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

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

Faculty Advisor/Client:
Dr. Stansifer (ryan@fit.edu)
Florida Institute of Technology, Department of Computer Science

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Current Milestone Progress Matrix:

Task	Completion %	Tommy	Xander	Todo
Implement GUI for main system interactions	90%	0%	90%	Clean up code and add unit tests
Implement script interpretation system	90%	80%	10%	Add additional functionalities, polish existing features
Update and extend documentation on website as appropriate	80%	40%	40%	Continue refining and extending documentation
Create presentation poster	100%	70%	30%	N/A

Task Discussion

Implement GUI for main system interactions

- The main execution window, main menu, and grammar creation window have been implemented.
- Users can now create a grammar, save it to a file, and then execute the entire GLASS framework inside the GUI.

Implement script interpretation system

- Lexer, parser, and interpreter for GLASS scripting has been implemented. Current features include:
    - Integer, boolean, and string data types
    - Expression evaluation
    - If-else blocks with condition evaluation
    - Variable declaration and assignment
    - Ability to declare “production functions”, which are specialized functions that are called while traversing the parse tree.

Update and extend documentation on website as appropriate

- Fixed mobile view for documentation. Table of contents is not accessible through a popup window.
- Updated documentation to include information about more system features, including:
    - Syntax definition
    - Interpretation scripts
    - Follow-along tutorial across all pages

Create presentation poster

- Presentation poster created using the provided template and specifications.

Team Member Contributions:

Tommy Galletta:
- Implemented script interpretation system
- Made presentation poster
- Updated documentation

Alexander Lockard:
- Constructed GUI for tool
- Tested script interpretation system
- Assisted in creation of presentation poster
- Updated documentation

Milestone 6 Plan:

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

Discussion of Planned Tasks:

Polish implemented features

- Features that have already been implemented (GUI, scripting system, logging/debug features, ease of use features) will be polished and finalized.

Finalize user documentation

- Web-hosted user documentation will be finalized and will include all relevant information required to use the tool effectively.

Conduct evaluation and analyze results

- Contact a variety of computer science students and have them perform a series of tasks using our tools. We will record the time it takes them to complete the tasks, along with any points of confusion they happen across while completing the tasks.
- These users will then complete a small survey about their experience using the tool

Test/demo of the entire system

- Prepare a demonstration of an "end-to-end" usage of our tool, including creating a syntax definition, preparing a source file, and writing a small script file to interpret the parsed source.

Create user/developer manual

- Create a PDF document containing information about this tool that is relevant for those who wish to use or expand on our tool.

Create demo video

- Create a video demonstrating how the tool is used and how it can be used in practice.

Client Feedback on Current Milestone:

- See Faculty Advisor Feedback below

Milestone Three Faculty Advisor/Client Meeting Dates:

- October 27th

Faculty Advisor Feedback:

- The GUI is a unique feature to the project, potentially the “number one” unique feature.
- While our advisor had some comments about how it may be a “hard ask” for the user to learn a new scripting language for our tool in particular, he did appreciate the fact that our scripting language was “Java-like”.
- Advisor further emphasized the importance of attempting to use our tool for the tasks we originally had in mind when creating it.

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: _____