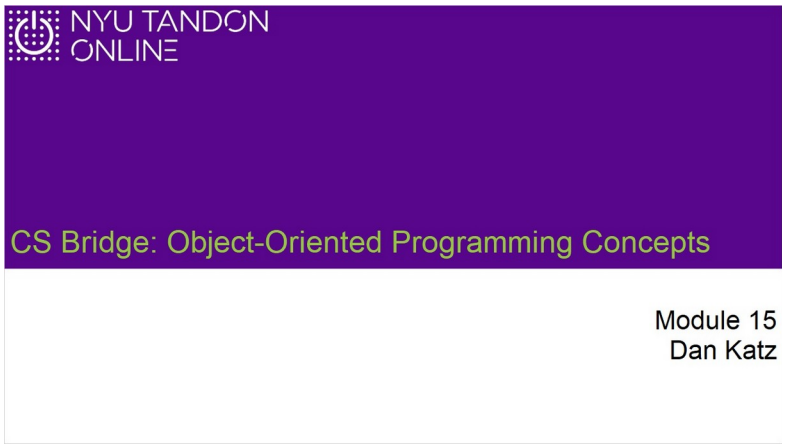
CS Bridge Modue 15 Object Oriented Programming

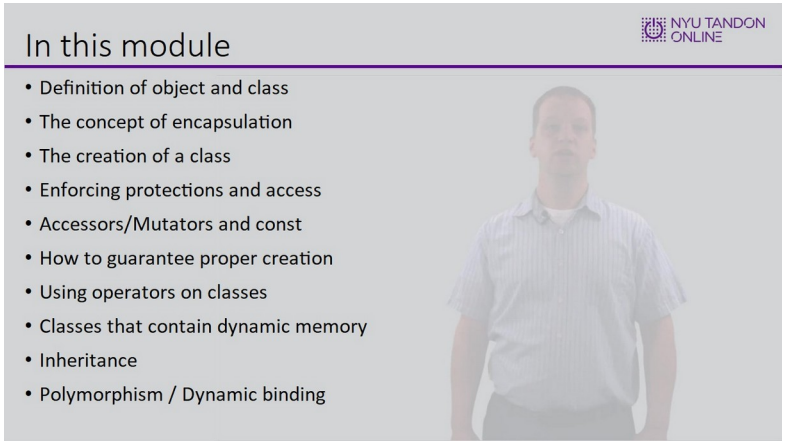
1. Module 15

1.1 CS Bridge: Object-Oriented Programming Concepts

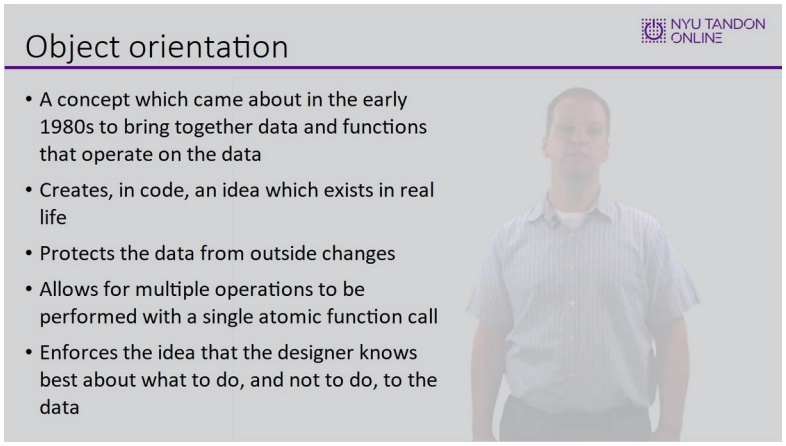


Notes:

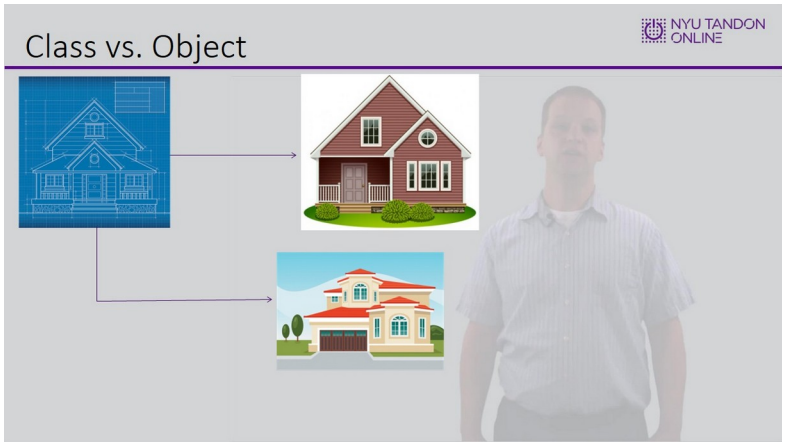
1.2 In this module



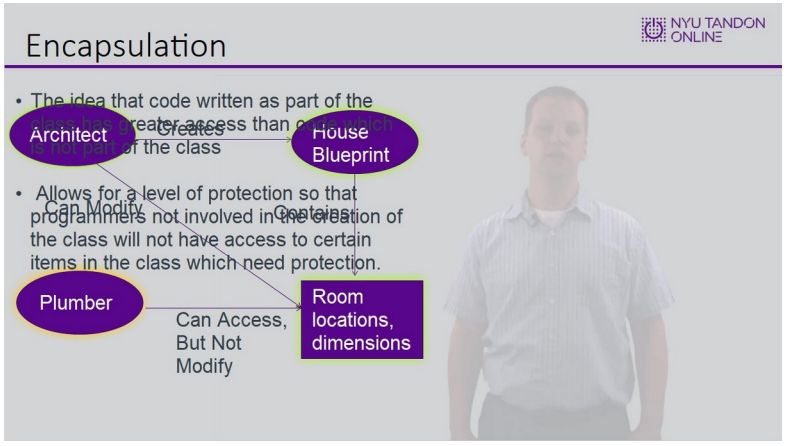
1.3 Object orientation



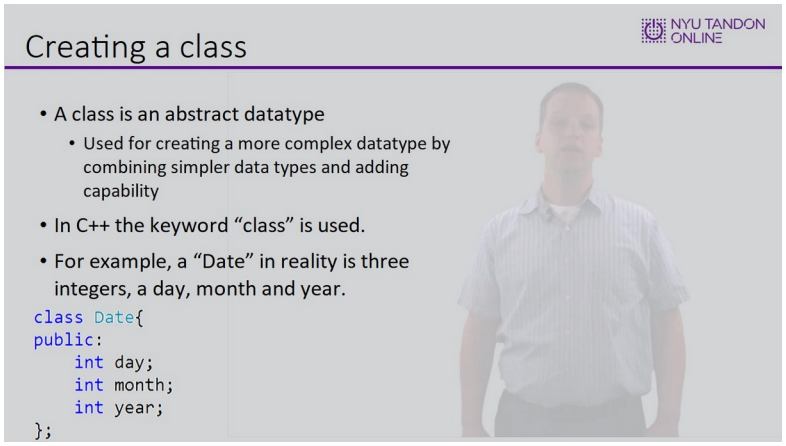
1.4 Class vs. Object



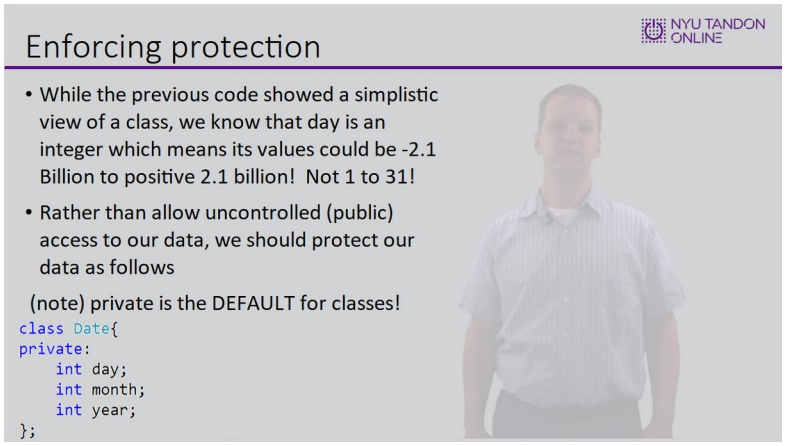
1.5 Encapsulation



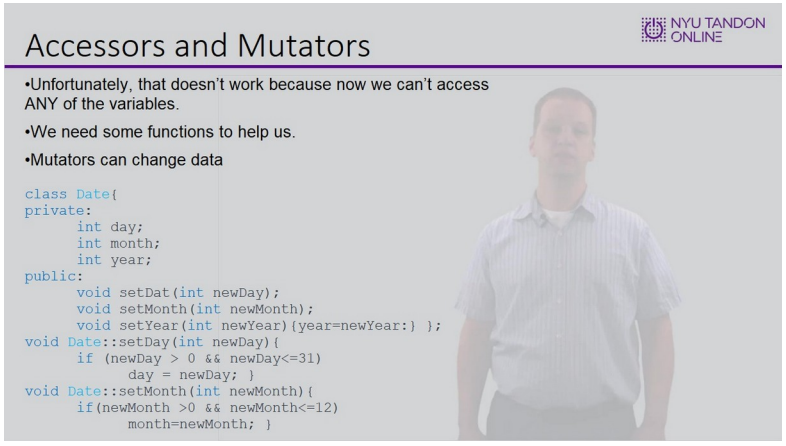
1.6 Creating a class



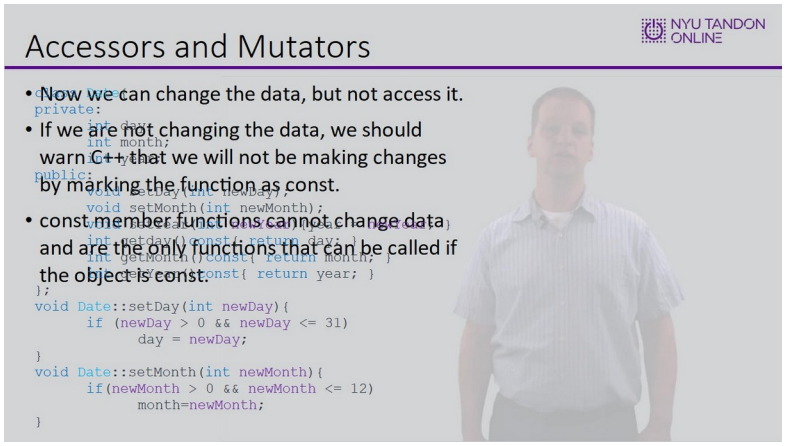
1.7 Enforcing protection



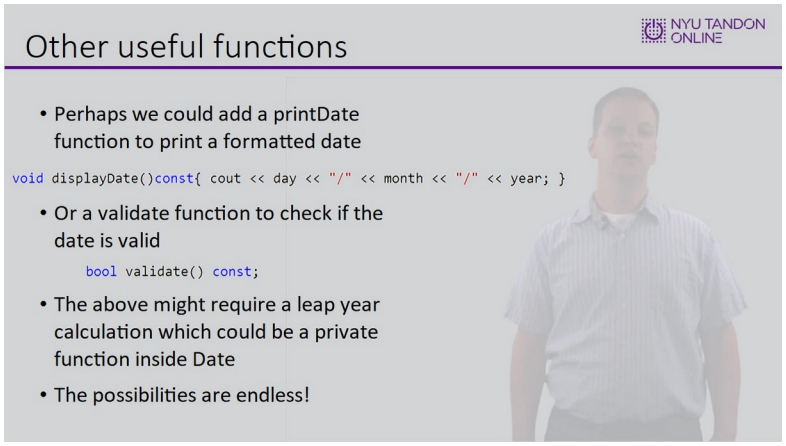
1.8 Accessors and Mutators



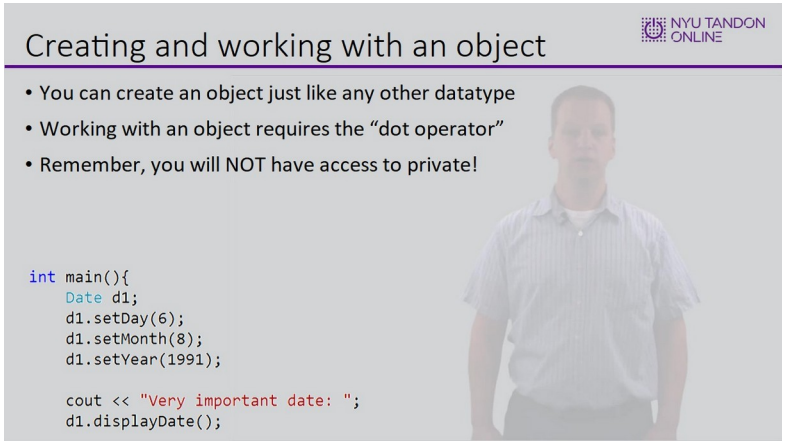
1.9 Accessors and Mutators



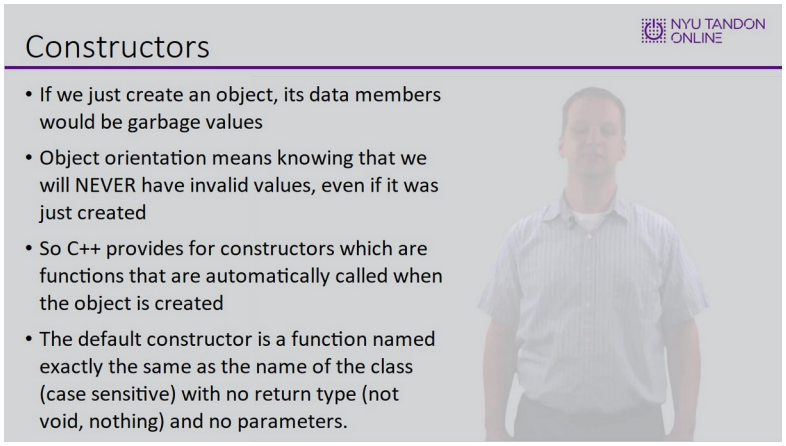
1.10 Other useful functions



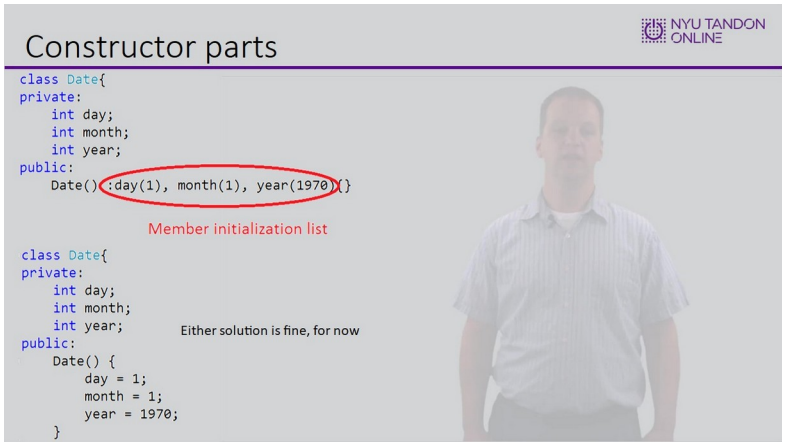
1.11 Creating and working with an object



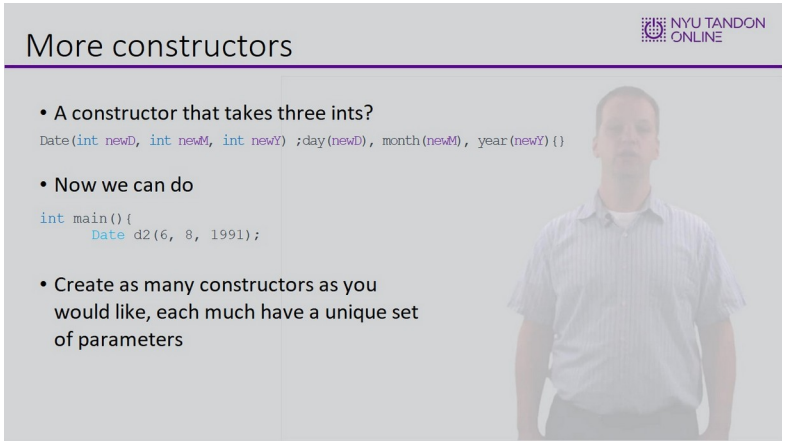
1.12 Constructors



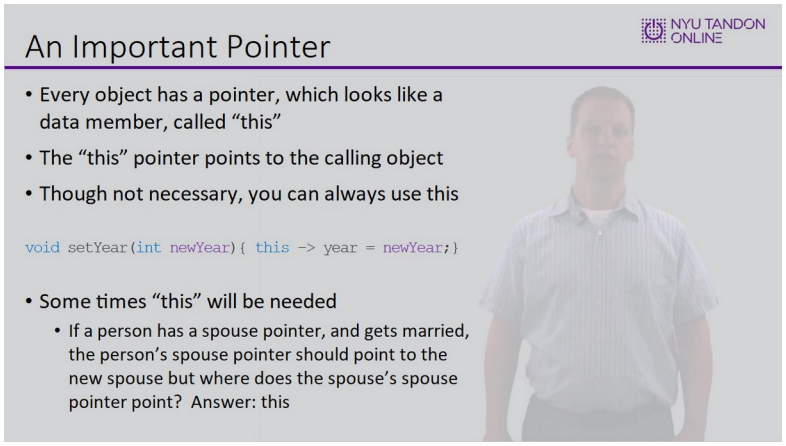
1.13 Constructor parts



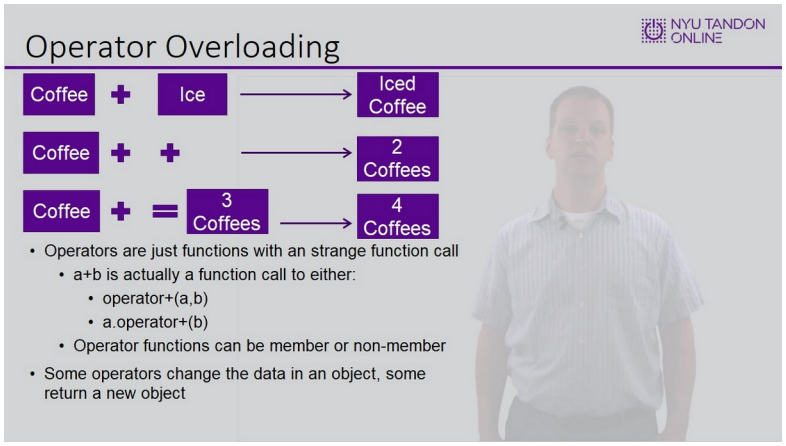
1.14 More constructors



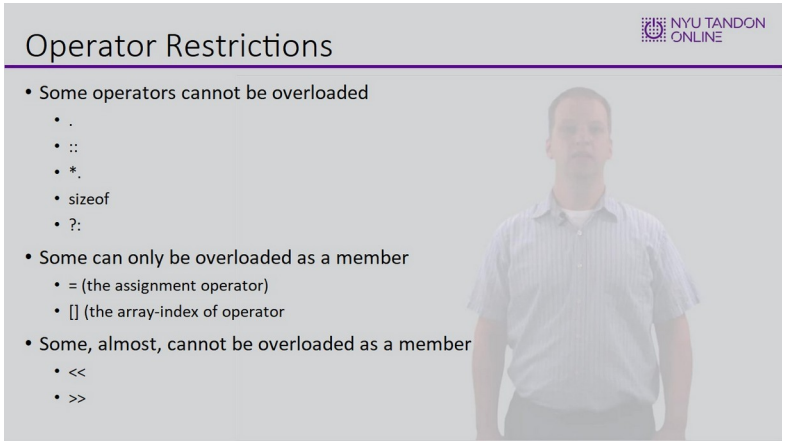
1.15 An important pointer



1.16 Operator Overloading

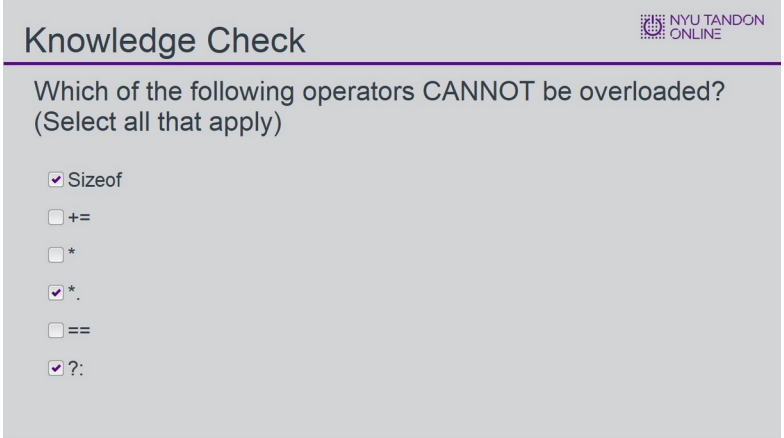


1.17 Operator restrictions



1.18 Knowledge Check

(Multiple Response, 10 points, 4 attempts permitted)



Correct	Choice
X	Sizeof
	+=
	*
X	*.
	==
X	?:

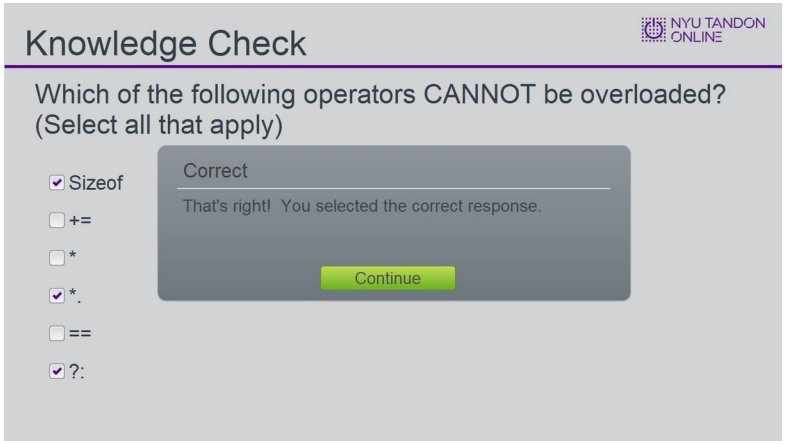
Feedback when correct:

That's right! You selected the correct response.

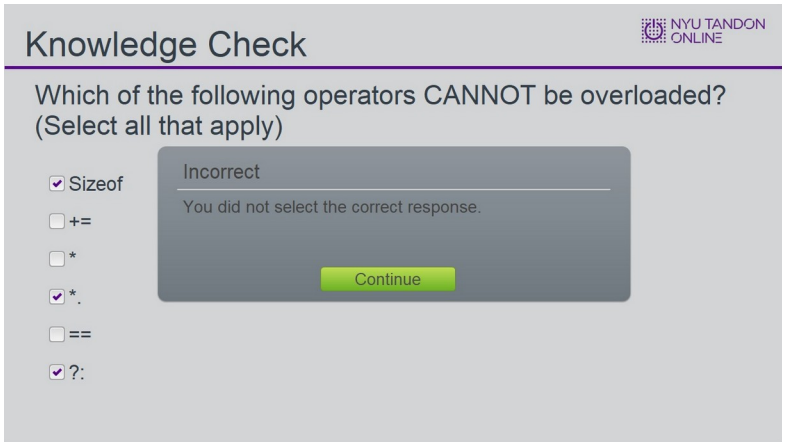
Feedback when incorrect:

You did not select the correct response.

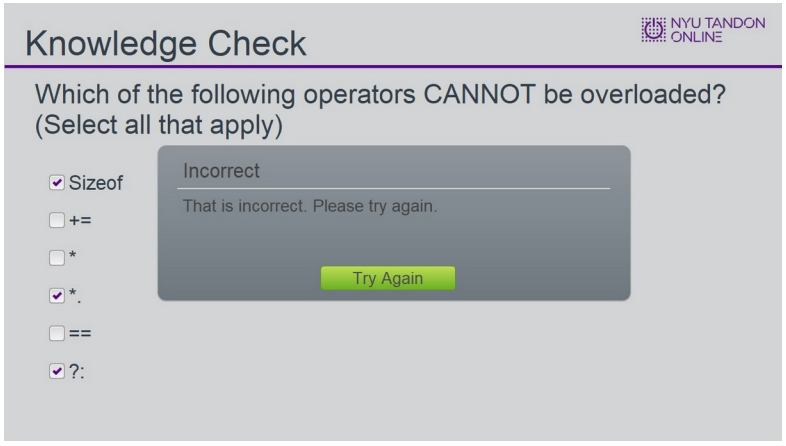
Correct (Slide Layer)



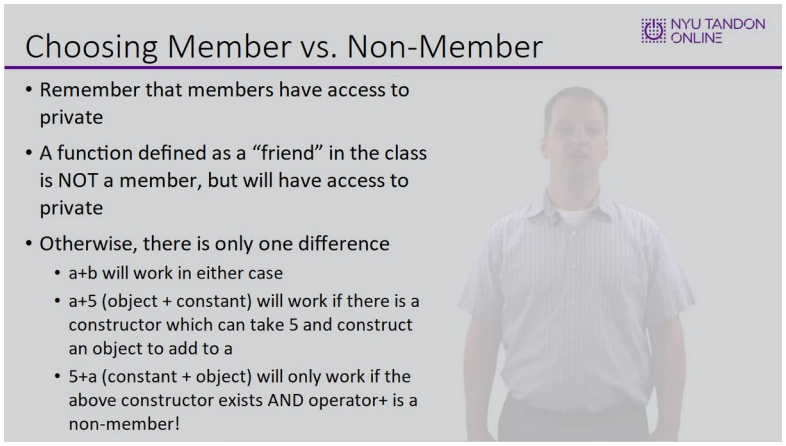
Incorrect (Slide Layer)



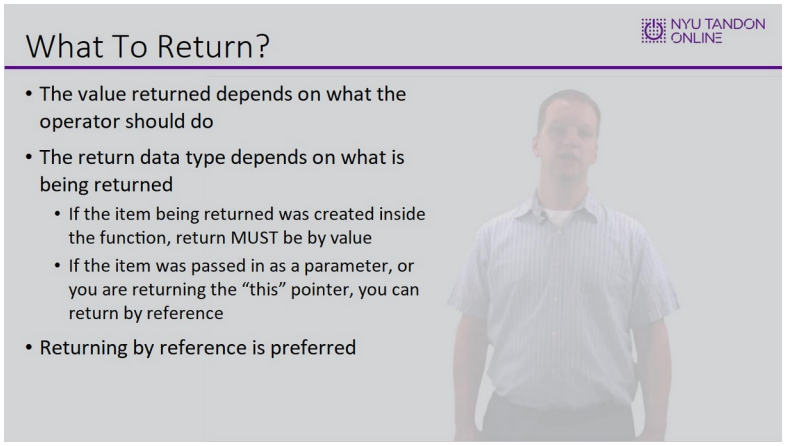
Try Again (Slide Layer)



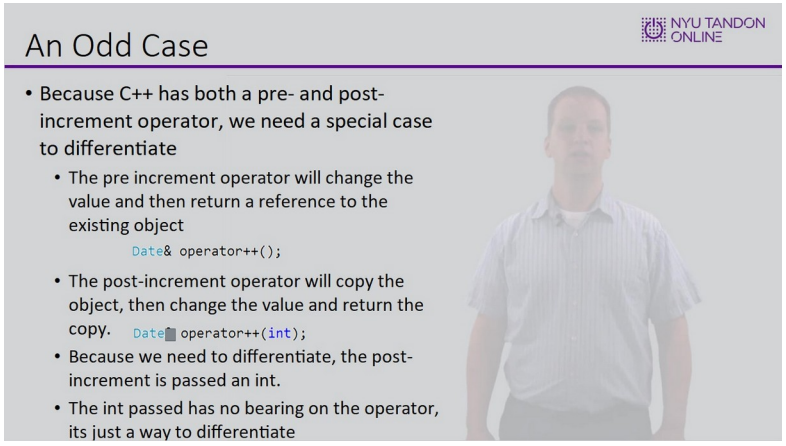
1.19 Choosing member vs. non-member



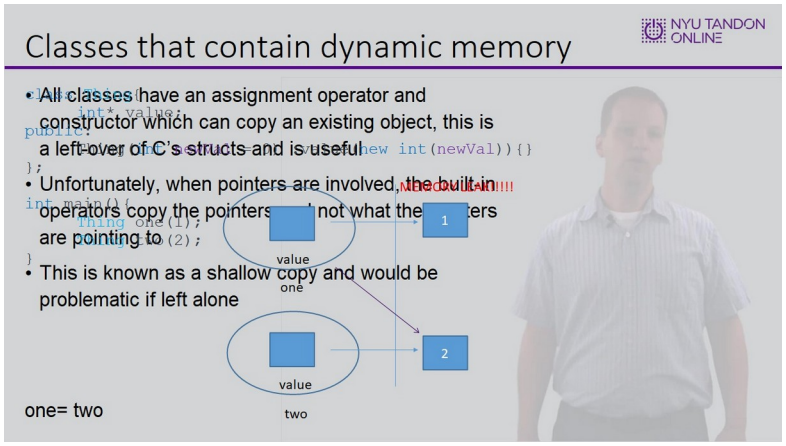
1.20 What to return?



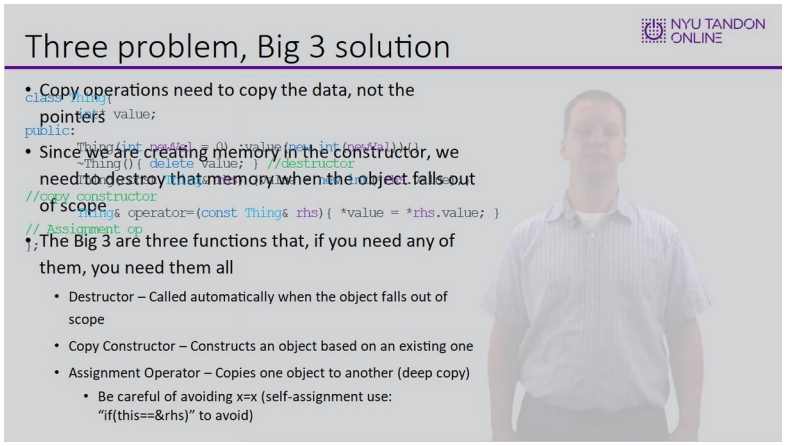
1.21 An Odd Case



1.22 Classes that contain dynamic memory

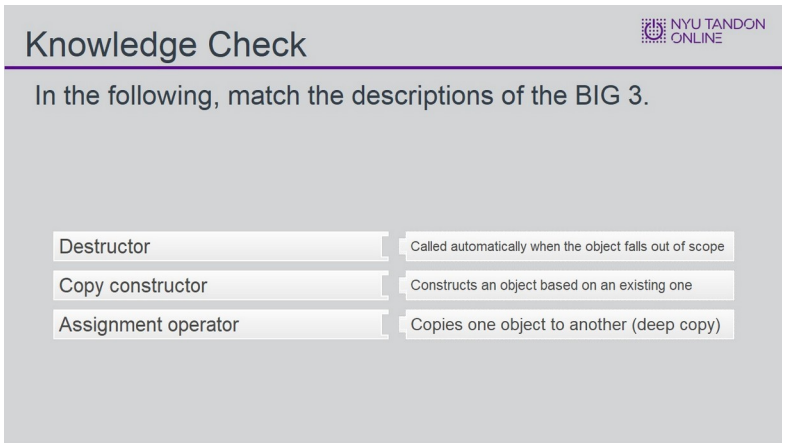


1.23 Three problem, Big 3 solution



1.24 Knowledge Check

(Matching Drag-and-Drop, 10 points, 3 attempts permitted)



Correct	Choice
Destructor	Called automatically when the object falls out of scope
Copy constructor	Constructs an object based on an existing one
Assignment operator	Copies one object to another (deep copy)

Feedback when correct:

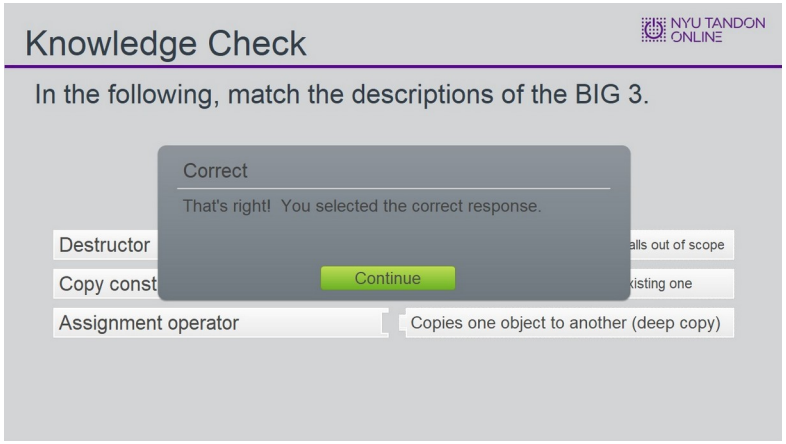
That's right! You selected the correct response.

Feedback when incorrect:

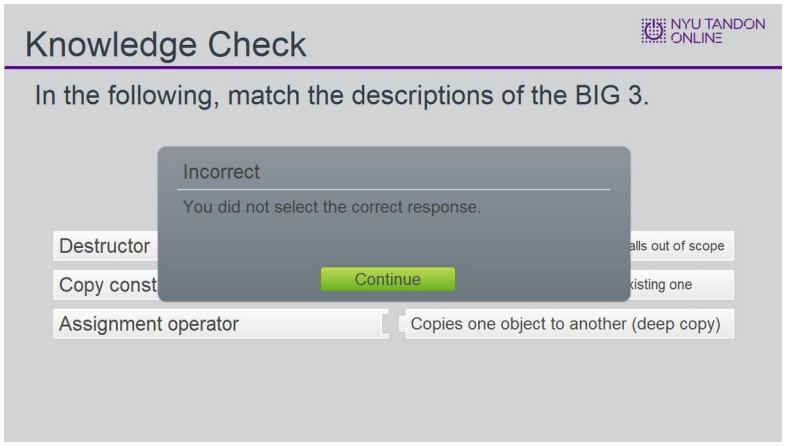
You did not select the correct response.

Notes:

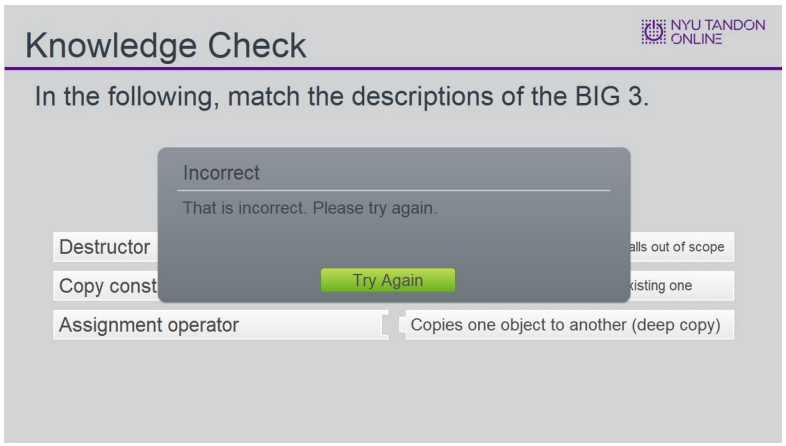
Correct (Slide Layer)



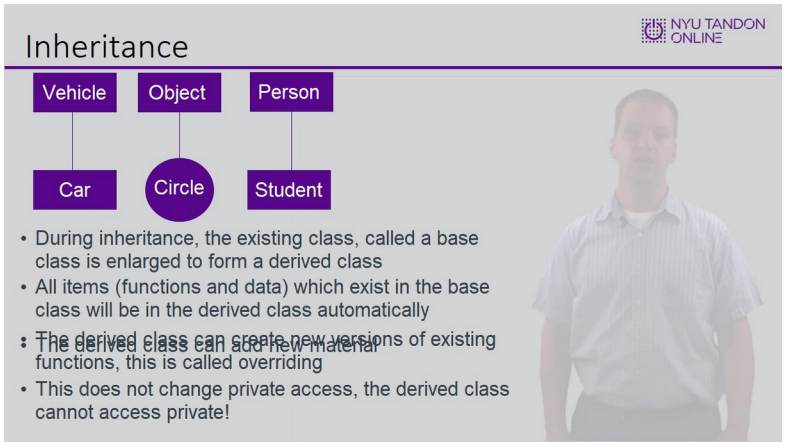
Incorrect (Slide Layer)



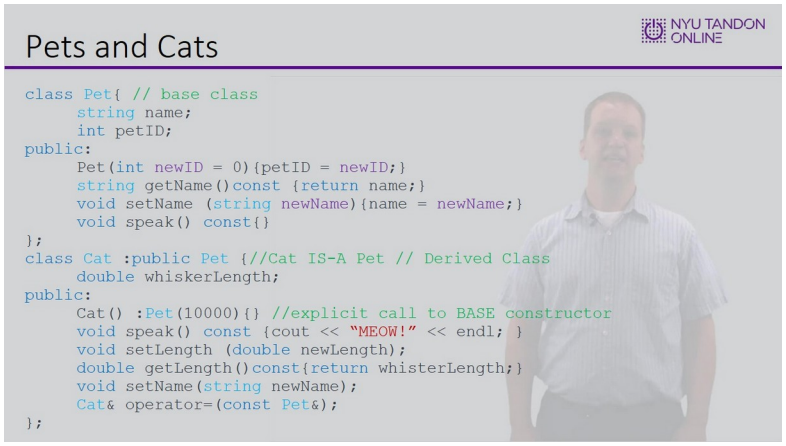
Try Again (Slide Layer)



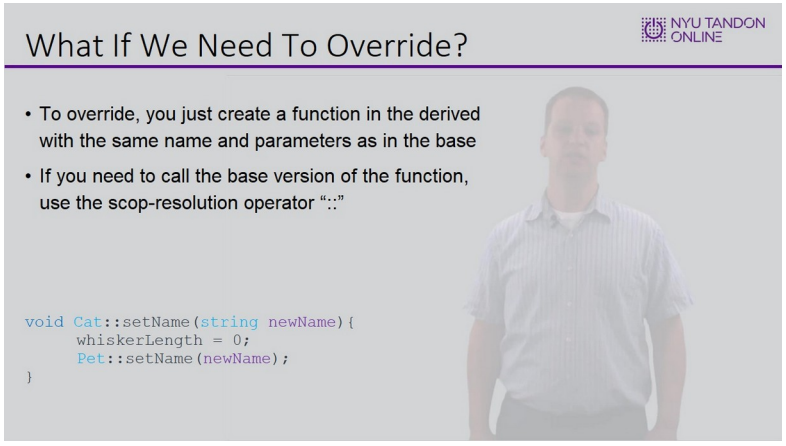
1.25 Inheritance



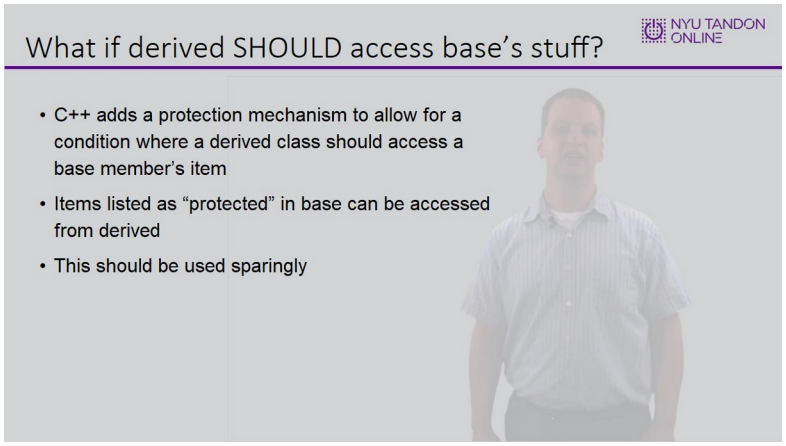
1.26 Pets and Cats



1.27 What if we need to override?

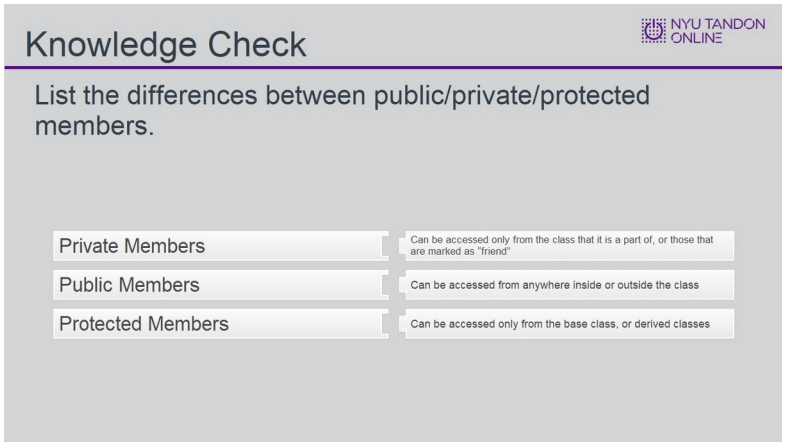


1.28 What if derived SHOULD access base's stuff?



1.29 Knowledge Check

(Matching Drag-and-Drop, 10 points, 3 attempts permitted)



Correct	Choice
Private Members	Can be accessed only from the class that it is a part of, or those that are marked as "friend"
Public Members	Can be accessed from anywhere inside or outside the class
Protected Members	Can be accessed only from the base class, or derived classes

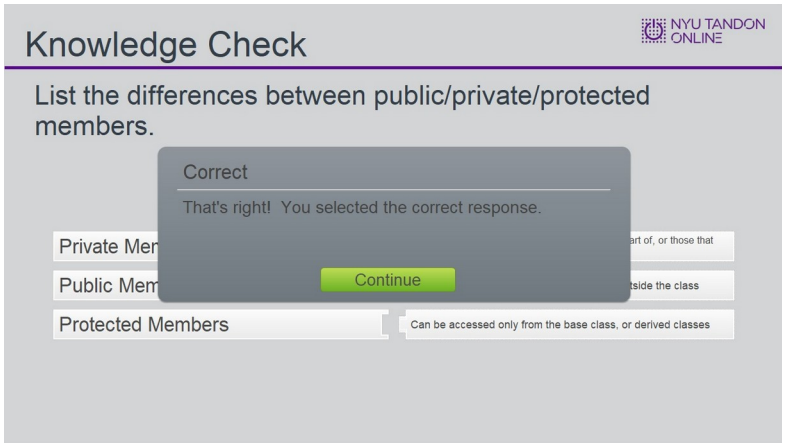
Feedback when correct:

That's right! You selected the correct response.

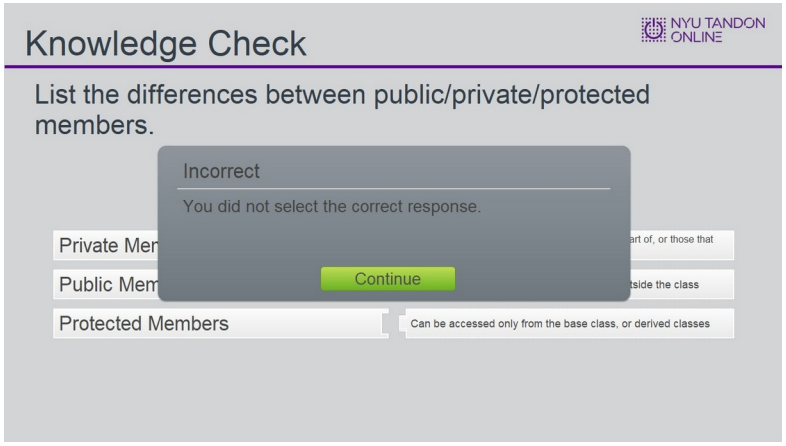
Feedback when incorrect:

You did not select the correct response.

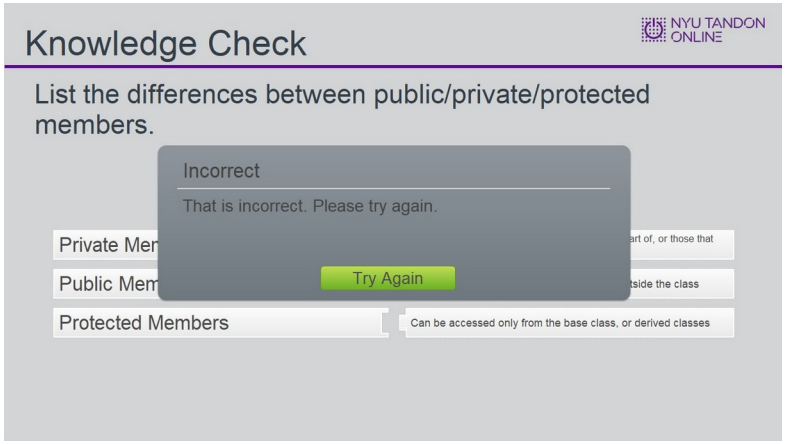
Correct (Slide Layer)



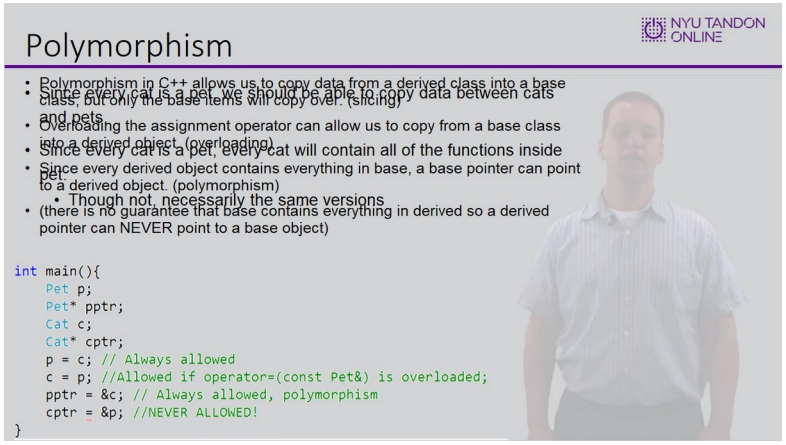
Incorrect (Slide Layer)



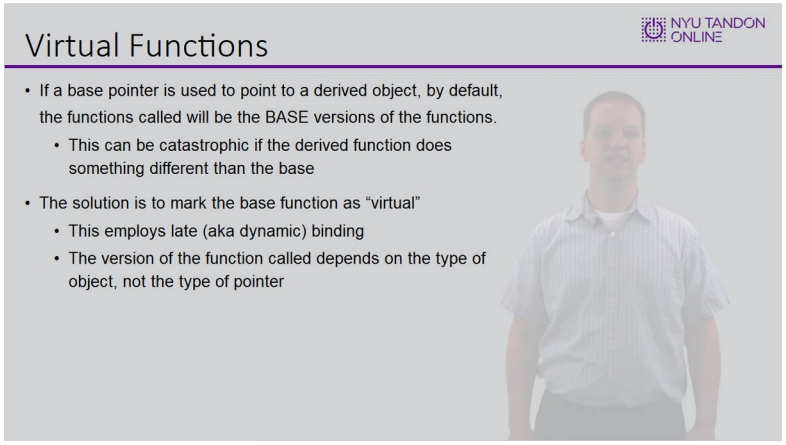
Try Again (Slide Layer)



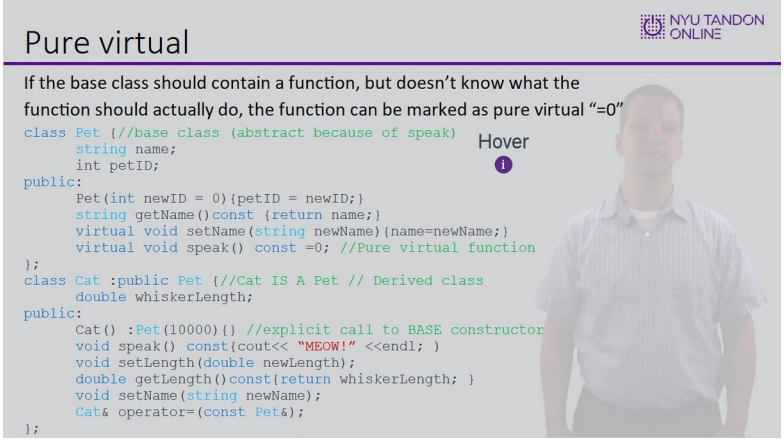
1.30 Polymorphism



1.31 Virtual Functions

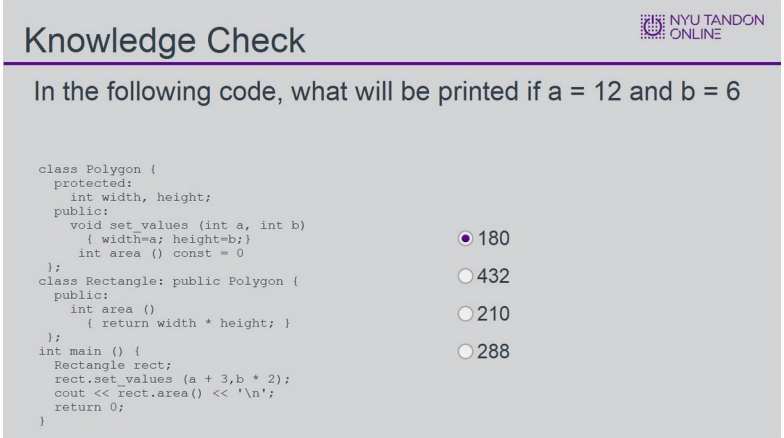


1.32 Pure virtual



1.33 Knowledge Check

(Multiple Choice, 10 points, 4 attempts permitted)



Correct	Choice
X	180
	432
	210
	288

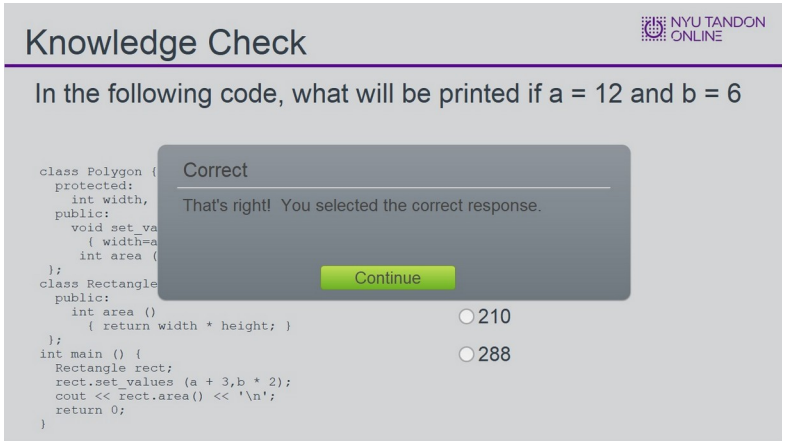
Feedback when correct:

That's right! You selected the correct response.

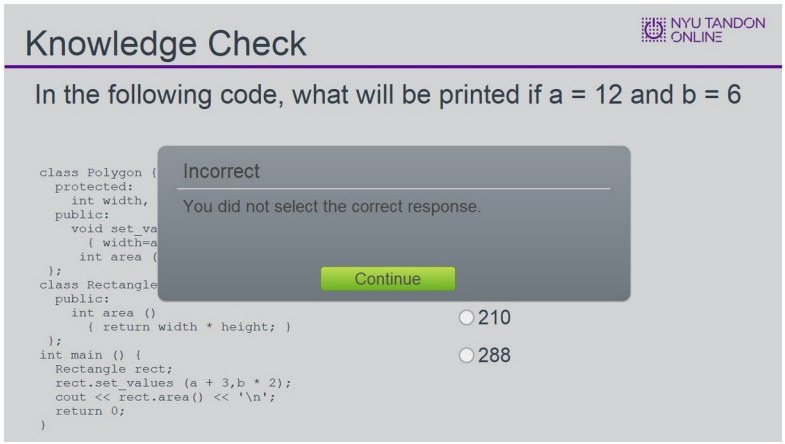
Feedback when incorrect:

You did not select the correct response.

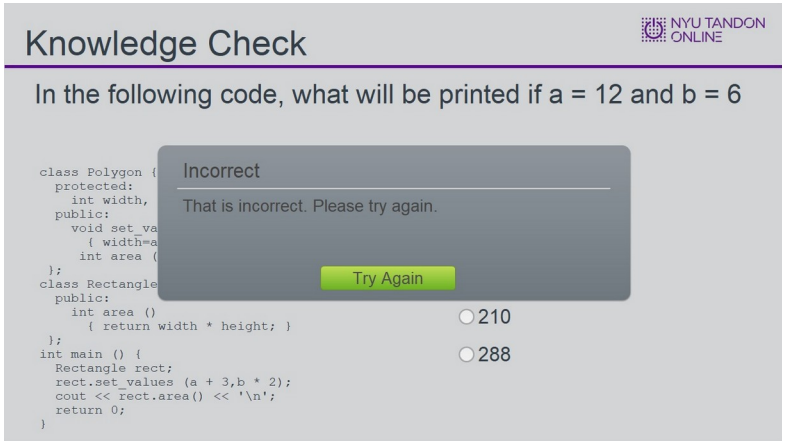
Correct (Slide Layer)



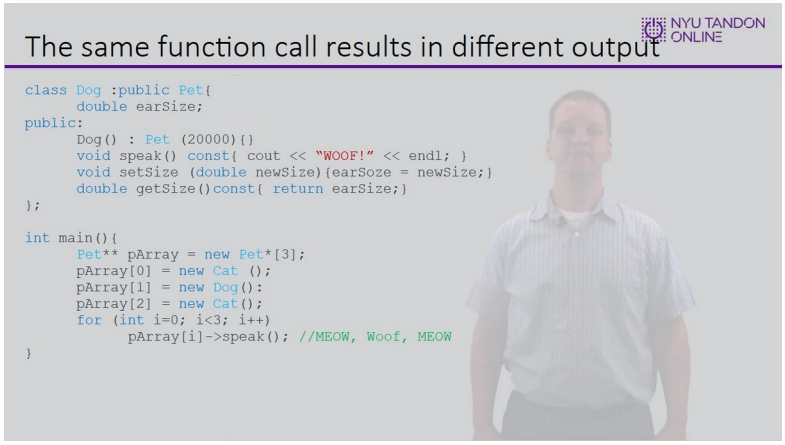
Incorrect (Slide Layer)



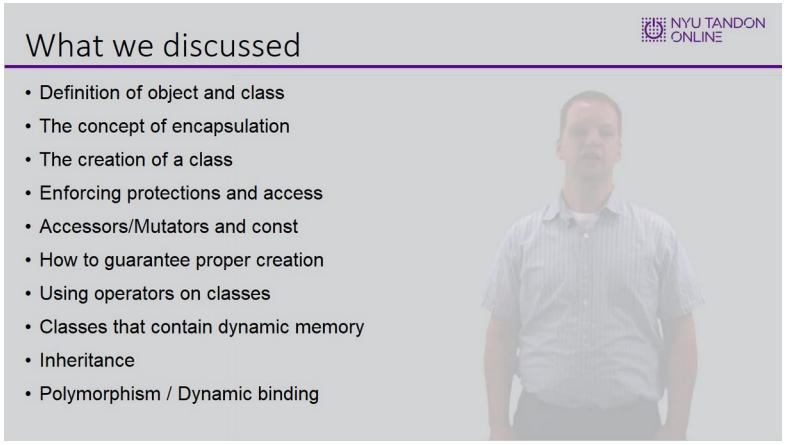
Try Again (Slide Layer)



1.34 The same function call results in different output

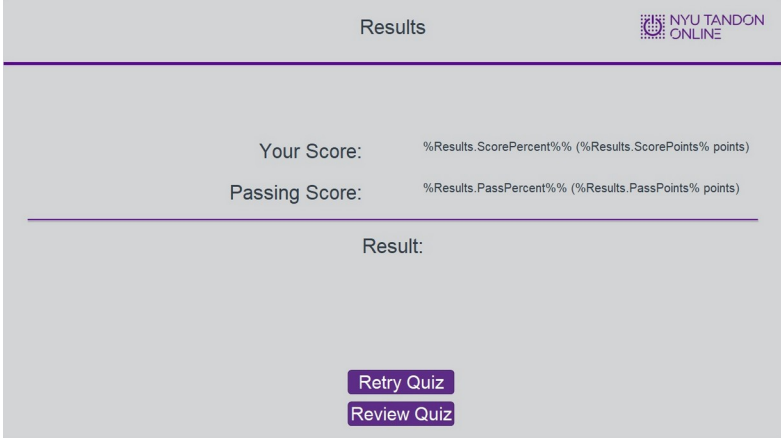


1.35 What we discussed



1.36 Results Slide

(Results Slide, 0 points, 1 attempt permitted)



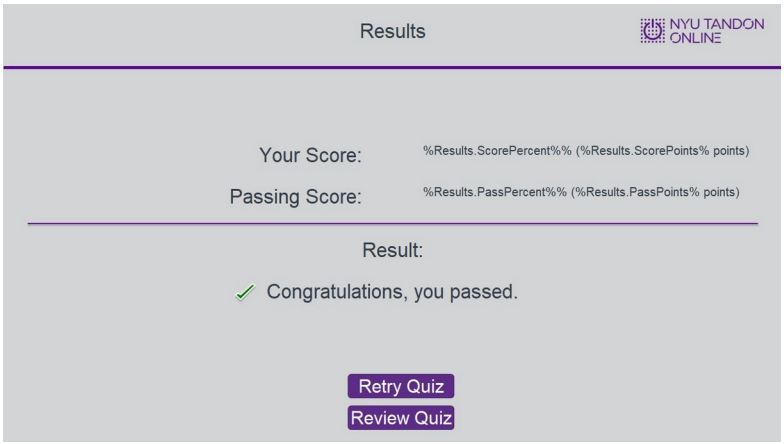
Results for
1.18 Knowledge Check
1.24 Knowledge Check
1.29 Knowledge Check
1.33 Knowledge Check

Result slide properties

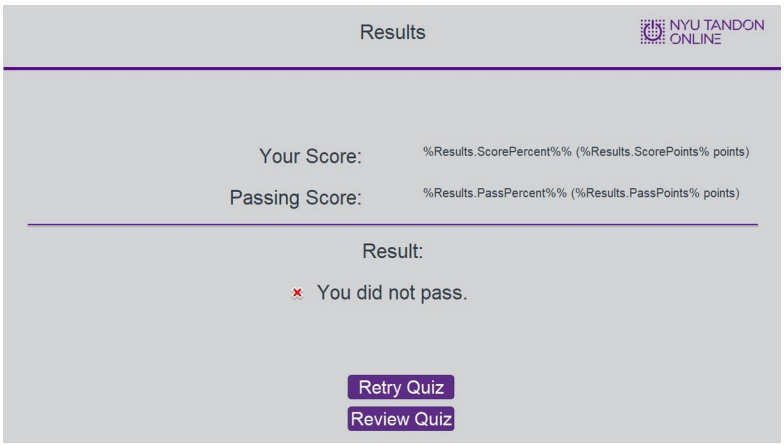
Passing Score	80%

Notes:

Success (Slide Layer)



Failure (Slide Layer)



1.37 End of Module