Reflection

What knowledge or skills did you learn?
I learned how to use a Java library, and both the importance of reading the documentation and seeking answers from multiple sources (as no single source ever had the solution to my problems that were not incredibly basic).

Navigating through a Java library was simultaneously very easy and very difficult. The amount of work done by the creator of the library made certain things incredibly easy to code - for instance, instead of manually having to define hitboxes and constantly check if 2 entities were colliding, I could simply add a new PhysicsComponent to both objects and they would automatically have collision logic. However, this in turn made it difficult as using new components meant new interactions - in the exact same example, adding a PhysicsComponent to my player meant that I had to entirely rewrite the movement code to use PhysicsComponent.Velocity instead of the Entity.translate I was previously using.
Once again, the original scale of my project was too large for the time frame I was given (particularly as I was working alone), so I learned about setting realistic expectations when it comes to doing something you've never done before.

What problems did you experience?

Along every step of the way, the code malfunctioned in some way. I constantly had to look through multiple different tutorials, the FXGL library documentation, and the uncommented demo program code to try and piece together a solution to my problems. Some of these problems remain unsolved (and will probably remain that way as the FXGL library is very obscure and as such has no online resources, and has largely been abandoned by its creator), but the process of solving problems helped me to learn about the process of coding which involves tons of failure, and code that is easy to go back and read in order to check and possibly correct.