, web dev, or SQL as the rest of the team, so he is not as efficient at working on features for the app. Right now there are still many opportunities to improve our development operations, so he's not short on work pertinent to his skillset. When DevOps work is light though, he can shoulder smaller development tasks to get up to speed on the app's code base, so by the time our development process has reaches a relatively "stable" state, he should be able to work on full feature branches.

# **Summary**

Our team has divided into four roles based on our strengths and past experiences. This allows the project to move forward with few skills-based bottlenecks.