Statement of Work

To provide prototyping and discovery services to assist Shirk with gathering the requirements and designing the system architecture for their proposed software idea. The main objective is for Developer to clarify technical aspects of the proposed software idea in anticipation of planning a 'minimum viable product' version in the next phase.

The proposed software idea involves creating a cloud-based content management system to store and manage firm-related or general information in a Neo4j graph database. The information would be stored with reference to it's authority and citation as a connected node graph using a generic data model. The content management system would allow for Shirk employees to create deliverables from the stored information in the form of tables, memos, etc.

To prepare for the next phase, Developer will test the technical feasibility and usefulness of two aspects of the proposed software: version control and AI search on a graph database. Developer will deliver a written report with the results of the tests.

Developer will create a sample dataset of information that might contain publications, journals, etc. and the surrounding context of their authority and citation. Developer will then convert the dataset into a connected node graph in a Neo4j database using a generic data model. Shirk may provide sample information but will not be required to for the purposes of this test.

Although this dataset and these features will likely continue to be used and expanded in the future of this project, their scope will remain limited to conducting feasibility and usefulness testing for this current chunk of work.

Developer will test and report on:

Version Control on Sample Dataset:
Version history for changes made to the sample data in our database for each node and relationship. Developer will test a soft delete system, where information isn't removed from the database on deletion but instead gains a 'deleted' status and persists. Developer will test the ability to view changes made to the sample dataset over time and roll back to a specific version for an individual node/relationship or a selected set of nodes/relationships.

AI Search on Sample Dataset:
Natural language search of graph data using built-in Neo4j generative AI tooling. Developer will evaluate the built-in Neo4j tools for for vectorizing and conducting natural language search against our sample database.

Developer will deliver a written report detailing the findings of these tests by the deadline (March 7th). The report will contain technical description of the results of the tests, as well as the developer's estimate on the technical feasibility and usefulness of these concepts in the context of the broader proposed software idea and the upcoming minimum viable product. The report will contain a description of the sample dataset used and an outline of how the data was stored. Any software or database generated for the purpose of this test will not be delivered or installed, but will have the possibility for later re-use as part of the minimum viable product. No warranty or support is to be provided on any software created during this process. No system or architectural design is required to be provided by Shirk for the purposes of this test.

Deadlines:
Written report to be delivered via email by March 7th.