**Team Name:**

The Coding Company

**Team Members:**

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**Team Leader:**

Matthew Le

Hello “The Coding Company”,

My name is Michael Smith, and I am looking to create online chatroom application call “SpeakUp”. It will have multiple features that let students participate in class. The applications would let students see other students as anonymous but let the teachers see who is participating inside the classroom. There will be a Teacher Version and Student Version.

Here is the breakdown:

**BUSINESS REQUIREMENTS**

1. Users of the Application: The users of the application would be the student body of the college and the teachers that are registered for teaching the class. Only the teachers that are assigned for teaching the course and section is able to access the chat room for that course. Teachers are only able to enter one chat room at a time. The same is follow for students. Students must get the chatroom access code that is randomly generated by the teacher.

2. Teacher Version: The teacher version has the same features as the student version, except it would give the teachers the ability to see the students’ name instead of it being “anonymous”. The teacher version would give the teachers the ability to kick or block any students if needed. The teacher version has the ability to delete any question or answer that was posted. The teacher version is able to generate random access code for students to enroll.

3. Student Version: In the student version, each student would see each other as “anonymous”. The Student Version requires the students to enter the Chatroom Access Code which is generated from the teacher version. This allows the students to enter the correct chat room. The student version would contain the following features.

4. Chatroom Access Code: Teachers are able to generate a random-access code for students to enroll in the chatroom. Teachers may set the expiration date for the access code. As long as the access code has not expired the students may enroll in the chatroom.

5. Profanity Checks: This feature would block any messages that contains any profanity. The student would be notified with a warning. If the student continues to receive the warning, they will automatically be kick from the classroom and set on a cooldown.

6. Upvote/Downvote: Students are given the ability to upvote or downvote each question or answer that are received. If the student continues to receive downvotes pass a set threshold for each question they asked, then they are prevented from asking more questions for the day, in any class.

7. Anonymous: Any question or answer in the chatroom are anonymous. The name “Anonymous” is automatically generated at the beginning for each, but students are given the option to change their name.

8. Spectator Mode: This mode allows students to spectate the chatroom but cannot participate in answering or asking questions. If a student is spectating a chat room, the teacher is able to see who is spectating it. Only students that are registered in the class is able to spectate the chat room as well. Spectator mode does not receive any notification and or effect reputation.

9. Attendance: The app would log the students that have entered the classroom and shows the teacher who is absent.

10. Notifications: The users are notified when their classes are live and when there is a new activity in the chatroom.

11. Reputation System: By participating and receiving votes, students can build up reputation points. High reputation points will be display first in the teacher’s attendance list.

**SOFTWARE REQUIREMENTS**

12. UI:

* There should be two separate user interfaces for the teachers and the students. The UI in the teacher’s version should have a different color scheme from the student’s version.

13. Online Chatroom:

* Interaction/Fun Features:
  + Teachers/Students should be able to tag each other in responses.
  + Teachers/Students should be able to upvote/downvote/like any responses in the chatroom.
  + Responses can include emojis.
* Profanity/Harassment Prevention:
  + We of course want to prevent any profanity or unpleasant behavior in the chatroom. To do this we want the inputs of all students to be checked for any inappropriate words.
    - If the inputs of any students are inappropriate, they are given a warning message and their inputs are not display in the chatroom.
    - 3 strikes system → after the second warning, they are kicked from the chatroom.
    - Teachers should have the power to kick anyone from the chatroom at any time.
* Anonymous Answers or Upvote/Downvote:
  + To encourage class interaction and for the main purpose of this software, we want all student inputs to be anonymous.
    - Students will have the option to change their name at the beginning of lecture or keep it anonymous.
    - Student responses in the chatroom should have an upvote/downvote button with a counter next to each.
* Spectators:
  + There should be a “spectator” capability so that students can be in the chatroom without interacting.
* Attendance:
  + Attendance should be taken based on who has entered the chatroom on that day.
* Participation Points:
  + The chatroom should have access to students’ participation progress and should be able to increase its value based on the students’ chatroom interaction.

14. Database:

* “SpeakUp” should have a database to keep track of all registered teachers/students/courses and their respective info.
* Online Teacher/Student Registration:
  + The application should let teachers register for “SpeakUp” and create a course. The students can then register for “SpeakUp” and add the course using the random-access code.
  + All info taken from registration should be used to distribute entries into tables in the database. The database design should be organized in such a way that makes the application efficient and reliable.
  + Teacher’s Information:
    - Teacher ID, Name, Courses, etc.
  + Student’s Information:
    - Student ID, Name, Courses, Grade, Participation Points, etc.
  + Course Information:
    - Course ID, Name, Teacher, Students, etc.

15. Security/Validation:

* Exclusive Access to a Chatroom Session:
  + Students should only be able to add a course using the random-access code that was generated from the teacher when they created their course.
  + Both the access code and class information need to match the teacher’s information in order for the student to be enroll and gain access to the chatroom.
  + Students need to register with “SpeakUp” using their student name, student ID, and their School’s information.

**HARDWARE REQUIREMENTS**

16. Data Storage: Messages should be stored both locally on the client device and on a server as well. The current or most recent lecture chat should be stored locally on the device. The last 3 lecture chats of any certain class should be backed up onto the server.

17. Devices: This app should be able to run on mobile devices so it should support iOS and Android mentality. The web app that accompanies it will be accessible on desktops, specifically using Chrome web browser.

**SUPPORT**

18. Software Maintenance: This software will need to be updated to address the issues that may occur in a messaging application. We will require that you offer on-demand support for minor fixes. Additionally, there may be features that we would like to add in the future. We would need you to also be available for the creation of new features. We would like for you to continue to provide support for a year. We will provide additional payment for each fix or feature appropriate to the time and resources required.

We plan to release this application in Spring 2018.

We are more than happy to elaborate on any requirement that may need so.

Thank you,

Michael Smith

CEO Default Company