Stakeholders:

* Developers: Sohaib Siddiqui, Gaganjeet Singh, Jimmy Chen
* Professor: Jimmie Davis
* Admin users
* Users

UberChat is a chatroom program, more specifically a client servers program, where anyone can join and talk to each other. It features a user friendly graphical interface and supports up to 50 clients. Each user joins a chatroom where the last 10 messages are saved. The program runs on Linux and the client and server communication takes place over a TCP connection. It is written in C++11.

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| Use Case ID: | UC001 | | |
| Use Case Name: | UberChat | | |
| Created By: | Muhammad Siddiqui | Last Updated By: | Muhammad Siddiqui |
| Date Created: | 10/13/2017 | Date Last Updated: | 10/16/2017 |
| Actors: | User | | |
| Description: | A client server chat program where the User chooses a unique nickname for themselves and they join chatrooms, by requesting a UUID. where they are able to send messages to the chatroom. Once they have joined, the user can then leave the chatroom and join other chatrooms. | | |
| Preconditions: | 1. User must have a unique nickname and a UUID to join a chatroom 2. User must enter a chatroom before they can view or send messages in that chatroom | | |
| Postconditions: | 1. Once requested, user will receive a UUID 2. User will make a username upon entering the program 3. User can request to and then subsequently join a chatroom | | |
| Normal Flow: | 1. User enters a unique nickname 2. User enters the home screen of UberChat 3. User requests to view all active chatrooms 4. User enters the name of the chatroom they wish to join 5. Now the user is able to view and send messages in the joined chatroom 6. User stays in the chatroom until they exit the program or exit the chatroom | | |
| Alternative Flows: | 5a. The user may leave the chatroom they joined at anytime and be sent to step 3 of normal flow  5b. User can be kicked from a chatroom at any time by an administrator   * User will be sent back step 3 of normal flow   5c. If the user enters an invalid name, they will be sent back to step 4 of normal flow  5d. If the user sends a message that exceeds 1000 characters, they will receive an error and be sent back to step 5 of normal flow | | |
| Exceptions: | 1a. If the user enters a nickname containing invalid characters, such as “;” or “,”, they will be asked to enter another nickname  1b. If the user enters a nickname that exceeds 10 characters (or leaves the nickname field empty), they will be asked enter another nickname | | |
| Includes: | N/A | | |
| Priority: | High | | |
| Frequency of Use: | At least 10 users per chatroom | | |
| Business Rules: | * Nothing will be stored on the users’ computers * Program will not access anything on the users’ computers | | |
| Special Requirements: | N/A | | |
| Assumptions: | * Client and server are connected to a network * Server has enough memory to store all user UUIDs and to store last 10 messages | | |
| Notes and Issues: | * Pre-production use case subject to change | | |

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| Use Case ID: | UC002 | | |
| Use Case Name: | UberChat | | |
| Created By: | Muhammad Siddiqui | Last Updated By: | Muhammad Siddiqui |
| Date Created: | 10/13/2017 | Date Last Updated: | 10/16/2017 |
| Actors: | Moderator | | |
| Description: | A client server chat program where the moderator chooses a unique nickname for themselves and have administrative privileges over chatrooms | | |
| Preconditions: | 1. Moderator must log in with their unique name and UUID  2. Moderator must request to see all available chatrooms  3. Moderator must join a chatroom before they can kick users form said chatroom | | |
| Postconditions: | 1. Moderator can see a list of chatrooms, upon request | | |
| Normal Flow: | 1. Moderator must check the “Moderator” checkbox  2. Moderator will login with their UUID  3. Moderator requests to see active chatrooms  4. Moderator enters the name of the chatroom which they wish to join  i. Moderator can also enter the name of the chatroom which they wish to remove  5. Once joined, the moderator can send and receive messages in the chatroom  i. Moderator can also remove users from the chatroom they have joined  6. Moderator stays in the chatroom until they exit the chatroom or program | | |
| Alternative Flows: | 1a. If the moderator enters a UUID containing invalid characters, such as “;” or “,”, they will be asked to enter another nickname  5a. The moderator may leave the chatroom they joined at anytime and be sent to step 3 of normal flow  5b. User can be kicked from a chatroom at any time by a moderator  5. i. a. If the moderator enters an invalid name, they will be sent back to step 5i of normal flow | | |
| Exceptions: | 1a. If the moderator enters a UUID containing invalid characters, such as “;” or “,”, they will be asked to enter another nickname | | |
| Includes: | N/A | | |
| Priority: | High | | |
| Frequency of Use: | At least 3 moderators | | |
| Business Rules: | * Nothing will be stored on the users’ computers * Program will not access anything on the users’ computers | | |
| Special Requirements: | N/A | | |
| Assumptions: | * Client and server are connected to a network * Server has enough memory to store all user UUIDs and to store last 10 messages | | |
| Notes and Issues: | * Pre-production use case subject to change | | |

![A close up of a whiteboard

Description generated with high confidence]()



A screenshot of a cell phone

Description generated with very high confidenceA screenshot of a cell phone

Description generated with very high confidenceA picture containing screenshot

Description generated with very high confidence

A screenshot of a cell phone

Description generated with very high confidence

System Diagrams

Activity Diagram:

A close up of a map

Description generated with high confidence

Context Diagram:

A picture containing bathroom, text

Description generated with high confidence

Class Diagram:

A close up of text on a white background

Description generated with very high confidence

State Diagram:

A close up of a white wall

Description generated with high confidence