MASSACHUSETTS INSTITUTE OF TECHNOLOGY
6.5150/6.5151 Adventures in Advanced Symbolic Programming
Final Project Assignment—Spring 2024

Reports: Draft Due Wednesday, 1 May 2024; Final Report Due Friday, 10 May 2024

The term is coming to a close! As advertised in the Red Tape Memo, your projects are coming due: Each team must produce a report of several pages explaining their project. Regardless of assigned presentation day, each team must turn in a draft of their project report on Wednesday, May 1. You are welcome to make some additions and changes between your draft and final submission, but we expect your presentation to demonstrate a complete project. The final report is due on Friday, May 10. We cannot accept any late problem sets or revised reports after Tuesday, May 14. (The last day of Spring term classes is Tuesday May 14.) Please include an electronic means for us to access your code with the final report submission (email or web link). As it is the end of term, these are official hard deadlines. We will be as flexible as possible, but there is a moment when the grades must be submitted, and we have to submit before that moment.

Presentations

In addition to the written report, each team must present an oral report to the members of the class. All members of the class are expected to attend these presentations to poke holes and ask penetrating questions. Please show up, on time!

We have reserved two days for you to present your projects, starting Monday, May 6. There will be two presentations per day. Each group will prepare a 20 minute presentation and will be allocated 25 minutes (5 minutes to answer questions posed by the class.) We propose the following tentative schedule, subject to negotiation:

- Monday, 6 May 2024
  1. Group 1: Creating a DSL from Scratch
     - Sam Aquaviva
     - Josiah McMenamy
     - William Liu
  2. Group 2: Symbolic Music Composition
     - Evan Rubel
     - Nhung Van
     - Amanda Zheng

- Wednesday, 8 May 2024
  1. Group 3: Property-Based Testing
     - Andres Buritica Monroy
     - Rick Ono
  2. Group 4: Image Manipulation
     - Carol Chen
     - Edward Wan
     - Justice Vidal

Every member of a team should participate in the presentation. We assume that each team will have have slides to share that explain their project. But it is disruptive and time wasting for slide to be on separate computers, so the slides should be on only one computer. (Of course, there should be backups for failures.)

As a reminder, here are our expectations for your project from the Red Tape Memo: “In this project you will design and build a significant piece of symbolic-manipulation software. You will be expected to write elegant code that can be easily read and understood by us. You must supply a clear English explanation of how your software works, and a set of test cases illustrating and testing its operation. You will present a brief summary and demo in class near the end of the term.”

Friday, May 10 Will be an open discussion of the content and structure of this class, and perhaps suggestions for how the projects presented might be improved. Presenters may want to respond to these comments from the others in the class.

I also want to hear what you would like have been done differently in this class, and suggestions for material that we did not discuss that you would have liked to be discussed. I will prepared some remarks to stimulate this discussion.

Monday, May 13 will be the last day of class. Having read your final reports, we will share some last thoughts, reflections, and future ideas, and have a brief reception celebration.