

# Adding Delight to Web-IDE

## Thesis Validation

Michael Hilton

March 13, 2012

### 1 Validation Summary

One of the most difficult parts of my thesis will be the validation of the results. My thesis will be a **project** based thesis, where I will be attempting to add delight to Web-IDE. Since the concept of delight is something that is not easy to objectively measure, it will be a challenge to find a way to validate my results.

I plan on attempting to validate my results in two different manners.

**Validation Path 1.** Since delight is subjective measurement, one of the validation methods I will attempt will be based around auto reporting. My plan is as follows:

- Divide the experiment subjects into two groups.
- Have all subjects fill out a questionnaire before they use Web-IDE where I will ask them about their expectations before using Web-IDE. One of the main reasons for these questions will be to attempt to determine what their expectations are before they use the software.
- After completing the questionnaire I will have both groups use Web-IDE the before a series of tasks. The control group will use the legacy version of Web-IDE that does not have my improvements, and the experimental group will use the updated version with my improvements.
- After each group completes their Web-IDE tasks, I will ask them to fill out another survey to find out about their impressions after using the software. Hopefully I will be able to show a significant difference in the quality to experience of using Web-IDE before and after my improvements.

**Validation Path 2.** Validation path 2 is much less defined at this point in time. I would like to be able to perform an experiment that shows that adding delight to Web-IDE helps students perform better then if they were give the less delightful version. One possible way ahead for this would be to have two section of CSC123 use Web-IDE, one with the legacy version and one with the delightful version, and then compare the results of both versions. This would take a lot more coordination to achieve, and I would only be able to accomplish it if I can convince the instructor of CSC123 to commit to this. Perhaps as a compromise, I can perform an experiment such as this for a limited amount of time, such as for the first few weeks of the quarter.