Project Journal

# Parsley

The day I was given my project, I studied the codebase and seen that we were using a module named Parsley to parse RFC documents and diagram structures. I had previous experience working with ANTLR4 and understood the basics behind EBNF (Extended Backus-Naur Form) so was able to transition into using Parsley grammar files easily. After reviewing the ASCII diagram grammar file and looking at a few tutorials online, I started writing the grammar for the QUIC-specific structure format in RFC 9000.

## Problems

I used the *Example Structure* from Section 1.3 in RFC 9000 to write the grammar rules originally. Afterwards, I copied every structure from RFC 9000, put the structures in a folder and iterated over them, parsing each one. I quickly found that there were a few structures that contained syntax using hexadecimal values rather than integers. I used these failed tests to construct a grammar file that worked with all possible structure syntax.