



*LEARN. SOLVE. EMPOWER*

# The COCODE team



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# **Value Proposition**

Learn. Solve. Empower.





# Solution Overview



We heard that students in computer science courses felt that they could not easily collaborate without experiencing imposter syndrome. We also heard that professors do not have the tools to support beneficial pair programming or collaboration that does not violate the honor code in their classes.

We hope to create a platform on which students can collaborate anonymously or with their friends. Once they have mastered a concept, they can give back by teaching it to others who are still struggling. The platform is easy to manage and can be integrated into any CS course.



# Brainstorming Tasks



## Simple Tasks:

- Join a randomly assigned study group
- Find a practice coding problem
- Find anonymous people to collaborate with
- Browse the different concepts
- Assign problems to student groups
- Auto-grade answers

## Moderate Tasks:

- Track personal/group scores
- Solve a regular coding problem
- Complete an alternate line coding challenge with a teammate/friend
- Complete a concept challenge with a teammate/friend
- Create recurring anonymous study group
- Alternate lines of code with the computer

## Complex Tasks:

- Choose a team based on personal criteria
- Create coding/concept problems
- Categorize problems
- Complete an alternate line coding challenge with a stranger matched based on preferences
- Manually grade answers
- Track personal/group progress with strengths and weaknesses broken down



# Three Finalist Tasks



**Simple Task:** Study with anonymous people

**Moderate Task:** Teaching/learning with study group/friend

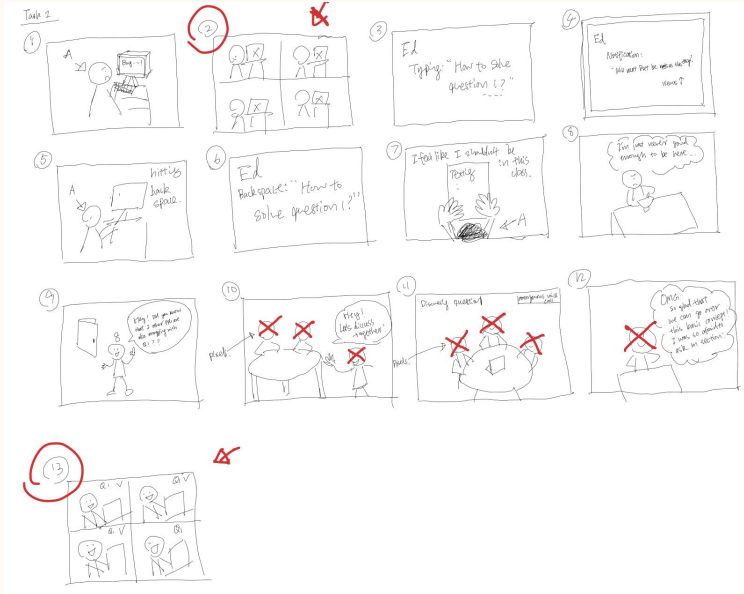
**Complex Task:** Integrate a (flexible and manageable) collaborative component into the course



# Video Planning Storyboards



# Task 1



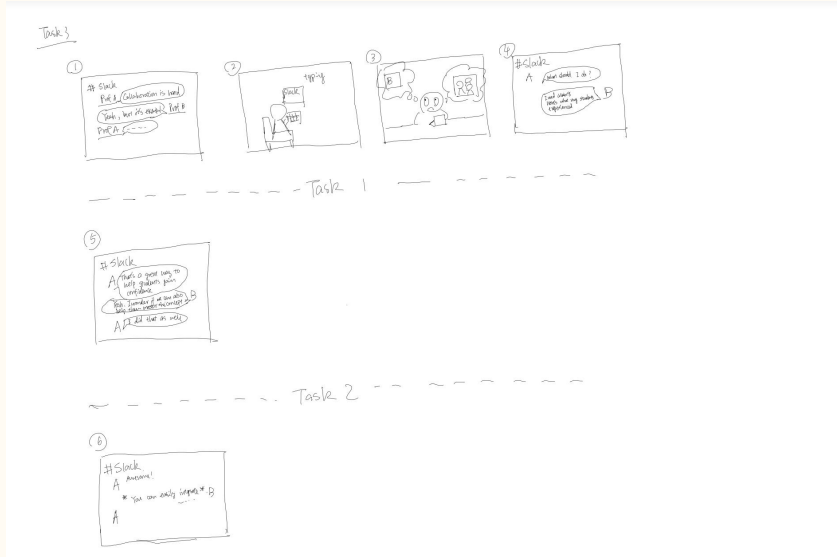
- Student A has a series of errors pop up as they try to debug something - look frustrated
- Student A starts to type a question asking about some beginning part of the assignment
- A post appears on Ed asking about question 8, while ABC etc are struggling with question 1 \*views go up\*
- Student A dejectedly deletes their question
  - (Their reaction: I shouldn't be in this class, I wonder if I'm the only one)
- A texts friend (I'm so dumb... I don't belong here), friend recommends Collabor8
- A goes on Collabor8, joins an anonymous voice only discussion about question1, along with BC etc
- They are smiling, chatting about the problem

# Task 2



- Student A struggles with concept x
- Student A goes on cocode and finds a teacher and learns the concept
- A finishes their learning session
- A gets a popup to the effect of "You just learned X. Would you like to test your mastery by teaching someone else?"
- A chooses yes
- A is enthusiastically teaching

# Task 3



- Professor struggles to think of a good way to motivate students to collaborate.
- She messages her professor friend on slack to ask for advice
- The friend tells her about two features of cocode
- The first message takes us into task 1
- After task one, it comes back to the professors chatting on Slack. The professor friend explains another feature which leads into task 2
- At the end of the video, the professor is excited to start using cocode

# Appendix





Trisha K. , Daniel R., Juliette W., Angela C.  
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[https://hci.stanford.edu/courses/cs147/2021/wi/projects/education\\_technology/cocode](https://hci.stanford.edu/courses/cs147/2021/wi/projects/education_technology/cocode)