

Neoboard LLC.

CS Senior Design Project

<u>About</u>

Neoboard is an Education Technology startup based in the Inland Empire that develops applications that supplement LMS systems with the primary goal of improving the quality of online classes for students and educators. Our company mission is to blur the lines between traditional and online classes through technology. We seek to contribute to the success of students in online classes by providing them with a sense of community that supports and facilitates their learning. Our initial goal/milestone is to help students easily find and join the most appropriate study group for their online class. This includes seamlessly integrating with the LMS environment, creating an automated study-partner matching algorithm, and providing students with the ideal place & time for them to conduct their study sessions, physical and online. For more information, please visit our home page at www.neoboardapp.com or contact us at careers@neoboardapp.com.

Project Summary

Neoboard is looking for students with basic knowledge of LAMP stack development to construct a web application that is the first minimum viable product to begin testing and receiving feedback from students on web application user experience. This web application will consist of students creating accounts, making new classroom groups, automatically assembling them into groups based on their preferences provided via social media (including FB, WeChat, etc.) and requested information, and incorporating calendars to automatically find times and locations to meet. Calendars will be crossed referenced with student groups and automatically be provided the best time to meet for everyone, avoiding all calendar conflicts with the users. As technical milestones are reached, code modification will be a necessity in accordance with user feedback and developers must help grow the knowledgebase of the development team while continuing their involvement in hands-on programming. Students will also learn scrum and agile frameworks used by numerous software companies to assemble complex programs and mobilize their team from the lead developer of the team. Students will be learning best coding practices and industry experience from the lead developer with more than 10 years experience in education technology.



The development phase consists of, but is not limited to the following

- Creation of a database for user accounts and storage of user information for the study partner matching algorithm, as well as the storage of classroom rosters
- Development of a web application interface for student users and design of basic UI flow map
- Utilize FB and Canvas APIs (via Oauth) for the collection of information used to match students
- Incorporation of Google Calendar and iCal and automatically find times available for the student to meet up for studying, and cross-referencing with other members' calendars
- Implementation of approximate GPS location for mobile users
- Incorporation of machine learning algorithm to improve study partner matching based on feedback from users

Preferred Skill Sets:

- Basic knowledge of Javascript framework(s) Angular, Vue, and/or React
- Knowledge and Proven Usage of GitHub
- Past experience with machine learning

Location: Remote, Offsite; Offices based in Downtown Riverside