# Mines CS Field Session Team Assembler

**Client:**

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**Project:**

Mines CS Field Session requires the matching of many students (you!) to projects and teams.  This matching is based on certain constraints and preferences; students can give preferences regarding teammates and/or projects.  Students can also specify people they should not be teamed with.  There are additional constraints, both soft and hard, in regards the number of people that can be on a given project.

The current system (Connect) for collecting student preferences and creating teams is an aging and un-maintained web application built in PHP.  While this system has served CS Field Session well for a number of years, various bugs have been accumulating.  In addition, the part of the web application which does initial team assignment really does not work well at all, leaving many hours of work for the Field Session coordinator (me!) to figure out good team assignments.

The goal of this project is to develop a new web application, re-creating the best parts of the old application, and putting in place new and improved functionality.

**Primary Goals:**

- Replicate existing student preference entry system (minus the bugs)
- Replicate existing team editing system
- Create new optimization routine for initial team assignments
- Add additional functionality for editing project and client information

**Technologies:**

While the team will have input on the tech stack used, my preference is to see the new application written with a tech stack I am familiar with.  My first choice is node.js/express.js + PostgreSQL + Vue.js or some close variant.  My second choice would be Ruby on Rails + PostgreSQL.

**Team size:**

3 - 5