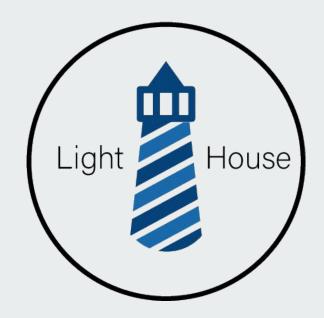# Lighthouse

Guiding students one question at a time.

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What it is

After using the CS 546 Slack channel for asking questions, we realized a better solution could be created

While the Slack channel initially worked great, over time it became cluttered with too many messages that made finding what you were looking for strenuous. The search functionality didn't provide any relief either. If you searched for something pertaining to Lab 9, information regarding Lab 10 or Lab 8 could pop up as well, thus confusing students about requirements.

Knowing that clear communication is imperative for student success, we created Lighthouse. Lighthouse will be a new platform for student-teacher communication to address these issues, to improve class fluidity, reduce confusion, and promote student success.

Why Build Lighthouse?

- The rise in MOOCs and websites such as Coursera and edX, along with the effects of the pandemic, showcase that the future of education is digital.
  - While that means an increase in accessibility, the drawback is a distinct lack of communication.
  - Students need proper communication to succeed and learn.
- Piazza was founded in 2009 and last received funding 6 years ago
  - This space is desperate for something new!
- Students will value our sleek UI and smart auto-tagging features; they'll never have search far to find what they're looking for

Competitors — Piazza

Benefits:

- Ability to sort posts into different tags
- Ability to ask questions anonymously and respond anonymously
- Instructors can endorse answers

Drawbacks:

- Outdated user interface
- Difficult to know when a question has been asked
- Requires users to sort tags themselves

Competitors — Slack

Benefits:

- Easy to distribute and join channels
- Easy to post questions
- Channels allow for multiple topics of communication

Drawbacks:

- Difficult to find exactly what you're looking for
- Threads can become messy and hard to navigate
- Requires a lot of reading to ensure nothing has been asked already
- Reposting of the same questions causes more work for students and instructors
- All sections are in the same channel

Competitors — Canvas

Benefits:

- Automatic access for everyone enrolled in the course
- Each section can be divided from each other

Drawbacks:

- Clumsy user interface for asking questions
- No search features
- No notifications/indicators when questions are asked

Core Features (Students)

- Enrolling in courses based on course code and password
- Creating a student profile page
- Filtering through questions based on tags
- Searching for questions based on title and content of the questions
- Ability to have their name shown or be anonymous when it comes to:
  - Asking questions in the class or to instructors
  - Responding to questions posted in class

Core Features (Instructors)

- Creating class pages for the courses they teach in person
- Creating an instructor profile for themselves
- Posting updates to the class
- Managing the available tags, posts, and users in their class
- Answering questions and promoting answers

Optional Features

- A profile overview on the homepage of the website for each user.
- Connect to Slack's API to add questions asked in the slack to the website automatically
- Auto-tag questions based on their content with NLP libraries
- Add a poll feature to gauge class sentiment on various proposals

SWOT Analysis

Strengths	Weaknesses
What do you do well? What unique resources can you draw on? What do others see as your strengths?	What could you improve? Where do you have fewer resources than others? What are others likely to see as weaknesses?
- Smart auto-tagging - Sleek UI	- Fewer developers than competitors - Another learning curve for students

Opportunities	Threats
What opportunities are open to you? What trends could you take advantage of? How can you turn your strengths into opportunities?	What threats could harm you? What is your competition doing? What threats do your weaknesses expose to you?
- Rise of online education - Space desperate for improvement	- Competitors have more money - Already integrated solutions

Target Audience: Students and Instructors.