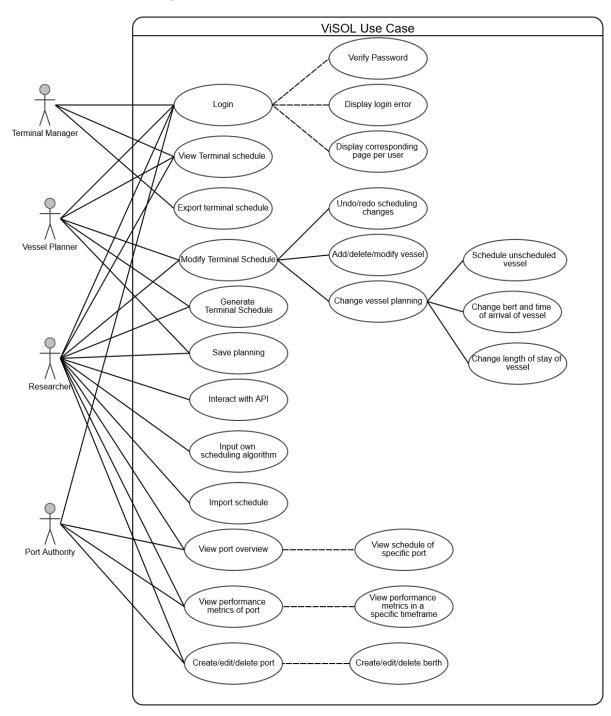
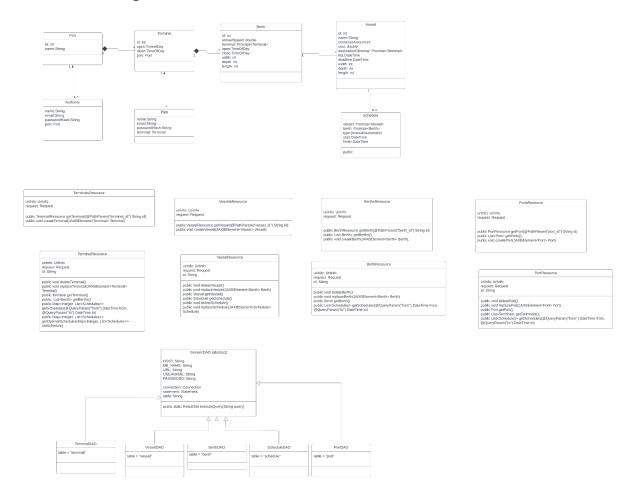
Project Assignment 2: Data Model

Use Case Diagram



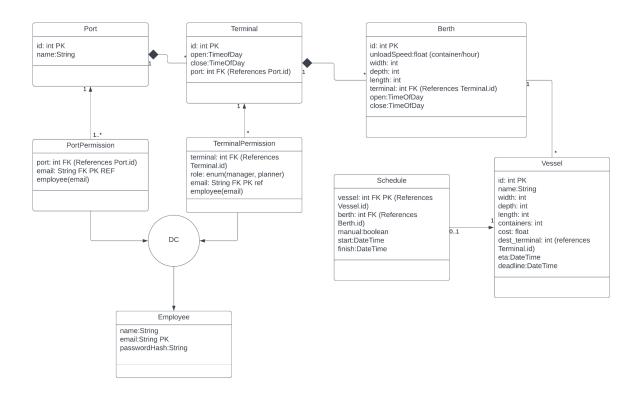
As per our user stories, we have four kinds of users. All of them can log in and view some schedules, but what kind of schedules depends on the type of user. Only vessel planners can edit schedules. The researcher is unique in this sense since only they have access to all functionality.

Class Diagrams



Our class diagram is a bit basic and not entirely up-to-date with the current state of the code anymore, but due to the lack of time in this sprint we had to make concessions and we believed the class diagram to contribute the least to a good end product, hence our decision. Still, it is an accurate reflection of our initial design prototype, with model, resource and DAO classes reflecting our database.

SQL Schema



There will be some changes to this next sprint, primarily so in the permission part and the addition of a ScheduleModification table. We opted to globally uniquely identify terminals and berths (instead of only uniquely identifying them within their specific port respectively terminal) to reduce the complexity of our RESTful API and database. We have identified a primary key for all tables, of which most are a unique ID with two exemptions. Users are identified uniquely by email address (a requirement already imposed by our authentication system), and schedules are identified by the vessel that it is for, since a vessel can only be scheduled once.