Minutes of Meeting 10/31/2024

Project Name: CYBER1-CodeVersion

Client Name: Tashi Stirewalt

Date: Oct 31, 2024

Time: 5:00 PM - 5:40PM Location: Microsoft Teams

Attendees: Tashi Stirewalt, Bryan Frederickson, Samantha Brewer

Client Representative: Tashi Stirewalt

Project Team Members: Bryan Frederickson, Samantha Brewer

1. Agenda

Discuss current progress on function rename implementation for CSTs and future steps.

2. Meeting Summary

Introduction:

Bryan Frederickson and Samantha Brewer are seniors at WSU serving as developers for Tashi Stirewalt for the CYBER1-CodeVersion project.

This project is meant to help signature-based intrusion detection by being able to generate semantic copies of known code, to better identify malicious software that has been changed to avoid detection.

Client's Requirements:

Client wants a simple algorithm for first implementation, nothing too involved that could delay a prototype like using machine learning compared to a simpler predefined probability selection for how to manipulate tree nodes.

Key Discussion Points:

Discussion Point 1: CST Function Renaming Edge Cases

Discussion Point 2: LLM usage for synonyms for function/var renaming as well as potentially generating code

Discussion Point 3: All possible nodes that define a function in CSTs and sequential definitions in Python

Decisions Made:

Work on CST function renaming to cover all possible definitions (as regex replacing of given string may edit other strings), don't try to have individual function synonyms for every function redefinition, expand for variable names and create user-friendly notebook of algorithm for client to test.

Action Items:

Action Item 1: Finish function renaming with as many edge cases covered

Action Item 2: Make a user friendly python notebook file for client to look over

3. Project Milestones Discussed

Focus on project writeups, especially the report section due Sunday, Nov 3, and the Sprint 2 deliverables due Nov 5.

4. Next Steps

See Action Items, as well as working on variable renaming and GUI for sprint 3

5. Next Meeting

Date: Thursday, Nov 7, 2024 [subject to change]

Time: 5:00 PM

Location: Microsoft Teams