# CS 3113-Online: Principles of Cybersecurity Course Project, 200 points

Due: April 24, 2022 – 11:59pm (Hard Deadline)

This will be a group project

## Conducting Cybersecurity Assessments

#### Purpose

The purpose of this assignment is to gain experience conducting a cybersecurity assessment of an organization. In this case, it is a fictitious organization called NARO, Inc. (Not A Real Organization)

This will be a paper-based exercise, meaning there will not be any active assessment activities such as penetration testing. However, this is not unusual in the cybersecurity industry for many reasons, including:

- Some systems such as those involving critical infrastructure are not suited for active
  assessment activities. For example, some industrial control systems can be damaged by a simple
  network scan.
- The only systems an organization has may be their "production" systems, and disruption of those could impact business operations.
- The organization is still in the design and implementation stage of the system, and a working system does not yet exist.
- The organization does not have the resources to support an active assessment. For example, they may not have an IT person that can quickly restore systems to their original state after it has been compromised

#### Assignment

For this assignment, your group will be taking on the role of cybersecurity assessors working for Death Star Consulting (DSC) that is conducting an assessment of NARO, Inc. Fortunately, a senior assessor will be giving your group guidance on this project, and will be providing you with a template that you can use for your report. In addition, they have already asked NARO, Inc. for some information about their organization, which they will provide to your group. Unfortunately, since DSC is understaffed, your group will be conducting this assessment on your own – with only occasional guidance from the senior assessor. This assessment will include the following areas:

- Evaluation of policies and procedures related to identify and access management (users, passwords, permissions, etc.)
- Communication and network security, including remote access, work from home, use of personal devices for work
- Cybersecurity training
- Data collection, location, retention, and destruction
- Physical security of systems and information
- Plans for Continuity of Operations, Disaster Recovery, and Data Backups

In the event NARO, Inc. does not have appropriate security-related policies, you will need to provide recommendations (and justification) for adopting them.

#### Timeline

Date	Activity
03/03	Group selection. This will be randomly done using the Groups feature in Blackboard.
Week of 03/07	You will be provided with a template and the initial information gathered on NARO, Inc.
Week of 03/21	Zoom meetings where your instructor will take on the role of the CEO of NARO, Inc. to answer questions you have regarding the company and the information that you have received.  Exact time: TBD
Week of 03/28	Zoom meetings where your instructor will take on the role of the CEO of NARO, Inc. to answer questions you have regarding the company and the information that you have received.  Exact time: TBD
Week of 04/11	Zoom meetings where your instructor will take on the role of the CEO of NARO, Inc. to answer questions you have regarding the company and the information that you have received.  Exact time: TBD
These Zoom meetings will be recorded, and will be available if you are unable to attend.	
04/24/2022	Project deliverables are due

#### Deliverables

The deliverables for this project are due 04/24 by 11:59pm. This is a hard deadline since the projects must be graded before the end of semester.

- 1) (140 points) Project report. This is meant to be a professional report that you would be willing to have your name on and be delivered to an organization. This report will include:
  - a. A discussion of the scope of the assessment
  - b. Assessment activities that were conducted
  - c. Audit checklists that were used (may be reused from Assignment 1, or may be something else)
  - d. Any cybersecurity findings that you have regarding the organization including an evaluation of severity, reasoning for that severity, and potential mitigations.
  - e. Recommendations for what the organization should do going forward
  - f. Overall conclusions

This report does not have a specific length requirement, but will be evaluated on completeness, professionalism, and overall ability to help the organization moving forward.

- 2) (60 points) Out-brief Presentation. There are two parts to this presentation:
  - a. The slides that your group would use to present your findings to NARO, Inc.
  - b. Notes that you would be using for the various slides. (This can be a separate outline, or done using the "Notes" feature in PowerPoint.)

This presentation will be evaluated on the professionalism, appropriateness for a small organization, and overall ability to communicate issues and recommendations.

One only submission of the deliverables is required per group.

### Other Notes

This is expected to be a group project. If there are any problems with group members that are not contributing, or other intra-group issues, please let me know.

You may discuss this project with others outside of your group, but your group report and presentation should be the work of your group and not other students.