

PROJECT OVERVIEW

Many findings in social science that use experiments rely upon testing hypotheses one-at-a-time in a physical lab. This process is limited in what phenomena it can study — experiments must be completed in one-sitting in one location, and generally only test one hypothesis at a time. The High-throughput Experiments on Group Dynamics research project aims to generate novel insights into teams by running experiments at scale in a virtual lab. Experiments will be run online in real-time with participants from Mechanical Turk.

The research team has reviewed existing literature on teams and mapped the conditions and details of the experiments these researchers used. Your work as an RA will be to take descriptions of these experiments, what we call a task, and implement them in [Empirica](#), an open-source Javascript framework.

SAMPLE ASSIGNMENT

The objective of this is to implement a sample task that can run locally (see below for task description). This is purposefully open-ended - make design decisions about user experience as you see fit. You're free to use whatever UI library you prefer. **Focus on implementing the task and making it a multiplayer experiment**, don't focus on the instruction pages or chat. Once you're done, share your Github repository with shape@seas.upenn.edu with:

- 1) Your task code, including any files needed to run it
- 2) README file answering the following questions (each answer can be brief)
 - a) About how many hours did it take for you to implement this task?
 - b) What was your biggest challenge in implementing this task?
 - c) What was a key design decision you made for this implementation?
 - d) Can you attend weekly project meetings Friday 8-10AM EST?
 - e) How many hours/week can you commit to this for this semester?

Note: We won't be using this code outside the interviewing process. It doesn't have to be perfect production-level code. Show that you can implement this task.

RESOURCES

- [Empirica documentation](#), make sure to use v1
- [Sample experiment here](#)
- [Description of task - Nine dots problem](#)