

REVIEW LESSON

MTA Course: 10754 Microsoft .NET Fundamentals

Lesson name: Microsoft .NET Fundamentals 6.1

Topic: Understand language interoperability (One 50-minute class period)

File name: 10754_Msft.NET_RL_6.1

Lesson Objective

6.1: Understand language interoperability. This objective may include but is not limited to: calling code written in one language from another language, understanding .NET language parity.

Preparation Details

Prerequisite student experiences and knowledge:

This MTA Certification Exam Review lesson is written for students who have learned about application programming with the Microsoft® .NET Framework. Students who do not have the prerequisite knowledge and experiences cited in the objective will find additional learning opportunities using resources such as those listed in the “Resources” section at the end of this review lesson.

Instructor preparation activities:

- None

Resources, software, and additional files needed for this lesson:

- 10754_Msft.NET_PPT_6.1

Teaching Guide

Essential Vocabulary

language interoperability—the ability of code to interact with code that is written by using a different programming language.

language parity—equivalence between the feature sets of different languages.

Common Language Runtime (CLR)—the run-time environment that executes managed .NET code.

Common Language Specification (CLS)—a fundamental set of language features and rules for how those features are used. CLS compliance ensures that an assembly can be used by developers working in a different .NET language.

Lesson Sequence

Activating prior knowledge/lesson staging (10 minutes):

1. Guide students through the language translation activity described in the Microsoft PowerPoint® presentation.

Lesson activity (30 minutes):

1. Use the presentation to review the fundamentals of language interoperability in the .NET Framework.

Assessment/lesson reflection (10 minutes):

1. Give the students about 5 minutes to complete the “Ticket Out the Door” activity. A “Ticket Out the Door” activity is one in which students must each respond to the questions and turn in their responses before leaving. After class, you can look over their responses to see if the concept needs further review, or if individual students need help with the lesson.
2. As time allows, call on students to share their responses.

Resources:

- **MSDN®: Cross-Language Interoperability**
<http://msdn.microsoft.com/en-us/library/a2c7tshk.aspx>
- **MSDN: Common Language Specification**
<http://msdn.microsoft.com/en-us/library/12a7a7h3.aspx>
- **MSDN: Cross-Language Interoperability**
<http://msdn.microsoft.com/en-us/library/730f1wy3.aspx>
- **MSDN: Common Language Runtime Overview**
<http://msdn.microsoft.com/en-us/library/ddk909ch.aspx>
<http://msdn.microsoft.com/en-us/library/25zf0ze8.aspx>