

2/12 Milestone Report - HearthNash

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Major Changes

There have been no major changes in the goals or implementation of our project since the last milestone report.

What You Have Accomplished Since Your Last Meeting

Since the last meeting, I added data visualization using Google Charts, implemented the first metric for analyzing match trees (match length), and tested it on a small randomized data set.

Meeting Your Milestone

We met all of our milestone goals for this week, which included designing and implementing a measurement scheme for one desirable quality, and using this scheme to collect a small dataset on at least 2 different formats. However, I would like to build a more extendible structure for storing and testing different formats.

Surprises

I've discovered that even with fairly small formats, the combinatorial explosion of the match tree causes a significant performance hit. Generating and processing about 20 match trees takes almost as many seconds. Optimization, such as with dynamic programming, will likely be necessary before larger scale data analysis.

Looking Ahead

Over the next two weeks, we plan to deviate from our projected milestone goals in order to work on optimization and reading/writing data to file. Specifically, I will implement some form of dynamic programming in order to collapse duplicates in the match tree. I also plan to design and implement one more measurement scheme for desirable qualities. In addition, as mentioned above, I will build a more extendible structure for storing and testing different formats. Lastly, I plan to integrate data ingestion for real-world decklist winrate data.

Resources Needed

We do not require any additional resources to complete this project.

Revisions to Your Future Milestones

[Green indicates goals added. Red indicates goals moved/removed]

February 24th

- Optimize match tree generation and processing.
- Add file I/O for metas, match trees, and metrics.
- Design and implement **one** more measurement scheme for desirable qualities.
- Integrate some form of data ingestion for real-world decklist winrate data.