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Explain the lesson coverage

Lesson Objectives

- What is VBScript?
- Understand purpose of VBScript
- Advantages and disadvantages
- Sample Code
- Basics of VBScript



Additional notes for instructor

Introduction to VBScript



- What is VB Script
- VBScript in Client Side and Server Side
- Features of VBScript
- Advantages of VBScript
- Disadvantages of VBScript
- A Sample Code
- Basics of VBScript
 - Where to Insert Scripts in an HTML page?
 - Formatting

Add the notes here.

What is VBScript?



- VBScript is short for Visual Basic Script.
- Visual Basic, as you may know, is a powerful programming language developed by Microsoft. VBScript is a scripting language, a subset of Visual Basic, by Microsoft, intended to be used with Microsoft products.
- VBScript is an interpreted programming language that can be embedded into an HTML web page or used in server side scripting.

Interpreted programming languages tend to be simpler to program but slower to execute in general. Each time a program is run, it has to be interpreted (interrogated) line by line, based on the flow of execution (you will see later how branches and loops affect the flow of execution).

Compiled programming languages have a more complex syntax, and require more strict programming practices. With a compiled programming language, you first write the source code, then you feed it to a compiler (a special computer program), which produces an executable binary program. On the Windows platform, the output of the compiler usually ends in the ".exe" file extension. The program that comes out of the compilation process tends to be platform (operating system) specific. The key benefit for the programmer is that no other programmer can look at the source code once it is compiled. The other key factor is that the language used to write the source code becomes irrelevant once it has been compiled.

Visual Basic is a compiled language, whereas VBScript is an interpreted language

VBScript in Client Side and Server Side



- Client Side Scripting
- VBScript code is executed/interpreted when an event is triggered. When the code
 is executed it is interpreted one line at a time. There are a number of events that
 will trigger the execution of a VBScript, like clicking on a form button, or the
 completion of a web page loading.
- Server Side Scripting
 - Server-side scripts are completely processed by the servers instead of clients.
 When clients request a page containing server-side scripts, the applicable server processes the scripts and returns an HTML page to the client
- VBScript is the default scripting language for ASP(Application Service Provider).
 When the web server loads an .asp page from the disk into memory, it
 automatically knows to interpret the code in this document. Once the code has
 been interpreted, the resulting HTML page is sent to the browser (client) making
 the request.

Features of VBScript



- VBScript is a lightweight scripting language, which has a lightning fast interpreter.
- VBScript, for the most part, is case insensitive. It has a very simple syntax, easy to learn and to implement.
- Unlike C++ or Java, VBScript is an object-based scripting language and NOT an Object-Oriented Programming language.
- It uses Component Object Model (COM) in order to access the elements of the environment in which it is executing.
- Successful execution of VBScript can happen only if it is executed in Host Environment such as Internet Explorer (IE) ,Internet Information Services (IIS) and Windows Scripting Host (WSH).

VBScript was introduced by Microsoft way back in 1996 and the first version was 1.0. The Current Stable version of VBScript is 5.8, which is available as part of IE8 or Windows 7

Advantages of VBScript



- VBScript has a good platform coverage. It can be run in many environments. Currently there are VBScript script engines for the 32-bit Windows API, 16-bit Windows API, and the Macintosh.
- VBScript is used as a scripting language in one of the popular Automation testing tools – Quick Test Professional abbreviated as QTP.
- VBScript is used for Client side scripting in Microsoft Internet Explorer.
- The ability to implement VBScript in our own applications. The VBScript source implementation can be licensed from Microsoft, completely free of charge, for use in any products and applications.

Disadvantages of VBScript



- VBScript is supported only by IE Browsers. Other browsers such as Chrome, Firefox DONOT Support VBScript. Hence, JavaScript is preferred over VBScript.
- VBScript has a Limited command line support.
- Since there is no development environment available by default, debugging is difficult.

The current version of VBScript is 5.8, and with the recent development of .NET framework, Microsoft has decided to provide future support of VBScript within ASP.NET for web development.

Hence, there will NOT be any more new versions of VBScript engine but the entire defect fixes and security issues are being addressed by the Microsoft sustaining Engineering Team.

However, VBScript engine would be shipped as part of all Microsoft Windows and IIS by default

We write the VBScript code in an HTML file and save the same with .htm or .html extension.

In the above example, we called a function *document.write*, which writes a string into the HTML document. This function can be used to write text, HTML or both.

So, above code will display following result:

Hello World!

Basics of VBScript - Where to Insert Scripts in an HTML page?



- Where to Insert Scripts in an HTML page?
- We have the liberty to insert Script code, in an HTML page, at any / all of the following locations:
 - Between the header tags i.e. <head> and </head>.
 - Within the HTML document's body i.e. between the <body> and </body>
 - In both header and the body
- You can have as many scripts on a webpage as you want, this includes both scripts in the head section and the body section of a webpage.

Example for Script Within the header tags:

A script placed in the head section of a webpage will be executed when it is called, or when certain events are triggered such as the clicking of a button or when a form is submitted

Example for Script Within the body tags:

A script placed in the body section of a webpage will be executed when the page loads. A script placed in the body section of a webpage generates the content of the page.

Basics of VBScript-Formatting



- White space ,tabs and newlines
 - VBScript ignores spaces, tabs and newlines that appear within VBScript programs.
- Single Line Syntax
 - Colons are used when two or more lines of VBScript ought to be written in a single line.
 - · Hence, in VBScript, Colons act as a line separator .
- Multiple Line Syntax
 - If a statement must span more than one physical line, place an underscore at the end of the line. The underscore acts as a line continuation character.
- Comment statements
 - In VBScript, comment statements are also called remark statements. There are two ways to indicate a remark statement.
 - The most common is to use a single quotation mark (').
 - You can also use the Rem keyword.

Examples:

1. Single Line Syntax

```
<script language="vbscript" type="text/vbscript">
var1 = 10 : var2 = 20
</script>
```

2. Multiple Line Syntax

```
<script language="vbscript" type="text/vbscript">
var1 = 10
var2 = 20
Sum = var1 + var2
document.write("The Sum of two numbers"&_ "var1 and var2 is
" & Sum)
</script>
```

3. Comments by use a single quotation mark

<script type="text/vbscript">
'this is a single line comment
'this is another single line comment
document.write("Here is some text")
</script>

4. Comments By Using the Rem keyword:

Sub cmdButton1_Click
Rem Comments describing the event procedure should go here
Rem and probably here too
End Sub

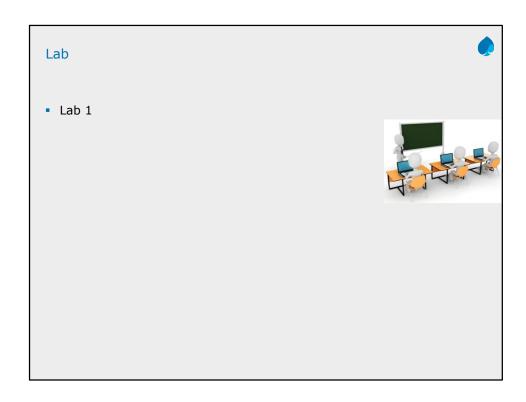
Instru

Demo

First VBScript program



Additional notes for instructor



Additional notes for instructor

Lesson Summary



- VBScript is an interpreted programming language that can be embedded into an HTML web page or used in server side scripting.
- Advantages and disadvantages of scripting.
- Formatting and basics in VBScript.



- 1. <!--->
- 2. False
- 3. IE

Review - Questions



Question 1: Comments in VB Script can be created using

- Option 1: <!-- -->
- Option 2: "
- Option 3: '
- Option 4: rem



Question 2: We can insert VBScript tags only in the header section of html page. State True or False

Question 3: Only _____browser supports VBScript.