sdmay18-16: Implementing OpenPLCs into a Cyber Defense Competition

Week 7 Report
October 28 - November 3

Team Members

Matthew McGill — *Meeting Facilitator, Project Manager*
Brennen Ferguson — *Hardware Engineer*
Joseph Young — *Security Engineer/Meeting Scribe*
Liam Briggs — *Hardware Engineer*
Joshua Przybyszewski — *Software Engineer*
Nicholas Springer — *Security Engineer*
Val Chapman — *Testing Engineer*

Summary of Progress this Report

Similar to last week's report, the team is continuing to build and tweak the systems to ideal use. To reiterate, the three main systems are our web app/server, linux/OpenPLC server, and Windows/FactoryIO server. In addition to this, documentation has become and will continue to be a very important part of our project, and is being continually updated.

Pending Issues

Currently because of the strategy we have taken to update our code and documentation, our files have lost some of their organization. This includes naming strategies, unused files, and organization of headings and instructions within the document files themselves. We have not yet connected all of our systems for a demo yet either.

Plans for Upcoming Reporting Period

Our plan is essentially to continue working on the items we have been. We intend to connect all of our systems together by the end of this week to stay on track for a perfected demo. After we have a demo of all the systems interacting as they should, we will pivot our focus to documentation and configuring our systems to be as easily implemented as possible.

Individual Contributions

Team Member	Contribution	Weekly Hours	Total Hours
Matthew McGill	Set up meetings, testing and reasearching Angular Dart for web app implementation	4	30
Brennen Ferguson	Learned and wrote ladder logic programs for possible implementation in our finalized demo	5	34
Joseph Young	Worked with Nick Springer to write up documentation and begin testing and implementing sercurity vulnerabilities	5	30

Liam Briggs	Researched and began testing networking communications between the web app and OpenPLC server	4	35
Joshua Przybyszewski	Developed a demo web app with realistic dummy functions that may be needed on to interact with our Factory IO scenario	6	33
Nicholas Springer	Worked with Joseph Young to write up documentation and begin testing and implementing sercurity vulnerabilities. Spun up server for web app	7	42
Val Chapman	Lead meetings and design documents, continued work on documentation for the end user to use our project to its full potential	4	31