Project Title: Generalized Language Abstraction and Scripting System (GLASS)

Team Members:
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Alexander Lockard (alockard2022@my.fit.edu)

Faculty Advisor/Client:
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Florida Institute of Technology, Department of Computer Science

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Current Milestone Progress Matrix:

Task	Completion %	Tommy	Xander
Polish implemented features	90%	45%	45%
Finalize user documentation	100%	80%	20%
Conduct evaluation and analyze results	100%	65%	35%
Test/demo of the entire system	100%	0%	100%
Create user/developer manual	100%	50%	50%
Create demo video	100%	100%	0%

Task Discussion

Polish implemented features

- Large amounts of additions to interpretation script system
- Reworked project website
- Several changes to the GLASS main system
- Several changes and fixes to the GLASS GUI

Finalize user documentation

- Added large amounts of documentation for the interpretation script system, covering all current features
- Documentation for older versions of GLASS now exist in an archive accessible on the project website

Conduct evaluation and analyze results

- Performed eight user demos, where users were asked to perform a variety of tasks
- Compiled user feedback into an evaluation document available on the project website

Test/demo of the entire system

- Created demo of an example syntax definition, an example source file, and an example interpretation script

Create user/developer manual

- Created developer manual with information about how to extend the GLASS system

Create demo video

- Created a video showcasing the main features of GLASS and how to make an example syntax definition and interpretation script

Team Member Contributions:

Tommy Galletta:

- Conducted user evaluations and analyzed results
- Updated interpretation script system
- Reworked project website
- Updated documentation to reflect system changes
- Wrote developer manual
- Created demo video

Alexander Lockard:

- Conducted user evaluations and analyzed results
- Wrote developer manual
- Made changes to GUI for file explorer
- Investigated various bugs with GUI

Lessons Learned:

Importance of an agile development process

For this project, the team utilized an agile development process, where small prototypes were produced frequently, tested, and then progress on the project would continue based on the results of testing the prototype. This methodology allowed us to build the project in small steps before all of the project requirements were fully set in stone, instead of having to come up with a holistic plan for the entire project.

Importance of code modularity

This project would not have been possible without managing subpackages within our project, and making sure that each subpackage served its purpose, and only its purpose. This design philosophy helped us to track down and fix bugs quickly and reliably, even as the scale of the project continued to grow.

Understanding project scope

While our project is already one with a pretty ambitious goal, we still had other ideas for features which did not make the cut. An important step that was taken multiple times over the development of the project was to take a step back, consider the use case for the tool and the needs for that use case, and eliminate features that were outside of the scope of the project. This helped to ensure that all of the critical features were delivered on time.

Importance of user feedback

Gathering user feedback, while it was something that was not done until the very end of the project, proved to be an incredibly valuable part of the process. Performing user demos and getting feedback from said users allowed us to pinpoint several areas of the project that needed to be addressed that likely would not have been found if it were not for the eyes of new users.

Version control and task accountability

Using GitHub as a tool for version control was essential to the development of this project, where different team members were working on different parts of the code simultaneously. Even so, we could have done a better job of maintaining project status across the board to make sure tasks are being performed on time and by the correct group members. In the future, using a tool such as Jira to track tasking and progress of different features would be beneficial.

Client Feedback on Current Milestone:

- See Faculty Advisor Feedback below

Milestone Six Faculty Advisor/Client Meeting Dates:

- November 8th
- November 22nd

Faculty Advisor Feedback:

- The amount of flexibility the interpretation script provides is good
- The project website looks great
- Happy to see original use cases being tackled
- Happy with our commitment to the project overall

Faculty Advisor Signature: _____ Date: _____

Evaluation by Faculty Advisor

Please detach and return this page to Dr. Chan (HC 209) or email the scores to pkc@cs.fit.edu

TG = Tommy Galletta
AL = Alexander Lockard

TG	0	1	2	3	4	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10
AL	0	1	2	3	4	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10

Faculty Advisor Signature: _____ Date: _____