

Problem Set 1 Results Writeup

Erik Orlowski

Changes

There was one small change I made to the design. In the `importTriple` method in `KnowledgeGraph.java`, I added a private helper method called `addPotentialQueryToSet`. This helper method handles adding potential new queries to the `queryMapSet` and adding the input triple as a result for all relevant queries. I added this helper method because I felt that doing this work directly in `importTriple` would have been a lot of repeated code, which would have taken a lot of work to modify if needed. Adding this helper method also simplified the implementation of `importTriple`, which is a core method to the application, and a source of risk because of the manual generation of permutations.

Comments on the Design

In general, the design was a big help in implementing the application. The design included all of the classes and methods I needed, and other than a few specific details, contained all the information I needed to implement these methods. As a developer, this meant that the problems I was trying to solve were mostly scoped to an individual method, with larger problems already being solved by the design document.

Improvements to the Design Document

Where the design document could have been improved is to give more clarity in how to handle edge cases. Specifically, it was ambiguous how to handle:

- Input triples with words not equal to 3
- Input triples without a period
- What to do after an exception was thrown (continue with execution or stop execution)

While the design document did a good job of handling the happy path, these additional details would have been very helpful in the implementation.