# Security Reports

In this lab the Operations Team is going to deploy a load generation and monitoring system. Your task for this lab is to develop the security policies that the additional functionality that these two systems provide you and integrate them into your overall security policies (ie. Now that you can generate a load, you can have a security policy that says what loads the architecture should be able to support). Remember, our expected load is 100 concurrent users. If this is what we expect on a normal day, what number of concurrent users should our architecture be able to support if we have a really big day? Also, how does our application fail? If bad guys send a DDOS attack our way (which they will do) and because of this increased load our system fails, how does it fail? Does it just slow way down and become unresponsive, but still alive, or does it fail completely and come back up as a command prompt?

You need to develop scripts that will test the system.

## Security Policies to be followed:

*When the web server reaches a critical load, it should attempt to remain available and only slow down even if to very slow speeds.*

## Deliverables:

Reports turned in should contain parts of the following components

* Enough of a description of the system or script that a new user understands its purpose
* Explanation of complicated or non-intuitive portions of code or process
* Basic usage and operation
* Which user to interact with the system or script as
* Where the script or system runs and what it touches or needs access to
* Known issues
* Future plans or features

Be concise and effective.

# Security Report:

|  |  |
| --- | --- |
| Group Number: | Group 4 |
| Group Members: | Nate Bachelder (Formerly Williams), Steffen Barr, Eli Hopkins, Xavier Rivera |
|  |  |
| Security Team Members: | Eli Hopkins, Xavier Rivera |
| Version/Lab Number: | Lab 2 |
| Date: | 10/04/21 |

Fill in the table below with a short description that answers the question.

## Project Description:

|  |  |
| --- | --- |
| What are the security policies of your group that must be met for this lab? | The server should remain available even under extreme loads and slow down when the load is too high. |
| What workload do you feel your application should be able to satisfy? | We feel our application could handle significantly more than the expected number of users. Up to 255 will be tested as this is the most that siege suggests using. |
|  |  |
| Success/Definition of successful completion | If our server is able to easily serve 100 users and acceptably handle 255 users, this lab has been successful. |

In your answers be sure to include both a textual description and screen shots showing your systems responding.

Performance Under Minimal Load (50 Simulated Users)

Graphical user interface

Description automatically generated

Performance Under Expected Load (100 Users)

Graphical user interface

Description automatically generated

Performance Under Overload (255 Users)

Graphical user interface

Description automatically generated

Even at 255 consecutive users, the server was hardly breaking a sweat. Our server may be able to handle at or upwards of 1,000 users at a time.