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YOUR COURSE, YOUR WAY - MORE EFFECTIVE IT TRAINING

# Programming for the Absolute Beginner with .NET

**Duration: 5 days** 

#### **Overview:**

Learning to program is one of the most rewarding experiences you can have in the world of computers! Instead of just using programs written by others, you can start to write your own programs.

Many people realize that the easiest way to learn is by seeing and doing. Aspect Training's Programming for the Absolute Beginner with .NET takes this easy to follow approach, with lots of opportunity to practice, plenty of examples to verify your work, easy to follow explanations, and plenty of sample code to examine.

In no time at all, you can start writing simple programs of your own design, using one of the most vibrant and popular languages of today, C#, or VB.

## **Prerequisites:**

There are no pre-requisites for this course

## **Topics:**

## 1 - Your First Program

Course Overview

What is .NET

The Programming Environment

Basic .NET coding

Running a Program in Visual Studio

#### 2 - Variables

What is a variable

Naming conventions

Data Types

Numeric Data Types

Variables and Math

Obtaining User Input

# 3 - Decisions

Boolean Login and Binary Math
Hexadecimal
5 - Loops
Safe Loops
Unsafe Loops
Controlling Loop Flow
Loops within Loops
6 - Running Programs
Comments
Building Solutions
Running the Application
Debugging
7 - Arrays
What is an Array
The use of Arrays
Multidimensional Arrays
8 - String
An overview of Strings
Escape Sequences
Concatenation
String Data Types
String Manipulation
9 - More with Variables
Data Conversion
Overflow and Underflow
Variable Lifetime (Scoping)

What if?

Time to switch

4 - More Math

Order of Precedence

One Plus One

Providing and Alternative

Checking Multiple Possibilities

Structures and Enumerations	
10 - Introduction to Methods	
Parameters	
Return Value	
11 - Anatomy of a .NET Program	
Namespaces	
Classes	
Instantiating an Object of a Class	
Static vs Non-Static	
Adding Additional Files to a Project	
12 - Collections	
ArrayList	
Boxing and Unboxing	
Generic List	
Hash Tables	
13 - More on Methods	
Overloading	
Passing by Value vs by Reference	
The Out Keyword	
Parameter Arrays	
14 - Classes	
Constructor	
Constructor and Structures	
Properties	
Class Methods	
15 - Handling Exceptions	
Try your code	
Catch an Exception	
Catching Specific Exceptions	
Finally	
Throwing Exceptions	