

Contents

ABOUT THIS COURSE.....	ABOUT-1
<i>Course audience.....</i>	<i>About-2</i>
<i>Course prerequisites</i>	<i>About-3</i>
<i>Student goals.....</i>	<i>About-4</i>
<i>Introduce yourself.....</i>	<i>About-5</i>
<i>Course goals</i>	<i>About-6</i>
<i>Module overview.....</i>	<i>About-7</i>
LESSON 1: INTRODUCTION TO OBJECT-ORIENTED PROGRAMMING	1-1
LESSON INTRODUCTION	1-2
<i>Learning objectives</i>	<i>1-3</i>
<i>Prerequisites</i>	<i>1-4</i>
OBJECT-ORIENTED PROGRAMMING	1-5
<i>Inheritance</i>	<i>1-6</i>
<i>Encapsulation.....</i>	<i>1-7</i>
<i>Interfaces.....</i>	<i>1-8</i>
<i>Polymorphism</i>	<i>1-9</i>
<i>Guided Exercise 1.1: Setting up your application development environment.....</i>	<i>1-10</i>
LESSON SUMMARY	1-11
LESSON 2: GETTING STARTED WITH ABL CLASSES.....	2-1
LESSON INTRODUCTION	2-2
<i>Learning objectives</i>	<i>2-3</i>
<i>Prerequisites</i>	<i>2-4</i>
DEFINING ABL CLASSES.....	2-5
<i>Determining the package name.....</i>	<i>2-6</i>
<i>Determining the class name</i>	<i>2-7</i>
<i>Using the New ABL Class wizard</i>	<i>2-8</i>
<i>Example: Newly defined class Emp</i>	<i>2-9</i>
<i>Parts of an ABL class definition.....</i>	<i>2-10</i>
<i>Data members of a class</i>	<i>2-11</i>
<i>Defining a data member as a variable</i>	<i>2-12</i>
<i>Class properties</i>	<i>2-13</i>
<i>Class constructors.....</i>	<i>2-18</i>
<i>Class methods</i>	<i>2-20</i>
<i>Class destructor</i>	<i>2-22</i>
<i>Check your understanding – Question 1</i>	<i>2-24</i>
<i>Check your understanding – Question 2.....</i>	<i>2-25</i>
<i>Try It 2.1: Defining classes</i>	<i>2-26</i>
ACCESSING DATA MEMBERS AND CALLING METHODS WITHIN A CLASS	2-27
<i>Accessing a data member within a class.....</i>	<i>2-28</i>
<i>Accessing a class method within a class</i>	<i>2-30</i>
ACCESSING DATA MEMBERS AND CALLING METHODS IN OTHER CLASSES.....	2-32
<i>Writing ABL using statements</i>	<i>2-33</i>
<i>Defining a variable or property of a class type.....</i>	<i>2-35</i>
<i>Creating an instance of another class.....</i>	<i>2-36</i>
<i>Accessing a public data member of a class instance.....</i>	<i>2-38</i>
<i>Calling a public method of a class instance.....</i>	<i>2-39</i>
<i>Accessing a class instance dynamically.....</i>	<i>2-40</i>

Deleting an instance of a class.....	2-42
Check your understanding – Question 3.....	2-43
Check your understanding – Question 4.....	2-44
Try It 2.2: Working with classes.....	2-45
TESTING CLASSES	2-46
Setting up the class test.....	2-47
Testing the class.....	2-48
Ending the test.....	2-50
TRY IT 2.3: TESTING CLASSES.....	2-51
LESSON SUMMARY.....	2-52
ANSWERS TO CHECK YOUR UNDERSTANDING QUESTIONS	2-53
LESSON 3: USING ABL CLASSES IN AN APPLICATION.....	3-1
LESSON INTRODUCTION	3-2
Learning objectives.....	3-3
Prerequisites	3-4
USING INHERITANCE.....	3-5
Procedure: Using the New ABL Class wizard to create a derived class.....	3-6
Example: TeamMember class	3-7
Try It 3.1: Using inheritance.....	3-8
USING INTERFACE CLASSES	3-9
Defining an interface class.....	3-10
Procedure: Using the New ABL Class wizard to create a class that uses an interface class	3-11
Defining a class that uses an interface class.....	3-12
Check your understanding – Question 1	3-14
Try It 3.2: Using an interface class.....	3-15
USING SINGLETONS.....	3-16
Defining a static data member	3-17
Defining a static constructor.....	3-18
CREATING CLASS INSTANCES DYNAMICALLY	3-19
Check your understanding – Question 2.....	3-21
TRY IT 3.3: USING A SINGLETON AND CREATING CLASSES DYNAMICALLY	3-22
USING EVENTS	3-23
Publishing class events	3-24
Subscribing and unsubscribing event handlers.....	3-25
Try It 3.4: Using events.....	3-26
LESSON SUMMARY.....	3-27
ANSWERS TO CHECK YOUR UNDERSTANDING QUESTIONS	3-28
COURSE SUMMARY	SUMMARY-1
OVERVIEW.....	SUMMARY-2
Review of course learning objectives.....	Summary-3
Progress OpenEdge resources.....	Summary-4
Progress technical support	Summary-5