

Milestone 2 Report

The menus are all interactive now and when the user clicks on the right menu items shown in the prompt, the new prompt is shown, and the status of that trial is logged to the console. The format of the log is as follows:

Target ID, Elapsed Time, Number of Errors

The items shown as a prompt is **randomized without replacement** to make a fair comparison between the items.

This is implemented mostly by introducing two new functions:

- refreshTrialItems
- endTrial

The nesting capability is now much more refined, and the menus can nest to four levels. This is done by modifying the classes **Menu** and **Menu Item**.

The content of the five menus is also revised and created in such way that makes the other variables irrelevant when it comes measuring the differences across the five combinations.

The parent nodes now expand when the user clicks on them, which is a more intuitive system for this experiment. The system before when they would expand while hovering over them although makes the process faster but is prone to errors. These errors can lead to inconclusive data.

On the technical side, the relationship between the menus and menu items is altered to make the new nesting functionality possible. In this configuration **each menu item holds its own child menu in a linear fashion** to make the delegation of mouse events more robust and smoother.

All in all, the project is almost finished except for trying out new menu contents and having a third party to go through the experiment to gather the data and draw conclusions on which menu depth is more powerful.