**Answers to the test**

1. The class diagram for the main engine is put under the documents folder as an image.
2. Please run the console solution built with .net core 6
3. A haiku from my understanding is a 3-line poem in Japanese. You could generate a haiku with the poem generator using the following header line:

“POEM: <LINE> <LINE> <LINE>”

No additional changes to the rule file need to be made. I have added a haiku test file in the documents folder.

1. Code quality and deadlines are two aspects of the SDLC which are not easy to achieve together. However, you can minimize the impact of writing low quality code to meet tight deadlines. You must focus on the following to achieve best code quality without sacrificing timelines.
2. Break down the work into smaller chunks. Smaller chunks are easier to manage, and smaller pieces of code are less likely to be filled with code smells or bad practices.
3. Focus on the critical pieces. If something is performance intensive, that code should be optimized before the rest of the pieces. Some piece of code that covers edge cases can be optimized later after we have some leeway in terms of timelines.
4. Focus on asking for help is of utmost importance. If some developer is stuck, they should not waste too much of a time trying to come up with a solution. Asking for help can bring in a second set of eyes which might identify code smells and propose better ways of doing something more efficiently.