

## **Assignment 2: Assessing Networking and Cybersecurity**

*By*

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I the networking and Cybersecurity part, I have completed two courses: 1. Cybersecurity, and 2. Digital Forensics.

### **What do I know: competencies, skills, and knowledge**

From Cybersecurity course:

In developing a personal information asset inventory consisting of 200 items containing my personal data and conducting a risk assessment, I acquired skills in creating asset inventories and assessing their associated risks. These skills are essential in real-life business organizations, as well as for managing my personal assets effectively.

I have honed my skills in crafting contingency plans, encompassing essential elements such as risk description and consequences, mitigation strategies, contingency actions, trip wires, necessary resources, and more. These plans I developed based on my practical experiences. Through this process, I have acquired the ability to discern risk factors that may provoke incidents. By delineating these risk factors, I can formulate comprehensive contingency plans aimed at forestalling such occurrences. These plans meticulously outline requisite tools and resources, establish a timeline for plan execution, designate responsible individuals or departments for plan implementation, and incorporate all pertinent details to ensure efficacious execution.

I have acquired skills in using various software tools such as Recuva and CCleaner for securely deleting files from memory by overwriting them with noise to prevent recovery. Additionally, I've learned to utilize JohnTheRipper for password cracking, understanding that more complex passwords require more time to crack. Furthermore, I've become proficient in using Prey to locate lost devices.

From Digital Forensics course:

By writing a detailed cyber incident report, I became familiar with CISA and its definition of incident-related terms. I was able to investigate a cybersecurity attack and write an incident report according to the Incident Reporting Framework by the Cyber Threat Alliance organization. This incident report described in detail pertinent facts about a cybersecurity attack.

Another assignment was to design my own learning homework. By doing so, I strategically planned step by step, setting deadlines aimed at accomplishing a goal. This helped me develop a habit of keeping track of my daily activities, tasks to be done, and how much time I am spending on each task using Google Calendar.

One of the biggest skills I have gained is identifying the eight wastes according to lean principles: over-production, over-processing, excess inventory, defects, transportation, unused employee potential, wasted motion, and waiting times. By practicing in every aspect of my daily life, I am developing my skills in identifying waste and striving to implement lean improvements.

In developing a financial fraud regression model web application, I have acquired skills in JavaScript, HTML, and CSS.

#### Where I am weak: Areas of improvement.

From Cybersecurity course:

There was a quiz about identifying which websites/emails are spam or not. There were two tests, and I failed both in identifying phishing emails and websites. I have very poor skill in identifying spam, and that makes me vulnerable to phishing attacks.

Moreover, I encountered difficulty using Wireshark software to locate open ports. Similarly, I found it challenging to crack passwords using JohnTheRipper, particularly due to numerous errors encountered while utilizing PowerShell.

From Digital Forensics course:

I had the opportunity to delve into machine learning applications using TensorFlow and Fast AI and apply this knowledge in developing a real-life web application. However, I found these concepts to be quite advanced for me. Despite completing my assignments, I acknowledge that I still have much to learn. In my personal assessment, I felt that my assignment fell short of expectations.

Additionally, I recognize the need for more practice in JavaScript and HTML CSS. From my perspective, completing only one homework assignment is insufficient for building the skills necessary for real-life job applications.

### Future: How I Plan to Grow

From Digital Forensics course:

I am planning to revise my course materials because they are well-organized and provide a comprehensive collection of sources suitable for acquiring precise knowledge. Additionally, I have already registered to obtain certificates from datacamp.com. As a WT student, I still have free access to this website, and I intend to utilize this opportunity to enhance my skills beyond what is covered in classroom assignments.

From Cybersecurity course:

To overcome these challenges, I intend to focus on enhancing my skills in identifying spam emails and websites. I plan to engage in additional training and practice exercises specifically tailored to improving my ability to recognize phishing attempts effectively.

Furthermore, I am determined to address my difficulties with using Wireshark software to locate open ports. I will dedicate time to further familiarize myself with the software and seek out tutorials or resources that can provide clarity on this aspect.

Similarly, I aim to overcome the obstacles I faced while attempting to crack passwords using JohnTheRipper in PowerShell. I will invest time in troubleshooting and understanding the errors encountered, as well as seeking assistance from online forums or communities to gain insights into resolving these issues.

Overall, through continuous learning, practice, and seeking support when needed, I am confident that I can overcome these challenges and strengthen my cybersecurity skills effectively.

My Project idea: Creating a Diabetes Prediction website.

Description: With this website the user can view the status of whether the user has diabetes or not.