

Modify the model of the Port of Assignment 1 (no Company but Location). We want to extend this conceptual model by adding patterns to describe a software implementation. We need to add the following functions:

- Operators who can be Location assigners to containers (Proxy Pattern).
- Operators can control cranes remotely using an appropriate interface, which can be in any language (Broker Pattern)
- Ship and container information will be stored in a database that has its own interface different from the names used in this model (Proxy Pattern)
- Warehouses have nested locations: sections within sections, which can be simple or composite. (Composite Pattern)
- We are dealing with only one port and there should be only one instance of it in the model (Singleton Pattern)
- Some containers have fragile contents and need to be handled differently (fragile attribute)
- Tug boats are assigned to incoming ships to guide them to their berths (Mediator pattern)
- Operators indicate malfunctions in a centralized repository (Proxy Pattern)