

Patrician College of Arts and Science

Department of Computer Science

Web Technology

SAE6B

Even Semester

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Introduction to VBScript

- VBScript is a Microsoft scripting language.
- When a VBScript is inserted into a HTML document, the Internet browser will read the HTML and interpret the VBScript.
- There are 3 environments where VB Script can run - IIS (Internet Information Server) , WSH (Windows Script Host), IE (Internet Explorer)
- To insert a script in an HTML document, the `<script>` tag is used
- Where to add - Head / Body section / both

VBScript Data Types

VBScript has only one data type called a **Variant**

- Empty, Null, Boolean, Byte, Integer, Currency, Long, Single, Double, Date, String, Object, Error.

What is a Variable? A variable is a "container" for information we want to store. A variable's value can change during the script. We can refer to a variable by name to see its value or to change its value. In VBScript, all variables are of type ***variant***, that can store different types of data.

Rules for Variable Names:

- Must begin with a letter
- Cannot contain a period (.)
- Cannot exceed 255 characters

VBScript Constants

- Constant is a named memory location used to hold a value that cannot be changed during the script execution. Constants are declared the same way the variables are declared.
- Declaring Constants

```
[Public | Private] Const Constant_Name = Value
```

VBScript Operators

- VBScript language supports following types of operators:
- Arithmetic / Mathematical Operators
- Comparison Operators
- Logical (or Relational) Operators
- Concatenation Operators

VBScript Procedures

- In VBScript there are two kinds of procedures; the Sub procedure and Function procedure.

1. Sub Procedures:

- Sub Procedures are similar to functions but there are few differences.
- Sub procedures DO NOT Return a value while functions may or may not return a value.
- Sub procedures can be called without call keyword.
- Sub procedures are always enclosed within **Sub** and **End Sub** statements.

2. Function Procedures:

The function procedure is used if we want to return a value.

- It is a group of reusable code which can be called anywhere in the program. This eliminates the need of writing same code over and over again and can divide a big program into a number of small and manageable functions.
- It is a series of VBScript statements enclosed by the Function and End Function statements.
- It can take arguments such as constants, variables, or expressions. The return type of a Function is always a Variant.

Conditional Statements

The flow of the script can be controlled with conditional statements and looping statements. Using conditional statements, we can write VBScript code that makes decisions and repeats actions. The following conditional statements are available in VBScript:

- **if statement** - This statement is used if we want to execute a set of code when a condition is true
- **if...then...else statement** - This statement is used if we want to select one of two sets of lines to execute
- **if...then...elseif statement** - This statement is used if we want to select one of many sets of lines to execute
- **select case statement** - This statement is used if we want to select one of many sets of lines to execute

Looping Statements

- If we want to allow the block of code to execute a number of times, we can use looping statements in the code to do this.
1. **For...Next statement** - runs statements a specified number of times.
 2. **For Each...Next statement** - runs statements for each item in a collection or each element of an array
 3. **Do...Loop statement** - loops while or until a condition is true
 4. **While...Wend statement**

VBScript Dictionary Object

- The **Dictionary** object stores data as key, item pairs.

A dictionary is a general-purpose data structure that looks like a linked list but acts like a "super array." Like VBScript arrays, dictionaries store data and make that data available through one variable.

- A dictionary has additional methods to add new items and check for existing items.
- We don't need to call ReDim to extend the dictionary's size.
- When we delete a particular item from a dictionary, all the subsequent items automatically shift up.
- We use keys to identify dictionary items. Keys can be any data subtype, except an array or dictionary.
- A dictionary can't be multidimensional.

VBScript Dictionary Object

- A dictionary is a COM object (called the Dictionary object) that is available through the Microsoft Scripting Runtime library.
- To create a Dictionary object in VBScript code, we use the CreateObject function with the programmatic identifier (ProgID) of Scripting.Dictionary:

```
Dim dict
```

```
Set dict = CreateObject ("Scripting.Dictionary")
```

Methods of Dictionary Object

1) Add Method: Adds a key and item pair to a Dictionary object.

Syntax: VBScript Dictionary Object Add Method
Object.Add key, item

2) Object Exists Method: Returns True if a specified key exists in the Dictionary object, False if it does not.

Syntax:

object.Exists(key)

3) Items Method: Returns an array containing all the items in a Dictionary object.

Syntax: *object.Items*

Methods of Dictionary Object

4) Keys Method: Returns an array containing all existing keys in a Dictionary object.

Syntax: *object.Keys*

5) *Remove Method*: Removes a key, item pair from a Dictionary object.

Syntax: *object.Remove(key)*

6) *RemoveAll Method*:

The RemoveAll method removes all key, item pairs from a Dictionary object.

Syntax: *object.RemoveAll*

a = d.RemoveAll 'Clear the dictionary



Thank you

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