

## STUDENT BENEFITS

Students are proven to perform much better when attending lectures. With ClassHub attendance becomes mandatory and unavoidable. Students who are shy to ask question can now do so just by typing. Students can now upvote questions that they deem to be more important. Students can review instructor answers by listening to audio answers. Students will get to be more interactive in class with participation quizzes and polls. Students will be able to voice their opinions and rate the lecture the instructor just taught. Students can send direct messages to professor. Students get an efficient notification system so they are less inclined to forget assignments.

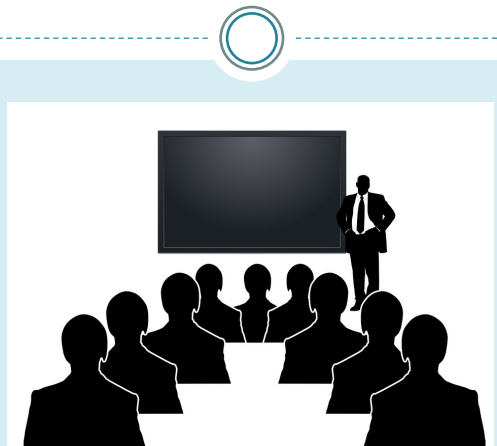
## INSTRUCTOR BENEFITS

Instructors will now be able to efficiently monitor student's attendance without the hassle of attendance sheets. They are able to ensure that a student remains for the entire duration. Instructors will be able to gauge students through interactive quizzes and polls. Instructors will now be able to address more in class questions. Instructors can record their answers to student questions via audio. Instructors now are able to receive feedback from the lectures they had just instructed. Instructors can now upload resource material and send notification reminders.



## HOW IT WORKS

Instructors download and register the Classhub application. They create a class and add a roster of students by email. Student also download the same app and register as students. If added by instructor then class will appear on main menu. Once class begins, Instructor launches new live session. Students have to be attending and in range to enter session. Within session, students may ask questions to the professor. Students can upvote certain questions. Professor can answer questions via audio. Professor may launch quiz or poll questions to all student in the lecture. Once the session ends, student will be able to leave a rating of the session for the instructor. In instructor's session history, statistics will be shown for every session. Instructor may upload resources and send notification reminders. Students have the opportunity to send professor direct messages.



## Group 6

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## ClassHub Overview

Technology has adapted and benefited education vastly throughout the last decade. However, there are still a number of hindrances students and instructors both face on a everyday basis that technology can ameliorate.

ClassHub: a mobile application aims to tackle everyday issues faced by students and instructors by providing a interactive real-time classroom solution.



## CLASSROOM CHALLENGES

**ClassHub aims to tackle the following issues:**

### Students

- Boring noninteractive lectures
- No incentives to come to class
- Trouble communicating questions
- Unable to provide feedback to instructor
- Unreliable Notification System and resource directory

### Instructors

- Lack of student attendees
- Students leaving early during lectures
- Lack of participation
- No feedback mechanism
- No in class questions being asked
- No interactive participation quizzes

## KEY FEATURES

1. ClassHub will utilize Google's Nearby Messages API to enforce attendance
2. Uses a combination of Bluetooth, Bluetooth Low Energy, Wi-Fi and near-ultrasonic audio to communicate a unique-in-time pairing code between devices to make attendance uncheatable
3. Live sessions via sockets to facilitate real-time communication between student and instructor
4. Realtime participation Quizzes and Polls
5. Realtime question feed for students
6. Upvoting capability for students to vote on their most desired question to be answered
7. Audio answer uploads for instructors to record verbal answers to the questions asked in class
8. Lecture Ratings for students to rate individual professor lectures
9. Direct messaging for students to communicate to professor
10. Notification reminders allow student to be reminded about upcoming assignments
11. Resource directory for instructors to upload documents and resources for students

