NWIT 245 – Defending the Network

Team Research Project

**Introduction:**

In today’s increasingly digital world, cybersecurity threats continue to evolve, posing serious risks to individuals, organizations, and global infrastructure. Among these threats, computer viruses and malware have caused significant disruptions and financial losses over the past few decades. This research project aims to explore three of the most infamous viruses in cybersecurity history:

1. Blaster
2. Slammer
3. MyDoom.

By studying these malicious programs, we can gain insight into how they operate, the damage they caused, and the strategies used to prevent and combat them.

In addition to understanding the nature of these viruses, this project also includes a detailed comparison of two antivirus solutions: Malwarebytes and Panda Antivirus. With a wide range of security software available today, it is essential to understand their strengths, weaknesses, and suitability for different users and environments.

**Objective:**

The primary objectives of this assignment are:

* To research and analyze the Blaster, Slammer, and MyDoom viruses, including their history, mode of operation, and impact.
* To understand the technical mechanisms behind how these viruses spread and infected systems.
* To examine the defensive measures that were or can be taken to prevent such attacks.
* To identify the relevant CVE (Common Vulnerabilities and Exposures) entries associated with each virus.
* To compare Malwarebytes and Panda Antivirus across multiple criteria, such as detection methods, ease of use, support, pricing, and overall performance.
* To develop teamwork, research, and presentation skills through collaborative investigation and class presentations.

This project is designed to build foundational knowledge in cybersecurity and enhance the ability to critically evaluate both past threats and modern security solutions.

**Part 1: Research and Understand Viruses**

In this two-part assignment, your team will research, analyze, and compare three notable computer viruses: Blaster, Slammer, and MyDoom. Your findings should be compiled into a 2-page written report (approximately 350–700 words) and include citations for all referenced sources.

Each team member must submit their own copy of the completed project by August 7th, and all members will present their findings in class. You may use PowerPoint or other visual aids during your presentation.

Each team will have 5 minutes to present. Be sure to include all team members' names on the report.

Your research should cover the following points for each virus:

* Overview of the malware (What it is and what it does)
* History and timeline of the malware
* Impact and damages caused, including monetary losses to individuals and organizations
* Mechanism of infection (how it works and spreads)
* Prevention and mitigation strategies
* CVE (Common Vulnerabilities and Exposures) ID number, if applicable

**Part-2 MalwareBites and Panda Antivirus**

In the second part of the assignment, conduct a comprehensive comparison of two antivirus software programs: Malwarebytes and Panda Antivirus.

Your comparison should address the following aspects:

* Key features and functionalities
* Detection and protection techniques used (e.g., signature-based, heuristic, behavioral analysis)
* User interface and ease of use
* System performance impact
* Customer support and service availability
* Platform compatibility (Windows, Mac, Android, etc.)
* Pricing and subscription options
* User reviews and reliability

Use tables or bullet points if helpful to highlight comparisons clearly.

**Submission Guidelines**

* Length: 2 pages (350–700 words)
* Format: Typed, double-spaced, standard font (e.g., Times New Roman 12 pt)
* Include: Team member names, citations (APA or MLA format), and any supplemental visuals if needed
* Due: **August 7th**
* Presentation: 5 minutes per team, in-class.