

INB371 Data Structures and Algorithms

Statement of Completeness

Thanat Chokwijitkul n9234900

Month Yean Koh n9070095

Assignment Name

Video Store Management Information System

Statement of Completeness:

According to the assignment 2's specification, all the abstract data types (ADTs), including `Movie`, `MovieCollection`, `Customer` and `CustomerCollection` have been completed. However, another two additional classes, including `StaffOperations` and `CustomerOperation`, have also been added to the project in order to assist the program in modelling sub-menus for staff and registered customers.

This statement is to confirm that the Video Store Management Information System is fully functioning with all the functions as the specification stated. All the requirements specified in the specifications have been completed with no known problem so far.

Additional Detail

- The authentication process is **case sensitive**. Therefore, if the input data (username or password) does not match any record within the system, the authentication will fail and the user will be brought back to the login menu screen in order to do the process again.
- The video store management system is **case insensitive**, which means it will ignore case when entering any input data except for usernames due to its format e.g. if the customer's name is John Smith, the username will be SmithJohn. Nevertheless, the system still displays any data in an appropriate format (properly capitalised).
- The system censors all the password input due to the fact that password masking is a good security practice and definitely crucial when using a short password to login to the system.
- The staff operations, including adding or removing a new movie, adding or removing DVDs, customer registration, removing customer, and the customer operations, including renting and returning DVDs, require a confirmation in order to process a particular activity.
- When the program requests an input from a user, the input must be valid in terms of data type and some specific requirements, such as a customer's password must be a 4-digit number or a customer's contact phone number must be 10-digit number. If the user input any invalid value, the system will keep displaying an error message with a specific caution or advise to that requested input in order to force the user to input a correct form of data, for example, if the user put any invalid value for a customer's password i.e. any alphabet or the input is not 4-length long, the system will keep displaying "Error: Invalid value" and "Password must be a 4-digit number" until the user input a valid value.