1 Major Changes

There have not been any major changes to the project since the last meeting.

2 Accomplishments Since Last Meeting

Since the last meeting, I have extended my experiment to also evaluate the performance of the algorithm on the overall dataset, not just the target item. I learned that it is possible for an algorithm to perform significantly worse on the target while still performing the same or better on the overall dataset. I have additionally written up an initial formulation of the problem, and some notes on what the objective function should be. I wrote the Funk SVD algorithm quantitatively and added some notes about how it works. Lastly, I wrote up several ideas to possibly pursue when developing a solution.

3 Meeting My Milestone

My planned milestone was to have taken initial steps in developing an approach, and to have experimented with several different ideas. I would say I have partially met my milestone; I have thought of some ideas to pursue in finding a solution, but my experimentation thus far has been of the problem itself rather than solutions to the problem.

4 Surprises

There have been no surprises to report so far.

5 Looking Ahead

Going forward, I plan to further explore the problem as well as begin exploring different techniques to solve it. Ideally, I will implement simple versions of these techniques in a model and evaluate it on the MovieLens dataset. I will gain a better intuition about what causes the model to be susceptible to these attacks and how to go about solving this issue.

6 Revisions to Future Milestones

I don’t believe that any revisions to future milestones are needed at this time.

7 Resources Needed

I have access to all of the resources I need for this project.