Minutes of Meeting 1/15/2025

Project Name: CYBER1-CodeVersion

Client Name: Tashi Stirewalt

Date: Jan 14, 2024 Time: 3:30PM - 4:00PM Location: Microsoft Teams

Attendees: Tashi Stirewalt, Bryan Frederickson, Samantha Brewer

Client Representative: Tashi Stirewalt

Project Team Members: Bryan Frederickson, Samantha Brewer

1. Agenda

Start off second semester development, check if plans from last semester need to be changed.

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:

For the second semester, focus on generating Code Property Graphs from source python code and be able to manipulate the CPG in more involved ways. The CPG should be able to be turned back into functional python code.

Key Discussion Points:

Discussion Point 1: Read original IEEE paper on Code Property Graphs to understand their scope.

Discussion Point 2: Look into Joern specifically as a CPG traverser.

Discussion Point 3: Make time for a GUI for the pipeline.

Decisions Made:

Will stay with python input source code exclusively if possible (may need to convert python source to C/C++, etc. to be able to fully use Joern) so that CST renamer stays relevant.

Go forward with Joern as the main plan, although other python to CPG converters may be considered if it falls through.

Action Items:

Action Item 1: Be able to input python code into CPG and visualize it, preferably be able to traverse as well – Due by 1/22/2025

3. Project Milestones Discussed

N/A

4. Next Steps

Research CPGs. Become familiar with Joern CPG traversal and manipulation.

5. Next Meeting

Date: Jan 22, 2025 Time: 3:30PM

Location: Microsoft Teams