National Initiative for Cybersecurity Education (NICE) Community Coordinating Council

Project Charter:
Career Pathways and Credentials Project

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1. Project Team Description

The National Initiative for Cybersecurity Education (NICE) is part of the National Institute of Standards and Technology (NIST) in the U.S. Department of Commerce, and is a partnership between government, academia, and the private sector focused on cybersecurity education, training, and workforce development.

This project, led by the NICE Promote Career Discovery Working Group, aligns with the NICE Strategic Plan's Implementation Plan Goal 1 to Promote the Discovery of Cybersecurity Careers and Multiple Pathways. The project team will focus on the NICE Implementation Plan Goal 1, Objective 1.2. Objective 1.2 centers on increasing the understanding of multiple learning pathways and credentials that lead to careers that are identified in the Workforce Framework for Cybersecurity (NICE Framework).

2. Project Team Purpose

Summary (the Elevator Pitch)

"Many do not understand the multiple careers or learning pathways to enter the cybersecurity workforce. This project's purpose is to increase understanding of the multiple learning pathways and credentials that may lead to a cybersecurity career identified in the NICE Framework."

Statement of Purpose

The purpose of this project team is to advise and assist in the development of one part of a larger report to identify multiple career pathways for cybersecurity work roles that can be used in the private and public sectors. The report will be submitted to Congress by June 2022. This resource will ensure that the multiple cybersecurity career pathways identified indicate the knowledge, skills, and abilities, including relevant education, training, internships, apprenticeships, certifications, and other experiences, that align with employers' cybersecurity skill needs, including proficiency level requirements, for its workforce; and prepare an individual to be successful in entering or advancing in a cybersecurity career.

There are multiple career pathway options in the cybersecurity workforce and there are multiple learning pathways to gain the knowledge, skills or competency areas needed for cybersecurity careers identified in the NICE Framework. Some may obtain an industry-recognized credential such as a certification, academic degree, or certificate of completion. Others might take some classes offered in high schools, colleges, and universities, or through training providers. Some educational credentials come from community, technical, or vocational programs, while others are gained through four-year programs; some continuing to complete graduate or professional degrees. Industry-recognized certifications, on the job learning, workplace experiences, self-paced learning, competitions, apprenticeship, internship, and externship programs are additional learning pathway options. The purpose of this project team is to increase understanding of the multiple learning pathways and credentials that may lead to a cybersecurity career identified in the NICE Framework.

Scope

The scope of this project will address Objective 1.2 of the NICE Implementation Plan, namely, to increase understanding of multiple learning pathways and credentials that lead to careers that are identified in the Workforce Framework for Cybersecurity (NICE Framework). Within Objective 1.2, there are four strategies that support meeting this objective:

1.2.1 Identify and track multiple learning pathways and credentials aligned to the NICE Framework Work Roles and Competencies
1.2.2 Identify and develop tools and resources that promote learning pathways and credentials aligned to NICE Framework Work Roles and Competencies
1.2.3 Share messaging to attract, develop, and retain talent and relay the innumerable and varied career options in cybersecurity
1.2.4 Collaborate and support alignment of the NICE Framework Work Roles and Competencies with career tools and resources

This project will focus on Strategy 1.2.1. Tools and resources that promote pathways and credentials (Strategy 1.2.2) may be referenced but only to the extent that their inclusion does not take away from the objective of identifying multiple learning and career pathways and credentials. This project will examine relationships between starting points, pathway options, credential options, and cybersecurity work roles. Specific "step-by-step" guidelines for entry into each of the 52 NICE Work Roles is not within the scope of this work.

3. Project Team Objectives

The project will identify multiple learning and career pathways for cybersecurity work roles that can be used in the private and public sectors, assuring inclusion of all components of the WIOA Career Pathways Definition. Additionally, the project will identify multiple credentials that lead to careers that are identified in the NICE Framework. The project team will assure alignment with other working group projects that are indicating the knowledge, skills, and abilities, including proficiency level requirements, that prepare an individual to be successful in entering or advancing in a cybersecurity career. The project team will also garner expertise from the NICE K12, Competitions, and Apprenticeship Community of Interest groups.

Additionally, the project should provide opportunities to review resources and existing approaches to existing examples of cybersecurity learning and career pathways, and lessons learned from other disciplines.

4. Project Team Deliverables

Identify multiple learning pathways aligned to the NICE Framework Work Roles and Competencies
Identify credentials aligned to the NICE Framework Work Roles and Competencies

Provide guidance on how to align multiple learning and career pathways and credentials with cybersecurity work roles that can be used in the private and public sectors, assuring inclusion of all components of the WIOA Career Pathways Definition.

5. Timeline for Project Development

January 17-18, 2022	Submit draft charter to NICE and the Careers Working Group (WG)
January 19, 2022	Project Plan is discussed by WG
January 26, 2022	Project Plan is approved and “official” project launch
January 19- Feb.16, 2022	Sprint 1 complete (pathways)
Feb. 16 - March 16, 2022	Sprint 2 complete (credentials)
April 1, 2022	Draft Deliverable for inclusion in formal report

References

1. **The National Initiative for Cybersecurity Education** Strategic Plan https://www.nist.gov/itl/applied-cybersecurity/nice/about/strategic-plan

2. NICE Implementation Plan https://www.nist.gov/system/files/documents/2021/09/23/Implementation%20Plan_22Sep2021.pdf

3. Careers Working Group Implementation Plan strategies and indicators of success evergreen document Objectives_strategies_actions_indicators_121521.docx - Google Docs