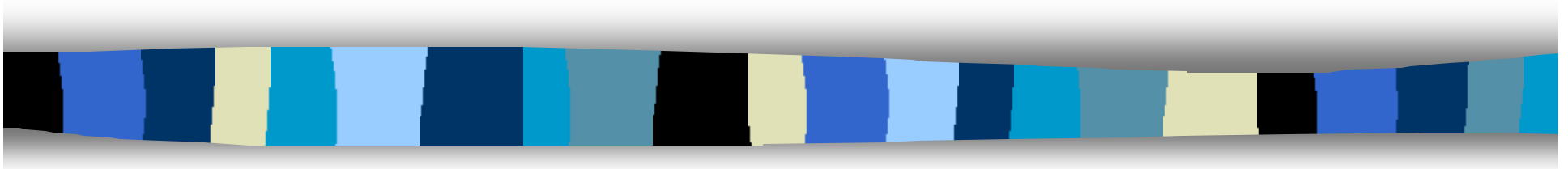


Introduction to VBScript





What is VBScript?

- Scripting Language
- Browser Dependent
- Browser Specific
 - Internet Explorer Only
 - CGWEB use only



Objective

By the end of this class you will be able to write event procedures that use variables and manipulate form data.



What You Will Learn...

- Creating and using variables
- Writing basic procedures
- Interpreting form data
- Using conditional statements



Objects

- Objects are elements of a web page that can be manipulated using a specified set of behaviors.



Properties

- Properties are like adjectives that describe objects or elements on a web page.



Methods

- Methods are procedures or functions that acts on an object.



Variables

- Variables are containers that store something



Operators

- Operators are symbols that when applied to data (or variables) cause the computer to perform an operation on the data



Statements

- Statements are instructions that tell VBScript how to execute methods or how to evaluate data and variables.



Procedures

- Procedures are groups of statements that are called on to perform a specific task.



Events

- Events are a type of procedure that are called automatically by user interaction



Scripting Basics

- Where scripts go
- Creating variables
- Writing basic procedures
- Using basic forms



Inserting Scripts in Web Pages

- Location in Page - <head>
- Script Tags

<script language="VBScript">

text of script

</script>



Writing Basic Procedures

- Functions
- Subroutines



Subroutines

- Defining Subroutines

```
sub myroutine  
  some statements  
end sub
```

- Calling Subroutines

```
Call myroutine
```

- Naming



Event Procedures

- Defining

```
sub mybutton_OnClick()
```

```
some statements
```

```
end sub
```

- Naming

```
mybutton_OnClick()
```



Exercise –

Creating the Subroutine



Examining the Code

```
<html>
<head>
<title>New Page </title>
<script language="vbscript">
sub mysubmit_OnClick()
    MsgBox "This is an Alert Box"
End Sub
</script>
</head>
<body><p>
<input type="button" name="mysubmit" value="Click Me">
    </p>
</body>
</html>
```



Review

- Where do scripts go in a webpage?
 - Usually the head, but can go anywhere
- What is the first thing you do to start a script?
 - `<script language="VBScript">`



Review

- How do you start writing a subroutine?
 - Sub *myroutine*
- What is the difference between a subroutine and an event procedure?
 - Subroutines are called from a script
 - Event procedures are called by events



Variables

- Creating - 2 ways
 - Name = "George Washington"
 - dim name
- Assigning a value
 - Name = *somevalue*



Types of Variables

- Variant
 - The kind of data stored
- String
 - Textual data
- Numerical
 - Four types of numbers



Variable Scope

- Script Level
 - Can be used by the entire script
- Procedure Level
 - Only used within the procedure



Variable Scope Example

```
<script language="VBSCRIPT">  
  dim firstname  
  dim lastname  
  sub mysubmit_onClick()  
    dim fullname  
    fullname = "Thomas Jefferson"  
    some statements  
  End sub  
</script>
```



Exercise

Creating Variables



Examining the Code

```
<script language="VBScript">  
    sub mysubmit_OnClick()  
        dim name  
        name = namebox.value  
        MsgBox "Your name is " & name  
    End Sub  
</script>  
<p>Please enter your name: <input type="text"  
    name="namebox" size="20"> </p>  
<p><input type="button" name="mysubmit"  
    value="Click Me"> </p>
```



Naming Objects

- Objects must have names to be used in scripts

```
<input type="text" name="namebox" size  
="20">
```

- `name = namebox.value`



Concatenation Operator

- Used to combine strings or variables
- Most commonly used operator
- `Fullname = firstname & lastname`



Review

- How do you declare variables?
 - dim statement or just use the variable
- What kind of procedure did you write?
 - Event Procedure
- How do you combine text strings?
 - Concatenation operator - &



Numeric Variables

- Declare just like any variable
- No quotation marks
- Can use arithmetic operators

```
studentnum = 3
```

```
myvar = 7
```

```
newvar = myvar * 2
```



Project Overview

- Script requirements:
 - Variables to hold the value of each text box
 - A statement to multiply the numbers
 - A statement to return a value.
- Web page requirements:
 - Two text boxes for entering data
 - A button to submit the data
 - A place to display the result.



Exercise

Return a Value



Exercise

Changing Text Boxes



Conditional Statements

- Evaluate a statement based on True/False
- Statements can only be true or false
- If...Then is most common
 - If the time is before 12 noon, then display “Good Morning” or else display “Hello”



If...Then Statement

If *condition* then

Do something

Else

Do something different

End if



Exercise

- Conditional Statements



Exiting Subroutines

- Provide a way to exit the script

Exit Sub



Exercise-

Exiting Subroutines



Review

- Using numbers in variables
- Using If...Then statements
- Using the IsNumeric statement
- Exiting subroutines



Creating Arrays

- Variable that stores a series of data elements
- Data elements are numbered
 - Zero-based
- Two Types
 - Fixed length
 - Dynamic



Fixed Length Arrays

- Declared like other variables
- Include number of elements
 - `dim myarray(3)`
- Assign values to elements
 - `myvar(2)=""Cats""`



Dynamic Arrays

- Declared like other variables
- Do not include number of data elements
 - `dim myarray()`
- `ReDim myarray(count-1)`
- `ReDim Preserve myarray(count+1)`
- Example of Dynamic Arrays



Exercise

Creating Arrays



Review

- What is an Array?
 - Variable that hold a series of data elements
- How do you refer to specific elements
 - `varname(x)`