# Software Requirements Document for Class Chat

# Group 9

## 1. Introduction

Class chat is a online messaging website that will enable students to communicate in class. It allows users to input text or images in a chat platform which are visible to other members in the group. The application will not enable users to make private chat rooms or exchange answers during quiz or exam times.

## 2. User Requirements

### 2.1 Software Interfaces

Class Chat will interact with Spire to acquire a list of classes each semester. Class chat will also interact with Moodle for a list of enrolled students for each class that is using Moodle.

### 2.2 User Interfaces

Sign Up Screen - Will prompt the user to input a .edu email address to be used as their username for signing in. Then will prompt the user for a password to connect to the email so that the users can sign in securely. There will also be an input for a nickname for users that don't want to post anonymously.

Login Screen - This interactive screen will have a field for both the student's email and chosen password that were used during the signup process.

Choosing courses - This screen would allow students to search for their classes or create the class if it has yet to have been created. Once the class is located will provide options for the student to join the class.

Chat room - The main interactive screen of the software. Where the student would be able to view and contribute to the chat thread in real time. This screen would provide the student the option as posting anonymously or with their chosen nickname.

Account screen - webpage for each user to edit their personal information and settings

### 2.3 User Characteristics

The intended users for Class Chat would be those who are in a classic (in-class) style lecture at the high school or college level with general knowledge of computer use, basic understanding of chat rooms, and the ability to login via an internet connection.

### 2.4 Assumptions and dependencies

a. Function website depends on internet connection

b. No set class roster. You create a class if not already listed and it will get approved.

c. Developers have limited knowledge on web programming.

d. Depends solely on school websites such as Spire and Moodle to provide class informations

## 3. System Requirements

All the system requirements for Class Chat are listed below.

### 3.1 Functional Requirements

**Function 1**: Sign up

Primary Actor: User

Precondition: Constant Internet connectivity available

Details: - each student will be asked for school(edu) email and a password to create an account

- no restriction on password content or length yet

- confirmation email will be sent to the given email for identity verification

- after signing up successfully, student can now log in.

- agree to terms and conditions

**Function 2**: Log In

Primary Actor: User

Precondition: Internet available

Details: - student can log into their account if they have already signed up for one

- requires the email address they used for signing up and their chosen password

- no limit for number of attempts since Class Chat won't ask student to store important information within their accounts

- if a student forgets password, he/she will be able to retrieve it through email

**Function 3**: Change Password

Primary Actor: User

Precondition: Internet available and logged in

Details: - User initialize password change on their personal account page

- user will be asked for old password, new password, and confirm password

- an email will be sent to user's email for verification

- new password is registered

**Function 4**: Edit Personal Information

Primary Actor: User

Precondition: Internet available and logged in

Details: - User will be able to choose a profile picture of their choice

- user will be able to put general information such as school, major, gender, grade, and a short description that no longer than 100 words.

- user will be able to change or remove any of these information anytime they are logged in

**Function 5**: Creating a Chat room

Primary Actor: User

Precondition: Internet available and logged in

Details: - user have the right to create a class that he/she is enrolled in.

- user needs to put down basic information about the class such as class number, class name, professor, and meeting time.

- a invite code is generated for other students to join this chat room

**Function 6**: Editing Chat room Information

Primary Actor: User

Precondition: Internet available and logged in

Details: - information such as TA office hours, SI session hours, and professor office hours are optional

    - for classes with labs or discussions will be able to put down times for labs or discussions, which will be labelled differently from lecture times.

    - information such as class times will be compared with data from spire for verification

**Function 7**: Joining a chat room

Primary Actor: User

Precondition: Internet available and logged in

Details: - a invite code is required to join a chat room for a specific class

    - after joining, the student will be compared with the list of student names Moodle provides for verification

    - students will get a notification on Class Chat and through email for successfully or unsuccessfully joining a class

**Function 8**: Quitting a chat room

Primary Actor: User

Precondition: Internet available and logged in

Details: - users will be able to quit a chat room anytime after they joined

    - all the user needs to do is to click on the button saying "Quit this Class Chat"

**Function 9**: Sending Messages

Primary Actor: User

Precondition: Internet available and logged in

Details: - Users will be able to send messages into the chat room once they join

     - sensitive or offensive words will be blocked or replaced/user will be warned

     - emojis will be provided

     - message can be send anonymously or not.

**Function 10**: Setting up Class Time alerts

Primary Actor: User and Class Chat

Precondition: Internet available and logged in

Details: - users have the option to turn on or off an option for getting a notification a certain amount of time before their class starts.

     - the default time is 15 minutes

     - user can turn it on or off anytime on their personal account page

**Function 11**: Report

Primary Actor: User

Precondition: Internet available and logged in

Details: - users can report any issues they have encountered while using class chat

     - users can also report suspicious or unpleasant classmates they have in their chat room

**3.2 Non-Functional Requirements**

1. Response time: webpage should take less than 3 seconds to load. Refresh should take less than 1 second.

2. Processing time: sending a message should take less than 500ms.

3. Storage: starting at 1 TB.

4. Hours of Operation: During class hours- 8-6 M-F

5. Ease of use: training time is less than 5 minutes.

6. Platform: mobile-friendly webpage

### 3.2.1 Software Quality Attributes

Privacy - The original factor in the software, to be able to ask questions without consequence. Measured by the ability to post anonymously if chosen.

Reliability - This is important so that students can continuously chat with each other during the course of the semester. This can be measured by a percentage of down time compared to up time and keeping that percentage low.

Efficiency - This is important because the software needs to keep up with the motion of the chat group. This can be measured in the time it takes for posts to be available for other students to view with reliable internet connections. As well as the time it takes students to view archived or older portions of the chat.