Concordia University

Department of Software Engineer and Computer Science

# COMP 6231, Summer 2016

# Assignment 1

# Dong Chen : 40013109 & Peilin Jiang: 40015338

## About this assignment 1:

To complete this assignment, we use Eclipse 4.5.1 with JDK&JRE 1.8.0\_65. The core techniques of this DSMS system is using JAVA RMI and UDP programming.

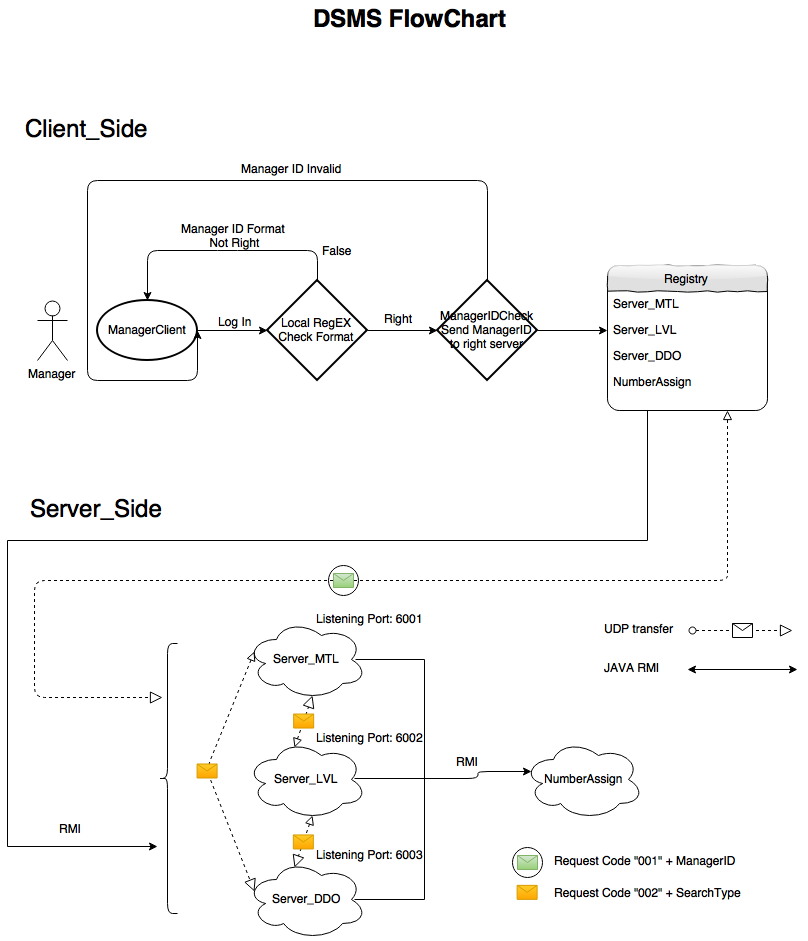
## Design of DSMS:

Step 1: Require Manager to input the ManagerID as a log in function.

Step 2: Using regular expression to check the format of ManagerID. If format is right, then go to Step 3, else go back to Step 1.

Step 3: Get the prefix of ManagerID then send ManagerID to specific server to check valid of account. If return value is valid, then go to Step 4, else go back to Step 1.

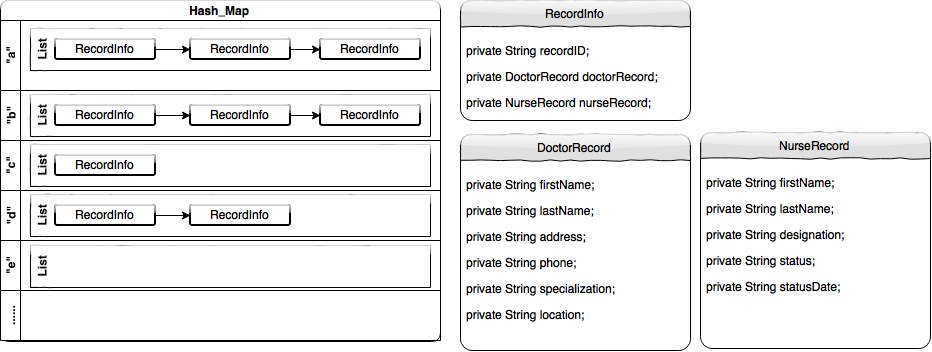
Step 4: ManagerClient get the right stub of server, can do some operation like creatDoctorRecord, creatNurseRecord, getRecordCounts, editRecord etc.



## Architecture and Data structures:

Data Structure:

The RecordInfo object is a DoctorRecord or NurseRecord with unique RecordID. Using this RecordID can identify the unique doctor or nurse. And we use hash map as a database to store the RecordInfo which is included in a list. The key of hash map is capital letter of last name no matter the doctor or nurse. Each key have a unique list to store the RecordInfo.



Architecture:

About the design of this DSMS, we have multiple packages like below:



## Test Scenarios:

## Most Important part: