

# Comp242 Assignment 1 - Analysis

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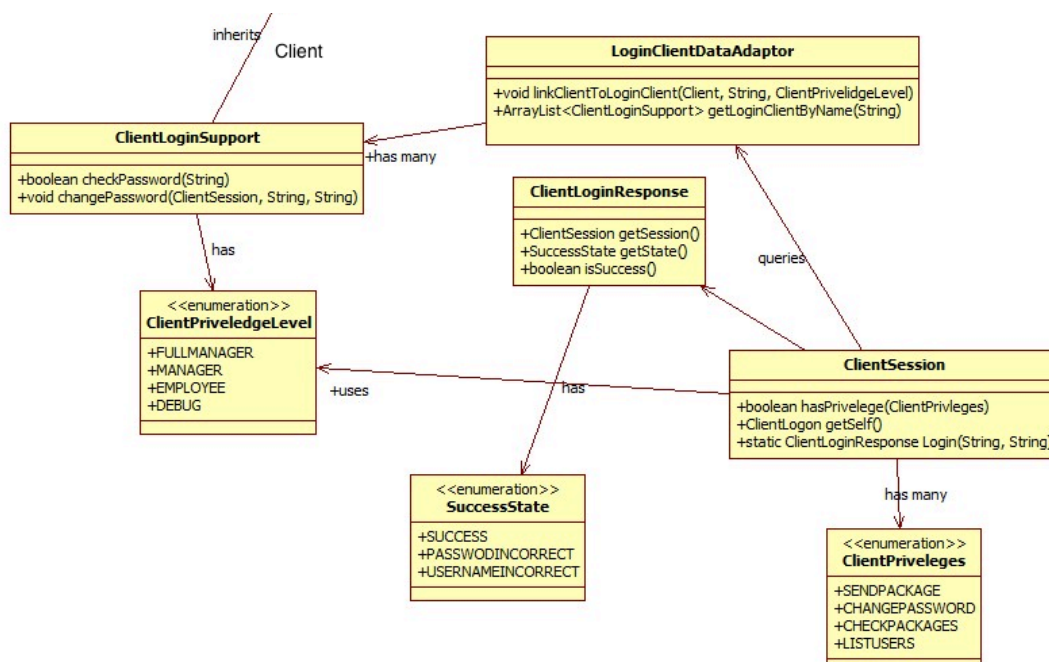
## Use Cases

The application enters in ClientLogin where the user authenticates with there full name and a password. The application authenticates it against the Login Client Database. The login form at this time will alert the use of any issues with the login such as a incorrect entry.

After logging in the Client will check what privileges the user has and hide any UI elements that the client does not have privileges to.

From the UI the client is able to monitor any current packages, edit users and change there own password.

## Class Model



## **Functions**

### **Login (Secure)**

Only Clients registered as Login Clients are able to login to the system, this is done as clients outside of a mail department are not required to login to the mail system though they may still need to have addresses assigned to them. The login system is secured using MD5 hashed passwords. Only during the scope of a function is the password stored in plain text and this is only when it was supplied as a argument. At a (currently not developed) database level the application and login is expected to be further secured.

### **Edit User Details**

Not all clients are able to login to the system. Clients are transformed by a administrator into Login Capable clients by assigning a password and a role to them. If a client is allowed they can change there own password. They need to know there password to be able to do this.

### **Send Package**

Clients allowed to send a package are able to from the 3rd tab of the Client UI. To do this they enter a destination and select from there own address to act as a return address. Once they send the package they package's status will become available, they can then observe this status over of the course of the package's transit.

### **Essay**

This project overall fitted the task quite well. The code produced in the end was not as consistent as I would have liked but that was due to too much of a micro level focus on development rather the macro process of how our code interacts.

Our group work will with collaboration for the most part. We used resources available to us like Github organizations. And to a lesser extent the elearn messaging system. One thing that helped to get the project started quickly was initially setting up the Github repo with everyone conferable in committing to Github. Personally most of the issues we had with the group work like the lack of a constant coding style could have been alleviated. For example while I organized every class into packages, the rest of the group did not, this fault cased a bit of an annoyance when merging the 2 codebases. In terms of the issue with the packages when it came time to merge the 2 codebases I simply worked around the issue. If we were to work on a project like this again we would specify in the repo a common coding style for everyone to use. Also the way we compiled the code lacked somewhat. We should have been using 1 big eclipse project for everyone, compiling to run from more then 1 entry point for each person's task.

In developing the project making a bit better use of graphical tools earlier on rather then adding the diagrams based on the source would have made the code a lot more consistent. It also would have helped the group to use a continuous integration system like Jenkins. This only to give us feedback on the code compiling in a central place along with better automated testing.

Personally I found the rest of the group was personally well motivated to get the job done though with a little pushing from Duncan Willcock. I was a little slack with the group work and myself required the same pushing to get the work done.

Differences in the group were in some cases left right to the very end to be resolved. This meant any resolutions had to work around the current code base. A example of this is while my coding adhered to java package conventions all other source code was simply put in the default package. Other differences were resolved effectively in meetings, things such as the selection of components and the required fields were solved without too much difficulty.

In all the project went quite well though a lot of issues would have been solved just by developing a more complete spec at the start of the project rather than just identifying components and splitting off as soon as there designed.