# COMP 3023 Assignment 2

**Design Patterns**

1. Strategy Pattern
   1. The strategy pattern was chosen so that each disease class was interchangeable with one another, ensuring that all diseases share a common interface.
2. Composite Pattern
   1. The composite pattern was chosen for Functional Requirement 2 because having all the diseases share a common interface will make it easy to calculate the alert level.
3. Adapter Pattern
   1. The adapter pattern was chosen so that existing patient files and new patient files can be loaded. Allowing possible incompatible interfaces to work together.
4. Observer Pattern
   1. The observer pattern was chosen, as it makes sense for an alert system to be flexible and scalable. This makes it so that new stakeholders can be added to the system easily.