

Software Requirements Document for Class Chat

Group 9

1. Introduction

Class Chat is an iOS online messaging application 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 not interact with any external system, such as Spire or Moodle.

2.2 User Interfaces

Sign Up Screen - Will prompt the user to input their .edu email address and their password. There will also be an optional input for a username 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.

Course List - This screen would allow students to search for their classes or create the class if it has yet to have been created. Once the student click on a class name, it will bring the student into the class's chat room.

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 username.

Profile screen - The user's username, if they have one, and email will be displayed on the profile page. There are also options for change email, change password, and delete account.

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 technology 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. Able to verify emails but cannot limit a class chat only to the students enrolled in the class.

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

- password must be longer than 6 characters
- 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 initializes password change on their profile page

Function 4: Change Email

Primary Actor: User

Precondition: Internet available and logged in

Details: - user initializes email change on their profile page

Function 5: Delete Account

Primary Actor: User

Precondition: Internet available and logged in

Details: - users are free to delete their account using the delete account option from their profile page.

Function 6: Creating a Chat room

Primary Actor: User

Precondition: Internet available and logged in

Details: - Users are able to create a chat room by inputting course names

- If the input course name already exists, the new chat room will not be created.

Function 7: Joining a chat room

Primary Actor: User

Precondition: Internet available and logged in

Details: - users can join a chat room by simply clicking on the chat room name the Course List page.

Function 8: Quitting a chat room

Primary Actor: User

Precondition: Internet available and logged in

Details: - users can leave a chat room by simple clicking on the back button on the top left corner of the chat room window.

Function 9: Sending Messages

Primary Actor: User

Precondition: Internet available and logged in

Details: - Users will be able to send messages into the chat rooms

- messages with sensitive or offensive words will not be sent
- message can be send anonymously if the user did not create a username.

3.2 Non-Functional Requirements

1. Response time: application should take less than 2 seconds to load
2. Processing time: sending a message should take less than 500ms.
3. Storage: starting at 1 TB.
4. Hours of Operation: at all time.
5. Ease of use: training time is less than 1 minutes.
6. Platform: iOS

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.