Module 4
Classes and Objects

Lecture
Using a Class: Constructor and Properties

Module 4 Learning Objectives

Bloom Level	Number	Name	Description	Course Learning Objectives
3: Apply	1	Use Provided Classes	Develop a console application that uses provided classes	Basic OO Concepts,Basic Programming Concepts
6: Create	2	Design New Class	Design a new class	Basic OO Concepts

Last time we learned the conceptual ideas behind classes and objects

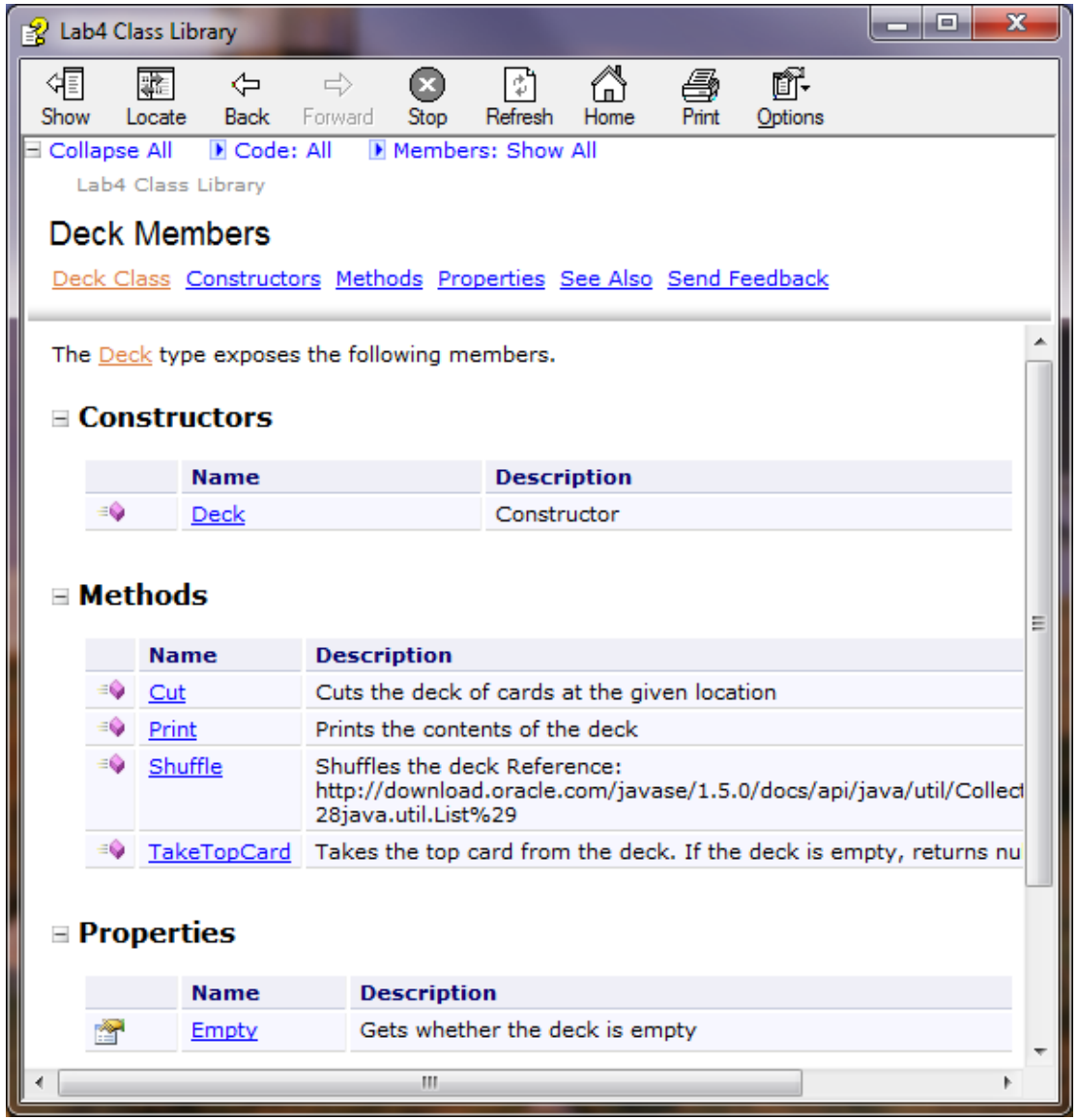
This time, we'll start using classes and objects in a C# program

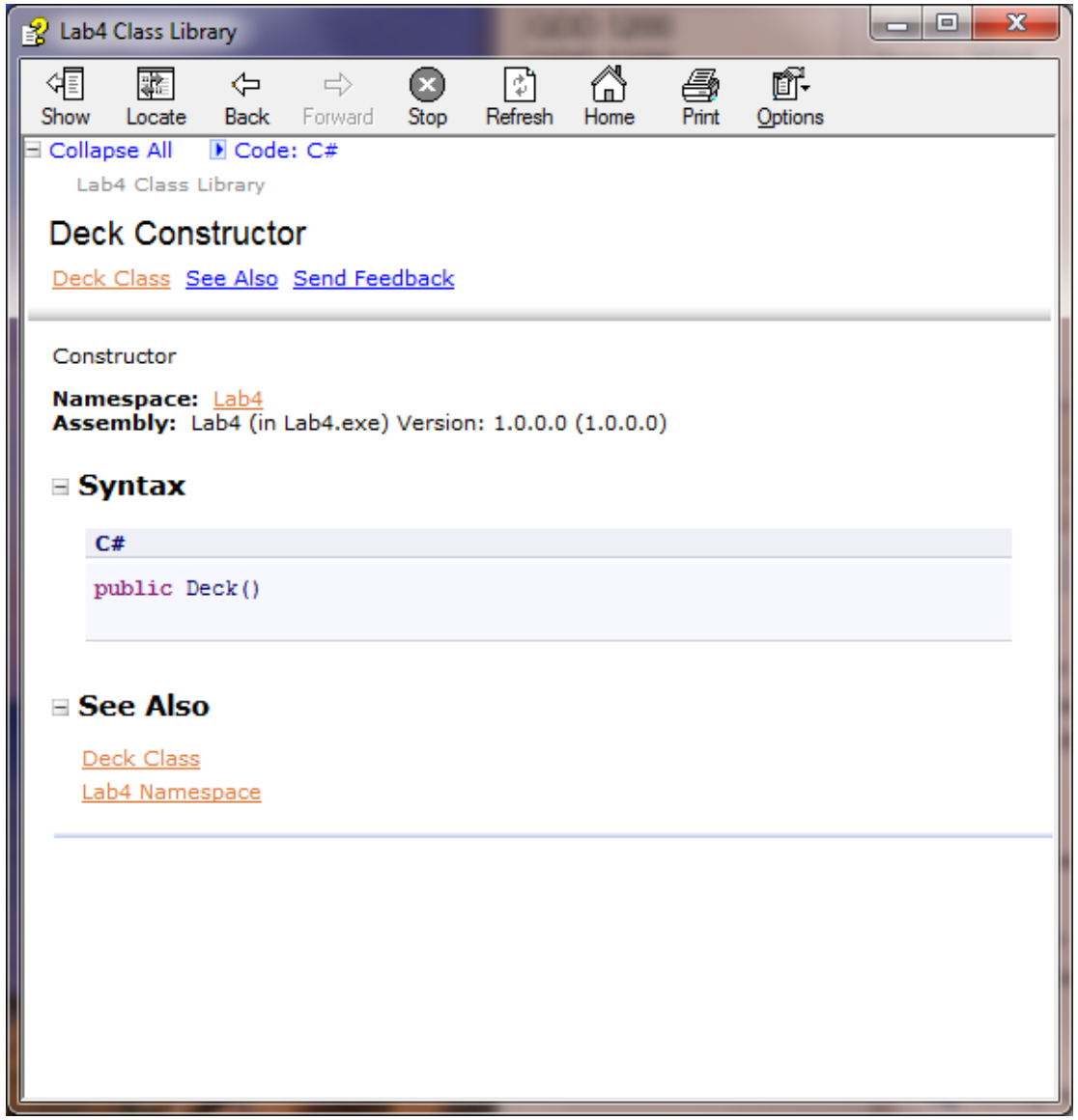
The first thing we need to know is how to instantiate an object so we can interact with that object

In-Lecture Quiz

To instantiate objects of a class, we use a

- A: wrench
- B: spell
- C: constructor
- D: superhero

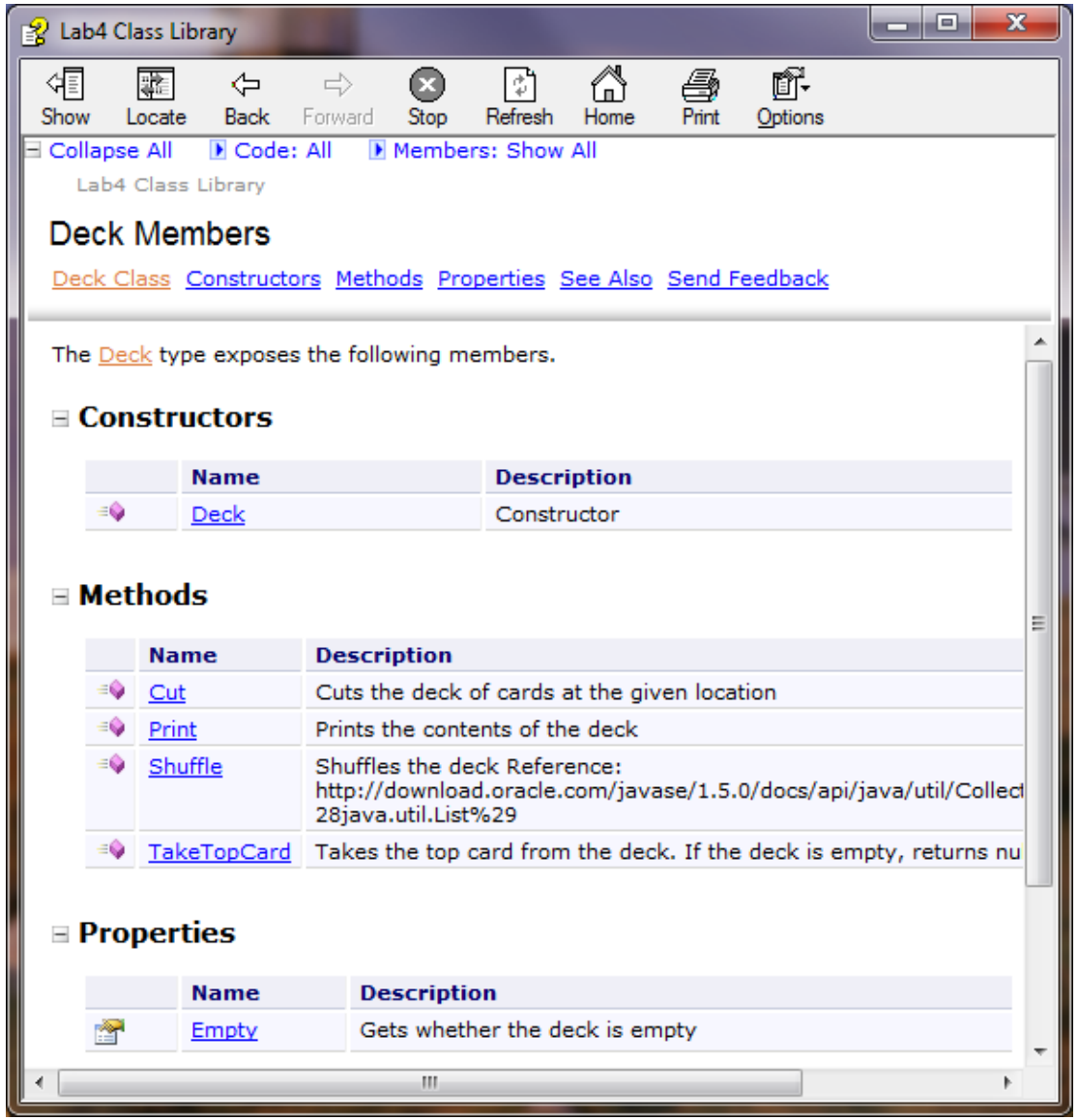

Lab4 Class Library
Show
Locate
Back
Forward
Stop
Refresh
Home
Print
Options
Collapse All
Code: All
Members: Show All
Lab4 Class Library
Deck Members
Deck Class
Constructors
Methods
Properties
See Also
Send Feedback
The Deck type exposes the following members.
Constructors
Name
Description
Deck
Constructor
Methods
Name
Description
Cut
Cuts the deck of cards at the given location
Print
Prints the contents of the deck
Shuffle
Shuffles the deck Reference: http://download.oracle.com/javase/1.5.0/docs/api/java/util/Collect 28java.util.List%29
TakeTopCard
Takes the top card from the deck. If the deck is empty, returns nu
Properties
Name
Description
Empty
Gets whether the deck is empty


Lab4 Class Library
Show
Locate
Back
Forward
Stop
Refresh
Home
Print
Options
Collapse All
Code: C#
Lab4 Class Library
Deck Constructor
Deck Class
See Also
Send Feedback
Constructor
Namespace: Lab4
Assembly: Lab4 (in Lab4.exe) Version: 1.0.0.0 (1.0.0.0)
Syntax
C#
public Deck()
See Also
Deck Class
Lab4 Namespace

In-Lecture Quiz

We get access to an object's state through

- A: real estate
- B: properties
- C: windows
- D: portals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Code: All
Members: Show All
Lab4 Class Library
Deck Members
Deck Class
Constructors
Methods
Properties
See Also
Send Feedback
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Name
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Print
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Shuffle
Shuffles the deck Reference: http://download.oracle.com/javase/1.5.0/docs/api/java/util/Collect 28java.util.List%29
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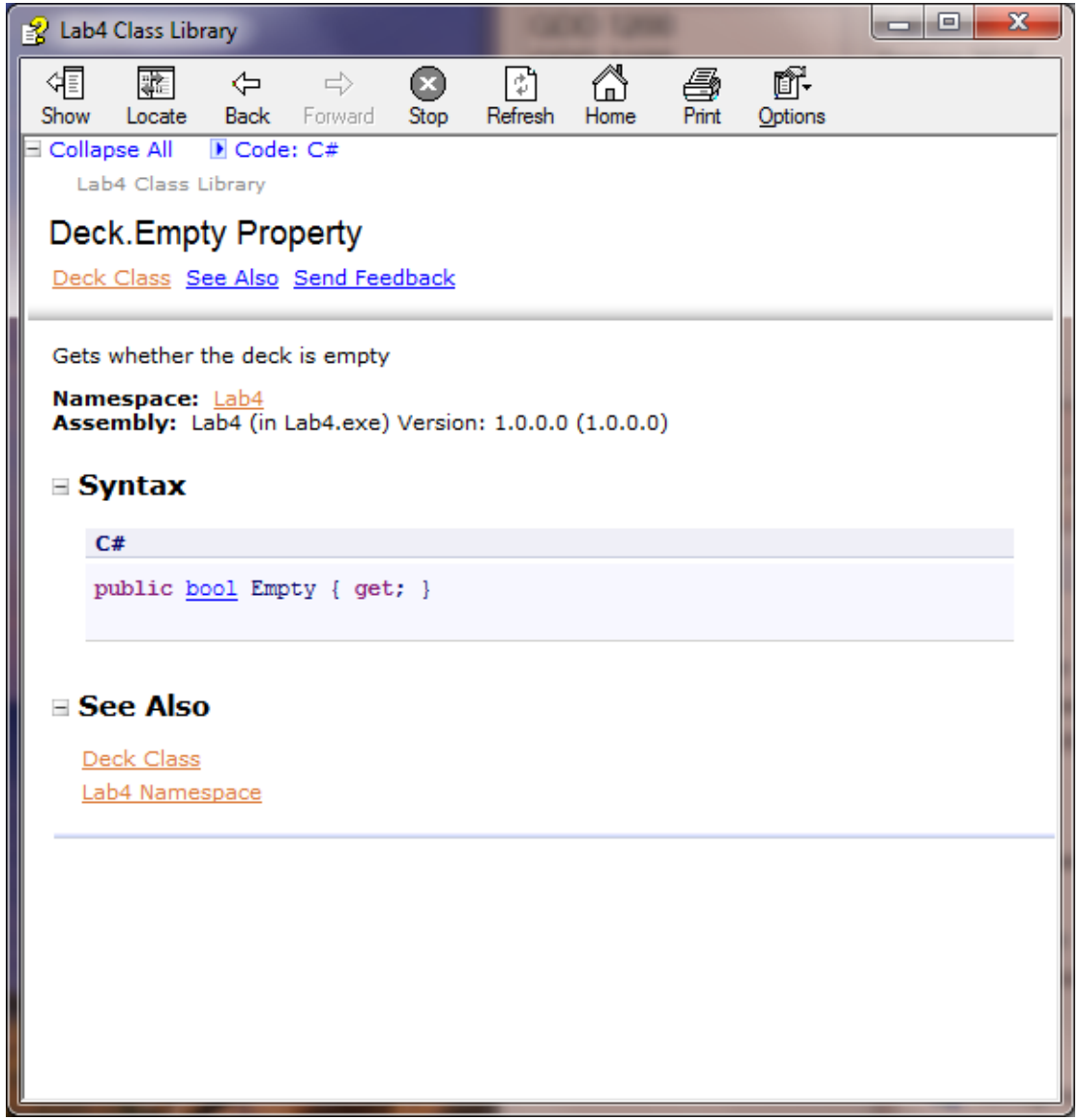
Lab4 Class Library
Show
Locate
Back
Forward
Stop
Refresh
Home
Print
Options
Collapse All
Code: C#
Lab4 Class Library
Deck.Empty Property
Deck Class
See Also
Send Feedback
Gets whether the deck is empty
Namespace: Lab4
Assembly: Lab4 (in Lab4.exe) Version: 1.0.0.0 (1.0.0.0)
Syntax
C#
public bool Empty { get; }
See Also
Deck Class
Lab4 Namespace

- Recap
  - Learned how to instantiate objects using a constructor
  - Learned how to access a property
- Next Time
  - We'll use methods to access object behavior