Security Injections @Towson

Welcome, Marilyn Soyars!

Security Injections, Java CS1 - Buffer Overflow

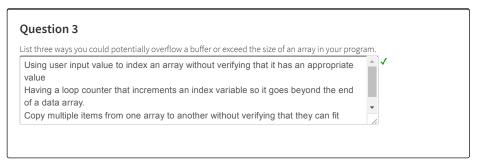


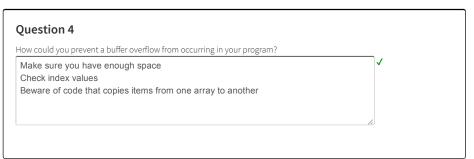
Discussion Questions

(Note: You may want to refer Background and Code Responsibly sections to answer the Discussion Questions.)

Describe the buffer overflow problem. A buffer overflow happens when a program attempts to access a value that is outside
of the specified data buffer.

Question 2	
hat happens if you exceed the size of an array in Java? Do you consider this robust behavior?	_
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Question 5 Give three real life examples of buffer overflow attacks (research on the web).	
The 1998 Morris Internet Worm	√
2001 Code Red Worm – Microsoft Internet Information Services	
2003 SQL Slammer – Microsoft SQL Server 2000	

Question 6

What can result from a buffer overflow

The potential impact of a buffer overflow will largely depend on the programming language. Some languages, such as Java, automatically identify situations that would lead to buffer overflows. These languages will generally indicate an error by throwing an exception, which the program should handle appropriately. If exceptions are not handled, the program will terminate.

Question 7

Buffer overflows can be troublesome if they are used by attackers to run their own code. What sort of things might an attacker try to do if he or she were able to run any code they wanted on a computer?

Directly malicious attackers might destory data or otherwise render the computer unusable. Criminals in search of useful information might try to read files, looking for credit card numbers, social security numbers, and other information that can be useful for theft, fraud, and identity theft. Others might use an attacked computer to run software that will be used to attack still other computers, creating an army of

Complete! Finish



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