

CPRE 492 Bi-Weekly Report #2

Report Weeks: Feb 8th - Feb 22nd

Group Number: 16

Project Title: Cloudflare WAF AI

Client/Advisor: Cylosoft; Dr. Yong Guan, Dr. Berk Gulmezoglu

Team Members:

Ryan Burgett: Meeting Leader

Giovanni Mejia: Report Manager

Jordan Heim: Documentation Manager

Eric Reuss: Documentation Manager

Presiiian Iskrenov: Meeting Scribe

Benjamin Fedderson: Stakeholder Correspondent

Summary:

Overall this past week, everyone was doing various things to make the development process of our final product successful. Ben and Ryan have been working on the final touches of our Database and Console Application. While half of the AI team, Eric and Giovanni, were working with Microsoft Analysis Extensions on Visual Studio. They were working on a sample database in hopes to relate it with our current Database that we have. The other two of the AI team, Presiiian, and Jordan were instructed to research types of attacks that can happen on our Database and various types of mitigation strategies. Moving forward, we would like to finalize the specifications of our Database and start production within our AI and connect it to our Database for initial scanning.

Past weekly Accomplishments:

Our Client wanted a new version of our Console Application code to be implemented in C#. At first, we wanted to use Python as our programming language of choice, but C# works and processes better with the Cylosoft servers, so that is something that was accomplished. We also had success with trying out Analysis extensions from the Visual Studio. We want to eventually have our own variation of a scanner that will be connected to our database. We also conducted research on various attacks that can happen within our Database. We want to make sure we account for everything and be able to mitigate such attacks when our software is deployed.

Pending Issues:

Currently, we are not experiencing any pending issues.

Individual Contributions:

| <u>Team Member:</u> | <u>Individual Contributions</u> | <u>Hours this week</u> | <u>Hours Cumulative</u> |
|----------------------------|---|-------------------------------|--------------------------------|
| Ryan Burgett | Worked on Database Scanner V1. Added a hard-coded version for SQL injections | 7 hours | 15 hours |
| Giovanni Mejia | Used analytic extensions from Visual Studio to try out on a Sample Database | 7 hours | 13 hours |
| Jordan Heim | Researched various attack methods and mitigation strategies for our Database. | 6 hours | 12 hours |
| Eric Reuss | Used analytic extensions from Visual Studio to try out on a Sample Database | 6 hours | 11 hours |
| Presiiian Iskrenov | Researched various attack methods and mitigation strategies for our Database. | 6 hours | 12 hours |
| Benjamin Fedderson | Worked on the finalized C# version of Console Application. | 8 hours | 15 hours |

Plans for the upcoming week:

We would like to have our Console Application done with all finalized touches. We would also like to start development within our AI to test against our Database. We are still trying out new things within Microsoft Visual Studio and are hoping to connect with our Database so we can have our scanner ready for various attacks.