Progress Evaluation: Milestone 5

Code Visualization

Team Members

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Client/Advisor

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Progress Matrix

Task	Completion %	Curtice	Joshua	Catherine
1. JSON Parser Overhaul	100%	100%	0%	0%
2. Frontend Integration / Arrays	100%	0%	100%	0%
3. Evaluation	100%	0%	0%	100%
4. Showcase Poster	100%	100%	0%	0%
5. Ebook page	100%	100%	0%	0%

Task Summary / Team Member Contribution

1. JSON Parser Overhaul

   CURTICE:

   Per suggestions from Dr. Chan, we have increased the modularity of the project. Initially, we planned to have the frontend do all of the JSON handling. Now, we have implemented an object-oriented JSON parser that stores three key points of information along with other data. These three key points are (a) Contents of memory at each step of execution (b) Changes between the previous state and the current state (c) Current line number. This new module is imported by other Python programs, allowing for easy access to trace data.

2. Frontend Integration / Arrays

   JOSHUA:

The foundation of the GUI, lacking only a couple of pending buttons, is laid out. Regarding the array visualization demo, it is nearly completed. Finalizing the setup for processing states and iterating through them is the remaining task before readiness.

3. Evaluation

CATHERINE:

For Milestone 5 the evaluation of the program was started. The first task was to go through and ensure the trace.py file gave the needed information. This was tested with the scenario programs that have been created over the course of the project's lifetime. As of right now with arrays, the trace.py file works as intended and gives all information that is needed to visualize. It gives it in a timely manner and each part of the trace clearly shows what is happening in the test programs. Next was to test the functionality of the GUI. In the GUI both buttons can be clicked, each window is able to be resized to shrink or enlarge and affects the size of the other windows in the program. The scroll bars work as intended as well. The window of the GUI appeared quickly after starting the program as well.

Milestone 6 Task Matrix

Task	Curtice	Josh	Catherine
1. Add LinkedList functionality to parser	100%	0%	0%
2. Add LinkedList functionality to GUI	0%	100%	0%
3. Create user/developer manual	100%	0%	0%
4. Create demo video	0%	0%	100%

Task Summary

1. Add LinkedList functionality to parser

   The JSON parser currently only correctly handles arrays. Add a case for LinkedLists and categorize it as a generic LIST.

2. Add LinkedList functionality to GUI

   Integrate the new functionality of the parser and draw the appropriate diagrams to represent LinkedLists.

3. Create user/developer manual

   Write appropriate documentation that details everything a potential user or developer would need to know about the software.

4. Create demo video

   Record a demo video showcasing the key features of the software.

Client Meeting Dates

- 15 Mach 2024

Faculty Advisor Signature:_____ Date: _____