Milestone 2

*High Level Design*

# Terminology

### Chat Room

A virtual environment in which users can post their messages and read the messages written by other users.

### User

A person who interacts with the system.

### Nickname

A familiar or humorous name the user uses to identify himself.

### Group Id

A number that represents a certain group of users who can communicate.

### Password

A group of characters (letters and numbers only) with length between 4 to 16.

### Message

The text which the user delivers. Message content is limited to 100 characters.

### Registration

The act of recording user details.

### Login

The act of signing into the system by the user.

### Logout

The act of signing out of the system by the user.

### Exit

The act of exit from the system by the user.

# Windows

### Chat Room

A virtual environment in which users can post their messages and read the messages written by other users.

The window contains an option window for choosing a wanted sort or filter, the option to log out and log in+ exit.

### MainWindow

Include three buttons- register, login and exit.

### Options

The User can choose in this window how he would like to sort and filter the list of messages.

The window contains sorts by: TimeStemp, group id + nickname + TimeStemp or only by nicknames. And filters by: None, User name or group id.

### Register

A virtual environment in which users can register to the system by using “nickname” , “group ID” and password .

If the user would like to register to a specific group, the user’s nickname has to be unique in this group.

The window contains an option to login after registration.

The user has the option to go back to the previous window.

### Login

Window that allows the user to login to the system by insert “nickname”,“group ID” and password.

The window contains an option to register in case the user is not registered yet.

The user has the option to go back to the previous window.

### Message

Window that allows the user to update his own message. The window present the user the message he wants to add and allows him to exit the window if he doesn't want to update.

# Communication model

## Requests

### Send message request

A send message request is initiated by the user, the request is sent to the server, which assigns the message with a unique ID (GUID) and the server’s timestamp.

### Edit message

Allow the user to update hid message.

### Automation retrieve for all the messages in every 2 seconds

This request initialized the chatroom's messages in every 2 seconds.

### Sort and filter the messages

This request arranges the list of images according to 2 types of filter: The group id and the user nickname and according 3 types of sorting: Message timestamp and Nickname and groupId, nickname, and timestamp. According to a specific filter and sort (that can change while the conversation is going on) the user can choose the way that he see the messages that sent to the chatroom.

### 7 tests for the developers

This request is made for us to verify that our actions were correct.

# Actors

## Users

A person connected to the chatroom using a client software, for sending and receiving messages. A user is identified by her group ID and a nickname that is unique to her group.