Task 2 UML Designs and OOP Considerations

# Description of Task 2

This task assesses the learning outcome.

Design a system using advanced object orientated principles and methods, such as Behavioural, Creational and Structural design patterns, ensuring a high level of quality and data security.

Produce an implementable class diagram for the system you are developing, this should show your final design of the software components and clearly show architectural patterns used in the development of the system. You are expected to use Design Patterns in the creation of you product, and you are also expected to show layering of the application, patterns should be considered in each of the layers for example you are expected to use a presentational Patten in the interface layer. This work should only include the requirements which you are expecting to implement during the time-box.   
 (5 marks)

Justification, you must provide a justification for any of the patterns you have chosen to implement. Outlining reasons why the choices have been made, as well as any data security decision you have made.

# Main Functional Requirements asked for

* Register client company
* Register a job for a client
* Automatically Schedule jobs with manual override.
* View current jobs.
* Record job progress.
* Assign Staff to job.
* Record outsourcing.
* Close job.

# Chosen requirements for Task 2

Below are the chosen requirements which are going to be undertaken for this task 2.

* Register client company.
* Register a job for a client
* View current jobs.
* Assign Staff to job.
* Close Job
* Record job progress.

In Assignment solution, have 2 projects:

* Model layer
  + This will include all the class entities (client)
* View layer
  + This will include the presenter classes and the forms