sdmay23-01: Knowledge Graphs for Cybersecurity Reasoning
Week 7 Report
November 4 - November 11

Team Members
Brandon Richards   — *Frontend Development Lead*
Micah Gwin   — *Python/ML Development*
Alice Cheatum   — *Programmer/CYB E Knowledge*
Nicklas Cahill   — *Tester/Programmer*
Michael Watkins — *Python/ML Development*
Carter Kitelinger   — *Client Interaction/CYB E Knowledge*

Summary of Progress this Report
- Scraper – Add testing (code coverage >75%)
- Scraper – Throw error if target HTML is not present
- Scraper – Track already-fetched articles
- Scraper – Store fetched articles in MongoDB

Pending Issues
- How to perform NER in parser
- How to perform RE in parser

Plans for Upcoming Reporting Period
- Parser – Read input from MongoDB
- Parser – Perform very basic NER on input from scraper
- Parser – Define expected input and output cases for testing

Individual Contributions

Team Member	Contribution	Weekly Hours	Total Hours
Brandon Richards	Added unit testing and code coverage to scraper, added additional validation logic to scraper, and begun preliminary work on structure of parser component.	5	
Micah Gwin	Reviewed existing starting code from the parser to try and formulate a plan for the upcoming weeks. Continued experimenting/learning for building and running docker containers for the project.	2.5	
Alice Cheatum	Worked on design document. Discussed, researched, and experimented with brat relationship annotation tool.	2.5	

Nicklas Cahill	Worked on Design Doc, Continued progress for manual annotations	2	
Michael Watkins	Finished MongoDB driver implementation for scraper and parser, added driver to scrapy pipeline, corrected Docker containers.	4	0
Carter Kitelinger	Worked on Design Document, discussed using a different annotation tool for creating the relationships between the tags for spaCy to learn connections between tags.	2	

Gitlab Activity Summary

Nothing to report.