## **Design Explanation**

- 1. Explain the changes if you use a different design compared to your assignment 1
- While the initial assignment was command line based, this assignment involved a graphical user interface, therefore the files and classes are structured in the Model-View-Controller structure.
- 2. Explain how the new classes are organized
- Using the MVC pattern allows for separation of concerns between the 3 domains.
- The view is coded on the fxml files.
- The controller interacts with the view and delegates actions to the models and the services in order to execute program logic.
- Models contain the necessary fields and methods that relates and concerns it.
- The models also contain custom exceptions that are associated with it in the Model. Exception package.
- The services help with program logic that doesn't involve the models, such as the degree of connection classes UserNode and SearchPath.
- 3. Explain the process by which your program will interact with user and external data source to
- To interact with external data sources, the adapter pattern is utilised so that the implementation can be altered depending on the source of the data. UserStore is the interface, and DBStore implements and acts as a adapter to interact with the SQLite external source.
- UserStore methods are embedded in User creation and addition of relation to create a seamless interaction between the java object and its data source.

Github Project URL: https://github.com/spacetj/assignment2