

## 15-400 Project Milestone 4

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#### **Progress/Surprise/Meeting the milestones**

For the past 3 weeks, I mainly worked on the implementation of the models considered earlier in the semester. Current milestones have another 2-week for implementation,

Major problems I am trying to work around:

- I was looking at general rule-modeling and simulation methods; there are some restrictions baked into the specific language I am using. The biggest one is that it can only directly model finite number of possible values for each state. One of the models I am working on needs to encode a value ("length") that can be arbitrary large. Current solution: define local function that computes "length" by matching/counting patterns when needed → will slow down the simulation.
- The modeling language is not as well-maintained as I imagined. This took up a lot of time. (I wasn't able to figure out some of those undocumented behaviors, but luckily nothing is really critical for my project so far.)

#### **Milestones:**

I have some changes to the milestones as the objective is clearer than before.

- April 5th, finish implementing the model, simulation/model fitting
- April 19th, analysis, conclusion wrt. probabilistic programs (need to keep the target programs simple enough)
- May 3rd, prepare for poster/presentation, report write up

#### **Next 2 weeks:**

Finish implementation.