# Milestone 1 15-300, Fall 2017

#### David Zeng

#### **Major Changes**

There are no major changes on the problem I am working on.

#### What You Have Accomplished So Far

I have read through the paper mentioned in the proposal "Controlled Dynamic Fair Division" and have started thinking about the first proposed problem. I'm currently also looking at an earlier paper "Dynamic Fair Division with Minimal Disruptions" (by Psomas, Friedman and Vardi) which is by the same authors as the first paper.

### Meeting Your Milestone

When talking with Alex, he mentioned that a lot of his paper might not be relevant to the first problem I'm working on. Thus, I read through the parts of the paper that seemed relevant and skimmed through the math for the other sections. Overall, I feel like I have met the first milestone.

### Surprises

There were no surprises so far, though I definitely feel like I'll have difficulty approaching the research problems since there's not any techniques I feel like I can easily adapt from the papers I read to this problem. I should probably ask Alex for guidance on that.

#### Milestones

Currently I have not needed to change any milestones. However, I will make sure to discuss milestones when I meet with my mentor.

## Resources Needed

I have not needed any additional resources for my project yet.