



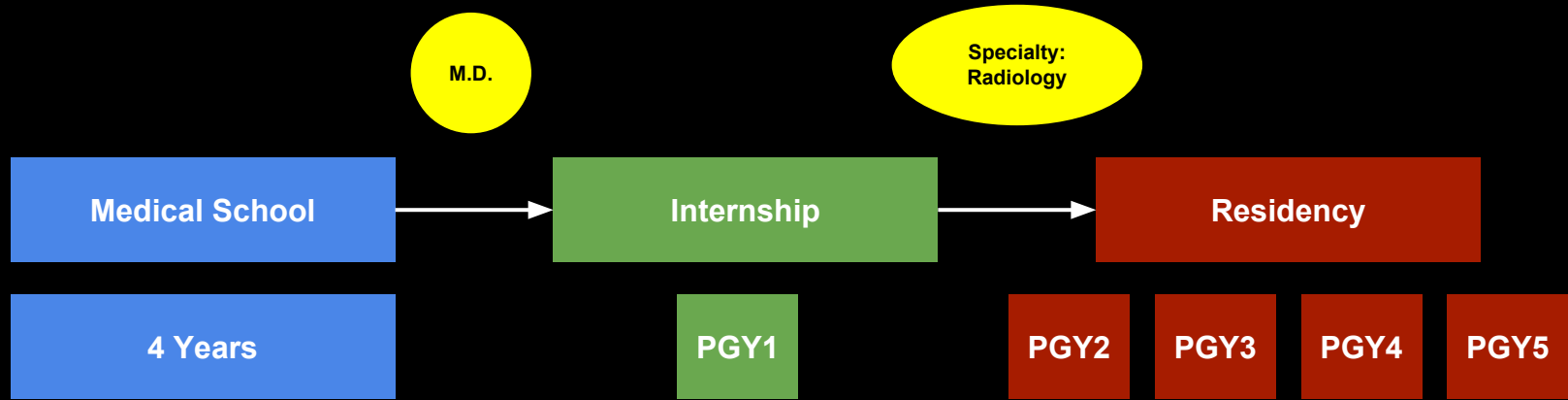
# Increasing Engagement and Collaboration in Radiology Lectures

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# Project History

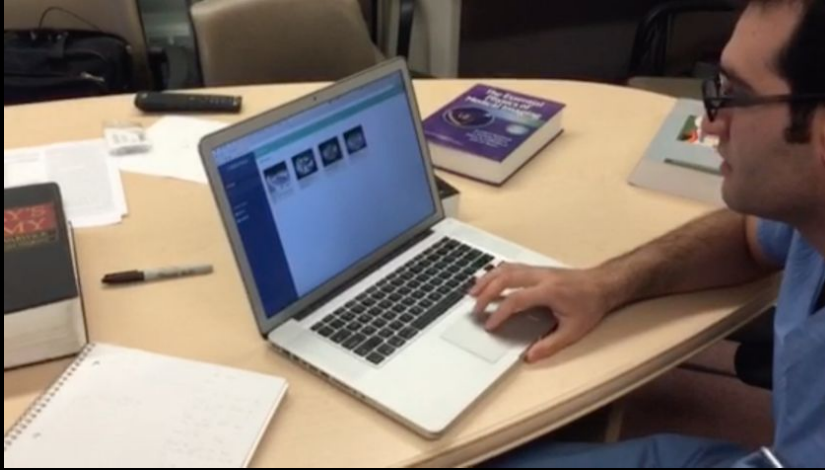
- CollaboRead is an iPad app that aims to increase student engagement and collaboration in radiology lectures
- Developed in collaboration with Tufts Medical Center
- Project Advisor: Prof. Benjamin Shapiro
- Project designed in Prof. Shapiro's Comp150-LTD course in Fall 2013

# Background



- Tufts Medical is a teaching hospital
  - Medical students on rotation
  - Residents

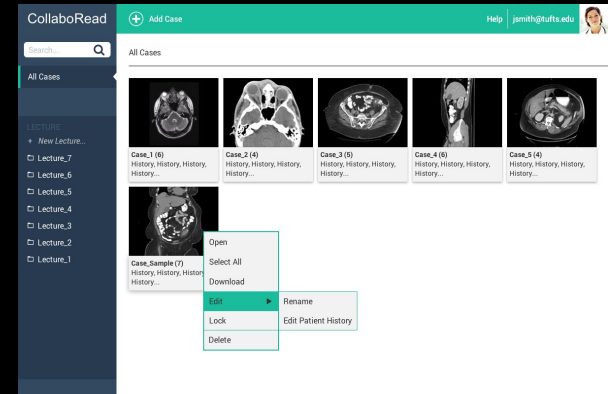
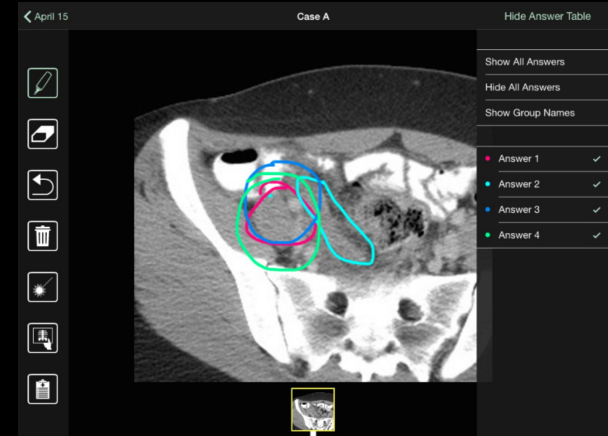
# User Research



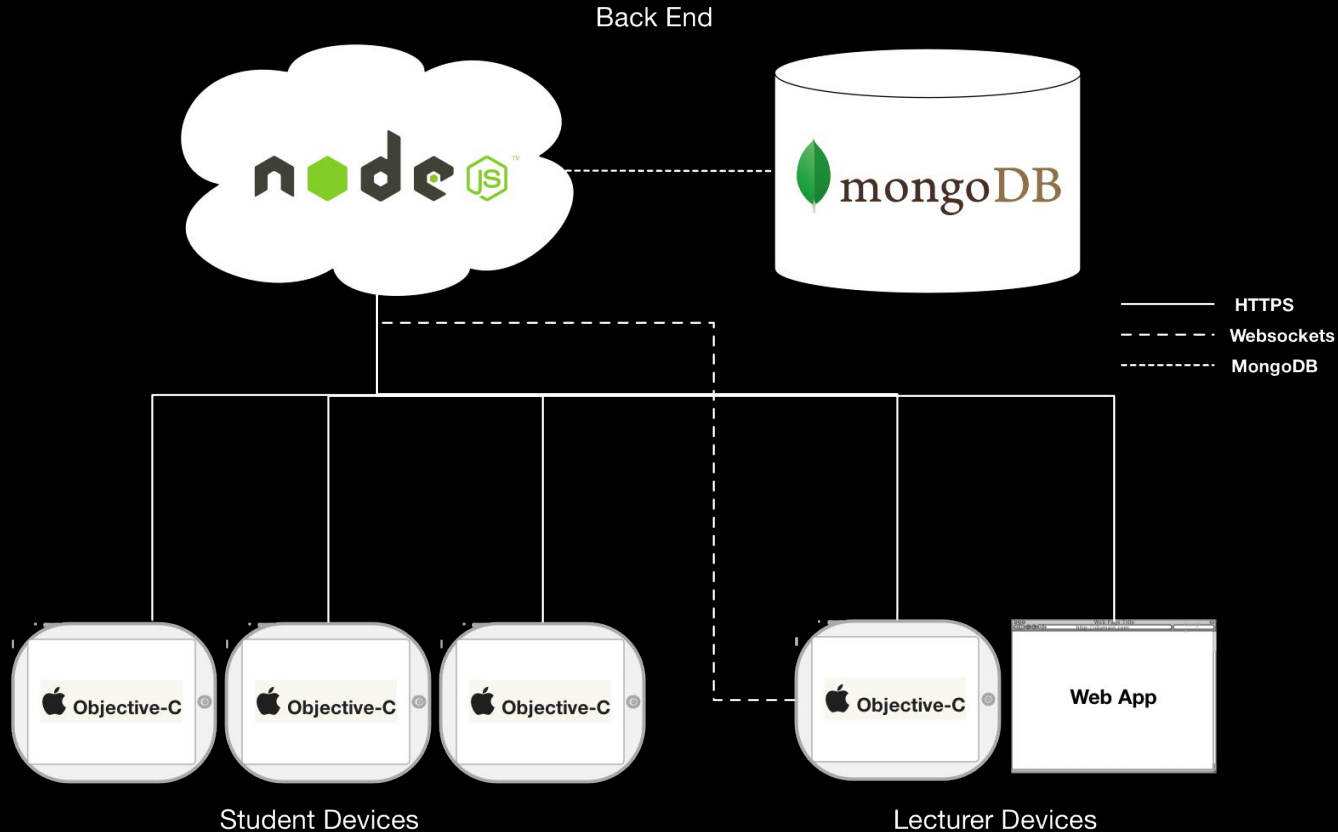
- Methods:
  - Lecture Observations
  - Student Interviews
  - Usability Tests
- Findings:
  - Radiology education culture is individualistic
  - Lectures are not engaging and “fear-based”
  - Residents do not get opportunities to practically apply skills in lectures

# Project

- iPad Application
  - Lecturers present cases with radiological images
  - Students work in groups to analyze and mark up images
  - Students submit analysis for lecturers to display and discuss
- Web Application
  - Lecturer dashboard
  - Upload / organize cases and lectures
  - View student responses

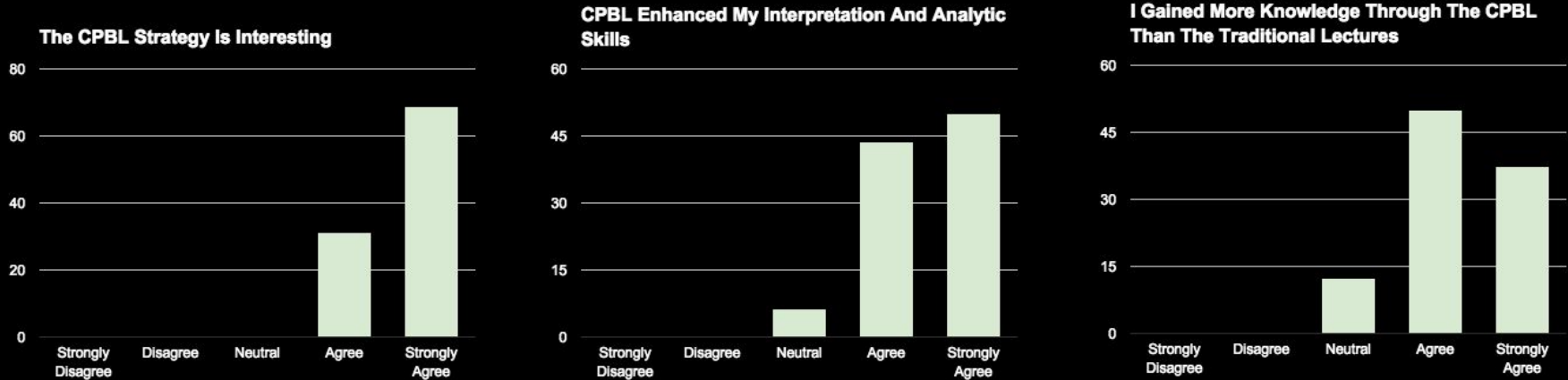


# Tech Stack



Demo

# Results



- Students visibly more attentive during the lecture
- Increased discussion between students about images
- Responses clarified areas of uncertainty of students and generated questions
- Overall: success



# Looking Forward

- Improve web application quality
- Add a metric to determine answer correctness
- Add more question formats (multiple choice, short answer)
- Add ability for lecturers to push questions to students

# Acknowledgements

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- Chris Gregg

# Thank you

Questions?