### **ASSIGNMENT 1**

## Task 1: Secure Network Diagram 80 points

### **Objective:**

- Proficiency with visualizing the flow of network information
- Understand the role of network devices and the role they play in a secure network.
- Demonstrating defense in depth

#### Scenario:

You work for a small or mid-sized company and recently assumed the role of Network Security Engineer. The company recognizes that it has deprioritized security in the past and understands that it should be part of the business and not an add-on. You are the first part of this change, thus the sole IT Security specialist. You have decided to first start with secure networking; but you need to understand the network before you can implement solutions. So, you've decided to map out the network and add components that you think would be beneficial to achieving security on the network. You'll use this logical diagram to help build your proposal to procure equipment or recommend configuration changes, so put your best foot forward. Remember that your boss and/or other stakeholders may not be as technically savvy as you, so how you relay information to them is important.

#### **Deliverable:**

A secure network diagram. Your diagram should detail network devices, information flow, and secure configurations (i.e. if your on-premise network allows users to remote in via a virtual private network, notate any secure configurations that you've implemented, such as remote connections only allowed via multi-factor authentication). You can include security configurations on the diagram itself, or in a separate document.

Note - Please include a description explaining the Secure Network Configuration.

# **Task 2: Recent Security Event Article**

20 points

Article should be short, concise, thoughtful, and well-written. Imagine a broad audience (a general technical audience). Your goal should be to write an article to help this audience learn about and understand the computer security field and how it fits into the broader context.

Your article should: (1) summarize the recent security event; (2) discuss why the current event arose; (3) reflect on what could have been done different prior to the event arising (to perhaps prevent, deter, or change the consequences of the event); (4) describe the broader issues surrounding the event (e.g., ethical issues, societal issues); (5) propose potential responses to contain the event by different actors (e.g., public, policymakers, corporations or media).

Note - There is no minimum/maximum word limit. The article should cover above mentioned points.