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## Default Question Block

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This information constitutes the "consent information" for the survey:

Dear Students,

This survey is a part of a Cybersecurity Education project funded by the National Science Foundation at VT. Our goal is to assess the effectiveness of the cybersecurity learning module implemented in your course this semester and improve these learning module based on your valuable feedback. The findings will also be published in journal and conference papers/posters for sharing our experiences to educators interested in cybersecurity education.

As a reminder, this survey is about the cybersecurity concepts that are covered in class during project 4 (for ECE 1574) or Lab 14 (for CS 1114).

Although the survey is voluntary and confidential, we would very much appreciate your participation. Consent is implied with the submission of the survey. The decision to participate or not to participate will not affect your grade in this course. The survey includes 31 multiple choice questions and it will take a maximum of 15 minutes for completing the survey.

Important Note: Kindly note if you are a minor, you are requested not to participate in this survey.

Cybersecurity Education Project Team

Q2. From where are you taking the course?

- On-campus
- Online

Q1. For which course were you given this survey?

- ECE 1574
- CS 1114

Q3. What is your discipline?

- Computer Science
- Computer Engineering
- General Engineering
- Others

Q4. What is your academic level?

- freshman
- sophomore
- junior
- senior

Q5. What is your gender?

- Male
- Female
- Others

Q6. What is your ethnicity?

- White/Caucasian
- Black or African American
- American Indian or Alaska Native
- Asian
- Native Hawaiian or Pacific Islander
- Other

Q7. I can define the cybersecurity principle of data integrity

- Strongly agree
- Agree
- Somewhat agree
- Somewhat disagree
- Disagree
- Strongly disagree

Q8. I can define the cybersecurity principle of data authenticity

- Strongly agree
- Agree
- Somewhat agree
- Somewhat disagree
- Disagree
- Strongly disagree

Q9. I can define an adversary/threat model

- Strongly agree
- Agree
- Somewhat agree
- Somewhat disagree
- Disagree
- Strongly disagree

Q10. I can describe potential security threats from non-valid input

- Strongly agree
- Agree
- Somewhat agree
- Somewhat disagree
- Disagree
- Strongly disagree

Q11. I can explain the purpose of ensuring the integrity and authenticity of data in real-world scenarios

- Strongly agree
- Agree
- Somewhat agree
- Somewhat disagree
- Disagree
- Strongly disagree

Q12. I can apply the process for ensuring data integrity and authenticity for real-world programming applications

- Strongly agree
- Agree
- Somewhat agree
- Somewhat disagree
- Disagree
- Strongly disagree

Q13. Data integrity can be described as:

- The ability of a system to ensure data can be accessed only by authorized users
- the ability of a system to recover data from backup after it has been deleted.
- The ability of a system to determine whether data has been modified since its creation
- The ability of a system to ensure the absence of tampering by unauthorized parties

Q14. Data authenticity means:

- The ability of a system to ensure that data is modified only by authorized parties
- The ability of a system to ensure the accuracy and precision of the data
- The ability of a system to ensure that data originates from a given source, i.e., has not been fabricated
- The ability of a system to validate users' passwords before granting access

Q15. An adversary/threat model describes

- A set of security vulnerabilities
- A defense strategy to protect against an adversary
- The ability to intrude into a network and tamper with data
- A set of assumptions about what an adversary is able and/or unable to do

Q16. Which of the following is not an example of what an adversary model may include

- The assumption that an adversary has knowledge of the encryption algorithm used
- The assumption that an adversary can eavesdrop on communication
- The assumption that an adversary can be sanctioned if caught
- The assumption that an adversary cannot access private keys

Q17. Which of the following Java/C++ expressions or statements can lead to immediate program failure or termination if the value of the input variable 'input' was not validated. Assume 'input' is declared as an Java/C++ 'int'.

- System.out.print(input) (Java); cout << input (C++)
- if (input >= 0 && input < 10) return -1; (Java/C++)
- array[input]++ (Java/C++)
- double v = (double) input (Java/C++)
- None of the above

Q18. The purpose of ensuring data integrity in real-world applications is:

- To ensure users can access the data at all times, including offline
- To ensure users that a system's data are trustworthy
- To ensure users that sensitive data has not been read by government agencies
- To provide free or low-cost access to data

Q19. An example of ensuring data authenticity in real-world applications is:

- To ensure that their online purchases cannot be tracked
- To ensure users that an email originated with a family member
- To ensure users that a sensor reading in a car is accurate
- All of the above

. For questions 20 to 30, note that the word “coursework/course” refers to anything that you do in your course related to cybersecurity, including assignments, activities (Project or lab), readings, etc.

Q20. The coursework held my attention

- Strongly agree
- Agree
- Somewhat agree
- Somewhat disagree
- Disagree
- Strongly disagree

Q21. In general, the coursework was useful to me

- Strongly agree
- Agree
- Somewhat agree
- Somewhat disagree
- Disagree
- Strongly disagree

Q22. The coursework was beneficial to me

- Strongly agree
- Agree
- Somewhat agree
- Somewhat disagree
- Disagree
- Strongly disagree

Q23. The instructional methods used in this course held my attention

- Strongly agree
- Agree
- Somewhat agree
- Somewhat disagree
- Disagree
- Strongly disagree

Q24. I enjoyed the instructional methods used in this course

- Strongly agree
- Agree
- Somewhat agree
- Somewhat disagree
- Disagree
- Strongly disagree

Q25. The instructional methods engaged me in the course

- Strongly agree
- Agree
- Somewhat agree
- Somewhat disagree
- Disagree
- Strongly disagree

Q26. I enjoyed completing the coursework

- Strongly agree
- Agree
- Somewhat agree
- Somewhat disagree
- Disagree
- Strongly disagree

Q27. I found the coursework to be relevant to my future

- Strongly agree
- Agree
- Somewhat agree
- Somewhat disagree
- Disagree
- Strongly disagree

Q28. The coursework was interesting to me

- Strongly agree
- Agree
- Somewhat agree
- Somewhat disagree
- Disagree
- Strongly disagree

Q29. I will be able to use the knowledge I gained in this course

- Strongly agree
- Agree
- Somewhat agree
- Somewhat disagree
- Disagree
- Strongly disagree

Q30. The knowledge I gained in this course is important for my future

- Strongly agree
- Agree
- Somewhat agree
- Somewhat disagree
- Disagree
- Strongly disagree

Q31. Please provide your comments/suggestions for the cybersecurity initiative.

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