

PSE – Experience Report

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In the course PSE, we were given the task to implement the game Splendor as a client-server application in Java. Our team members are Jan Walter, Leonardo Melodia, Enrico Naumann, Lukas Ott, Noyan Morali, and I. The team suggested that Lukas and I should take over the roles of scrum master and Product Owner, as we already had the chance to gather some experience in software engineering at our working student jobs.

With Lukas as our scrum master and me as the product owner, our coordination needed to be good, so that our team could rely on a good organization and streamlined development process. We as a team decided to have weekly meetings besides the tutoring sessions, to always be up to date with the progress of others and potentially support each other in our tasks. I was very happy with the work ethic of the team, since none of the topics had to be enforced on one of the members, but were always picked voluntarily, facilitating the development workflow.

We had the following distribution of general topics during the development process: Noyan and Jan developed the UI together, while Lukas and Leonardo started implementing the user management. Enrico focused on getting the websockets to communicate, while I started developing the game logic after having met the architectural decisions and communicated them with the team members. This distribution meant that in the beginning, I worked closely with Enrico, since the WebSocket protocol had to be aligned with the logical components on the server and client side. Later, when the game logic was complete, Leonardo and Lukas switched to implementing our AI client with the three difficulty levels.

For me, the biggest challenge was the starting phase of the project, where we had to understand topics like Maven, Jakarta EE, and Tomcat and how they could be used together in the project, since they were new to me. Once this hurdle was overcome and we had a prototype where our server was up and running when running the corresponding jar, the development process began to accelerate.

During the implementation of the game logic, I didn't face major problems. Of course, it was a lot to code, but I had a lot of fun doing that, since coding has been a hobby of mine for a couple of years already. This is also thanks to the fact that I could totally rely on the owners of my neighboring topics, namely websockets and UI. Our communication and cooperation at the touching points of our topics helped us not to be blocked by other issues that had to be solved before continuing with our own topic.

In conclusion, after some frustrating delays in the project's progress in the starting phase, I really enjoyed the journey, thanks to an engaged and motivated team. I especially respect the efforts of Enrico and Lukas, who pushed through some frustrating issues that would have been big blockers for the team. My most important personal learnings from this course consist of a more sophisticated knowledge of git and Maven, but also insights into working together as a team on a common project and the organization required for that.