

# INTERNET PROGRAMMING

## HYPER TEXT MARKUP LANGUAGE :-

HTML stands for Hyper Text Markup Language An HTML file is a text file containing small **Markup tags**

The markup tags tell the Web browser how to display the page

An HTML file can be created using a simple text editor

HTML tags are surrounded by the two characters <and>

The surrounding characters are called angle brackets

HTML tags normally come in pairs like <b> and </b>

The first tag in a pair is the start tag, the second tag is the end tag

The text between the start and end tags is the element content

HTML tags are not case sensitive, <b> means the same as <B>

This HTML element starts with the start.tag <body>, and ends with the end tag</body>.

The purpose of the <body> tag is to define the

HTML element that contains the body of the

HTML document.

### Headings.

Headings are defined with the <h1>to<h6>tags.<h1> defines the largest heading . <h6> defines the smallest heading.

### Closing Tag

You might have noticed that paragraphs can be written without end tags</p>

### Line Breaks

The <br>tag is used when you want to break a line. But don't want to start a new paragraph.

The <br> tag forces a line break wherever you place it.

### Comments in HTML

The comment tag is used to insert a comment in the HTML source code. A comment will be ignored by the browser. You can use comments to explain your code. Which can help you when you edit the source code at a later date.

Each HTML element has an element name (body, h1, p, br)

The start tag is the name surrounded by angle brackets: <h1>

The end tag is a slash and the name surrounded by angle brackets </h1>

The element content occurs between the start tag and the end tag

Some HTML elements have no content

Some HTML elements have no end tag

### Description

#### Tag

<html>

Defines an HTML documents

<body>

Defines header 1 to header 6

<p>

Defines a paragraph

<br>

Inserts a single line break

<hr>

Defines a comment

<!--	Define horizontal rule
<b>Tag</b>	<b>Description</b>
<b>	<u>Defines bold text</u>
<big>	Defines big text
<em>	Define emphasized text
<i>	Defines italic text
<small>	Defines small text
<strong>	Defines strong text
<sub>	Defines subscripted text
<sup>	Defines superscripted text
<ins>	Defines inserted text
<del>	Defines deleted text
<s>	Deprecated. Use <del> instead.
<strike>	Deprecated. Use <del> instead.
<u>	Deprecated. Use styles instead
 <b>Tag</b>	 <b>Description</b>
<code>	<u>Defines computer code text</u>
<kbd>	<u>Defines keyboard text</u>
<samp>	Defines sample computer code
<tt>	Defines teletype text
<var>	Defines a variable
<pre>	Defines preformatted text
<listing>	Deprecated Use <pre> instead
<plaintext>	Deprecated Use <pre> instead
<xmp>	Deprecated Use <pre> instead

## VB SCRIPT

VBScript is a scripting language A scripting language is a lightweight programming language VBScript is a light version of Microsoft's programming language visual basic

How to Put VBScript Code in an HTML Document  
 <script type="text/vbscript"> in Head or body tag.

### Scripts in both the body and the head section :

You can an unlimited number of scripts in your document, so you can have scripts in both the body and the head section.

To insert a script in an HTML document, use the <Script> tag. Use the type attribute to define the scripting language.

The Output Statement in VBSCRIPT is document.write("pattern").

If given in old browsers we specify the script type as

<script type="pattern">

#### Head section

Scripts can be placed in the head section. Usually we put all the "functions" in the head section. The reason for this is to be sure that the script is loaded before the function is called.

#### Body Section

Execute a script that is placed in the body section Scripts in the body section are executed when the page is loading.

#### Create a variable

Variables are used to store information. This example demonstrates how you can create a variable, and assign a value to it.

#### Create and array:

Array are used to store a series of related data items. This example demonstrates how you can make an array that stores names. (We are using a "for loop" to demonstrate how you write the names)

Ex:

Dim name

Name=some value

#### Life time of the variables:-

When you declare a variable within a procedure the variable can only be accessed within that procedure. When the procedure exits. The variable is destroyed. These variables are called local variables. You can have local variables with the same name in different procedures because each is recognized only by the procedure in which it is declared.

If you declare a variable outside a procedure. All the procedures on your page can access it. The lifetime of these variables starts when they are declared, and ends when the page is closed.

#### Rules for Variable Names:

Must begin with a letter

Cannot contain a period (.)

Cannot exceed 255 characters

#### Array Variables:

Then you can create a variable that can contain a series of values. This is called an array variable. The declaration of an array variable uses parentheses () following the variable name.

#### VB Script Procedures:

We have two kinds of procedure

**ECET(CSE- II)****A Sub procedure:**

- Is a series of statements enclosed by the Sub End Sub statements
- Can perform actions but does not return a value
- Can take arguments that are passed to it by a calling procedure
- Without arguments must include an empty set of parentheses ()

**A Function procedure:**

- Is a series of statements, enclosed by the Function and End Function statements
- Can perform action and can return a value
- Can take arguments that are passed to it by a calling procedure
- Without arguments, must include an empty set of parentheses ()
- Returns a value by assigning a value to its name

**In VBScript we have four conditional statements:**

- If statement – use this statement if you want to execute a set of code when a condition is true
- If .....then.....else statement – use this statement if you want to select one of two sets of lines to execute
- If.....then.....elseif statement – use this statement if you want to select one of many sets of lines to execute
- Select case statement – use this statement if you want to select one of many sets of lines of execute

**Looping Statements:**

Very often when you write code you want to allow the same block o code to run a number of times. You can use looping statement in your code to do this.

**In VBScript we have four looping statements:**

- For... Next statement – runs statements a specified number of times.
- For Each...Next statement – runs statements for each item in a collection or each element of an array
- Do....Loop statement-Loops while or until a condition is true
- While... Wend statement – Do not use it – use the Do... Loop statement instead

**ASP PROGRAMING**

- ASP stands for Active Server Pages

- ASP is a program that runs inside IIS
- IIS stands for Internet Information Services
- IIS comes as a free component with Windows 2000
- IIS is also a part of the Windows NT 4.0 Option Pack
- The option Pack can be downloaded from Microsoft
- PWS is a smaller—but fully functional—version of IIS
- PWS can be found on your Windows 95/98 CD

### Compatibility

ASP is a Microsoft Technology

To run IIS you must have windows NT 4.0 or later

To run PWS you must have Windows 95 or later Chili ASP is a technology that runs ASP without Windows OS

**Instant ASP is another technology that runs ASP without Windows**

### ASP File:-

An ASP file is just the same as an HTML file

An ASP file can contain text, HTML... XML. And scripts

Scripts in an ASP file are executed on the server

An ASP file has the file extension "asp"

### ASP Vs HTML?

When a browser requests an HTML file, the server returns the file when a browser requests an ASP file, IIS passes the request to the ASP engine. The ASP engine reads the ASP file, line by line, and executes the scripts in the file. Finally the ASP file is returned to the browser as plain HTML.

### Functions of ASP:-

- Dynamically edit, Change or add any content of a web page
- Respond to user queries or data submitted from HTML forms
- Access any data or database and return the results to a browser
- Customize a Web page to make it more useful for individual users
- The advantages of using ASO instead of CGI and Perl, are those of simplicity and speed
- Provide security since your ASP code can not be viewed from the browser
- Clever ASP programming can minimize the network traffic

You cannot view the ASP source code by selecting "View source" in a browser, you will only see the output from the ASP file, which is plain HTML. This is because the scripts are executed on the server before the result is sent back to the browser

### Syntax:

An ASP file normally contains HTML tags, just like an HTML file. However, an ASP file can also contain server scripts. Surrounded by the delimiters <% and %>. Server scripts are executed on

**ECET(CSE-II)**

**the server, and can contain any expressions, statements, procedures or operators valid for the scripting language you prefer to use Write Output to a Browser**

The response. Write command is used to write output to a browser. The following example sends the text "Hello World" to the browser:

```
<html>
<body>
<% response . write ("Hello World!")>
</body>
</html>
```

VBScript is default scripting language for ASP hence no need to mention. Whereas the java script need to be mentioned separately.

To set Java Script as the default scripting language for a particular page you must insert a language specification at the top of the page:

```
<%@ language = "Javascrip"%>
```

**Other Scripting Languages:**

ASP is shipped with VBScript and JScript (Microsoft's implementation of Java Script). If you want to script in another language. Like PERL, REXX, or Python, you will have to install script engines for them.

**Important:** Because the Scripts are executed on the server, the browser that displays the ASP file does not need to support scripting at all!

**Lifetime of Variables:**

- A variable declared outside a procedure can be accessed and modified by any script in the ASP file.
- A variable declared inside a procedure is created and destroyed every time the procedure is executed. No scripts outside the procedure can access or change the variable.
- To declare variables accessible to more than one ASP file. Declare them as session variables or application variables.

**Session Variables:**

Session variables are used to store information about ONE single user. And are available to all pages in one application. Typically information stored in session variables are name, Id, and preference.

**Application Variables:**

Application variables are also available to all pages in one application. Application variables are used to store information about ALL users in a specific application.

### Differences Between VBScript and JavaScript in ASP:

When calling a VBScript or a JavaScript procedure from an ASP file written in VBScript you can use the "call" Keyword followed by the procedure name. If a procedure required parameters, the parameter list must be enclosed in parentheses when using the "call" keyword. If you omit the "call" keyword. The parameter list must not be enclosed in parentheses if the procedure has no parameters he parentheses are optional.

When calling a JavaScript or a VBScript procedure from an ASP five written in JavaScript, always use parentheses after the procedure name.

### User Input:

The Request object may be used to retrieve user information from forms. User input can be retrieved in two ways: With Request.QueryString or Request.Form.

### Request Form

The Request.Form command is used to collect values in a form with method = "Post" information sent from a form with the POST method is invisible to others and has no limits on the amount o information to send.

### Form Validation:

User input should be validated on the browser whenever possible (by client scripts). Browser validation is faster and you reduce the server load. You should consider using server validation if the user input will be inserted into a database. A good way to validate a form on the server is to post the form to itself instead of jumping to a different page. The user will then get the error messages on the same page as the form. This makes it easier to discover the error.

### Cookie:-

A cookie is often used to identify a user. A cookie is a small file that the server embeds on the user's computer. Each time the same computer requests a page with a browser, it will send the cookie too. With ASP, you can both create and retrieve cookie values.

The "Response.Cookies" command is used to create cookies.

Note: The Resposnse.Cookies command must appear BEFORE the <html>tag.

<%

Response.Cookies ("firstname")="saimedha"

```
%>
Setting a date when the cookie should expire:
<%
Response.Cookies ("firstname")="Alex"
Response.Cookies ("firstname").Expires=#May 10.2002#
%>
```

**To Retrieve an Cookie Value?**

The "Request.Cookies" command is used to retrieve a cookie value.

In the example below, we retrieve the value of the cookie named "firstname" and display it on a page:

```
<%
Fname =Request. Cookies ("firstname")
Response. Write ("Firstname="fname)
%>
```

**Session Object :-**

The Session object is used to store information about, or change setting for a user asession. Variables stored in the Session object user, and are available to all pages in one application .

**A session starts when :-**

A new user requests an ASP file, and the Global.asa file includes a Session OnStart procedure

A value is stored in a Session variable

A user requests an ASP file, and the instantiate an object with session scope

**A Session Ends when**

- A session ends if a user has not requested or refreshed a page in the application for a specified period. By default, this is 20 minutes
- If you want to set a timeout interval that is shorter or longer than the default, you can set the **Timeout** property

\* To end a session immediately you may use the

**Abandon method :-****Remove Session Variable :-**

The Contents collection contains all session variables.

It is possible to remove a session variable with the Remove method.

**Loop Through the Contents Collection :-**

The Contents collection contains all session variables. You can loop through the Contents collection.

**Application :-**
**SAIMEDHA**
**TIRUPATI-9494861234 VIJAYAWADA - 9494891234**

**ECET(CSE-II)**

A group of ASP files that work together to perform some purpose is called an application. The Application object in ASP is used to tie these files together.

**Application Object**

An application the web may be a group of ASP files. The ASP files work together to perform some purpose. The Application object in ASP is used to tie files together.

The Application object is used to store and access variables from any page just like the Session object. The difference is that ALL users share one Application object for EACH user.

The Application object should hold information that will be used by many pages in the application (like database connection information). This means that you can access the information from any page. It also means that you can change the information in one place and the change will automatically be reflected on all pages.

**Multiple Choice Questions :-**

1. Choose the correct HTML tag for the largest heading  
a. <heading>      b. <h1>      c. <h6>      d. <head>
2. What is the correct HTML tag for inserting a line break?  
a. <1b>      b. <break>      c. <br>      d. none
3. What is the correct HTML for adding a background color?  
a. <body color="yellow">  
b. <body bgcolor="yellow">  
c. <background>yellow</background>
4. Choose the correct HTML tag to make a text bold  
a. <bb>      b. <bold>      c. <bld>      d. <b>
5. Choose the correct HTML tag to make a text italic  
a. <italics>      b. <i>      c. <i>
6. What is the correct HTML for making a hyperlink?  
a. <a href="http://www.HELLOWORLD">HELLOWORLD<a>  
b. <a url=" http://www. HELLOWORLD">HELLOWORLD<a>  
c. <a name="http://www. HELLOWORLD">HELLOWORLD<a>  
d. <a> http://www. HELLOWORLD<a>
7. How can you make an e-mail link?  
a. <mail>xxx@yyy</mail>  
b. <a href="xxx@yyy">  
c. <mail ferf="xxx@yyy">  
d. <a href=>>mail to xxx@yyy">
8. How can you open a link in a new browser window?  
a. <a href="url"new>      b. <a herf="url target">      c. <a hrref="url"new>
9. Which of these tags are all table tags?  
a. <table><head><tfoot>

- b. <table><tr><u>  
c. <table><body><tr>  
d. <table><tr><td>
10. Choose the correct HTML to left-align the content inside a table?  
 a. <td leftalign>      b. <tdalign=left>      c. <td valigh="left">      d. <tdleft>
11. How can you make list that lists the items with numbers?  
 a.<dl>      b. <ol>      c. <ul>      d. <list>
12. How can you make list that list the items with bullets?  
 a.<ul>      b. <list>      c. <ol>      d. <dl>
13. What is the correct HTML for making a checkbox?  
 a.<input type="check">    b. <input type="check">    c. <checkbox>    d. <check>
14. What is the correct HTML for making a text input filed?  
 a <textfield>    b. <textinput type="text">    c. <inputtype="text">    d. <inputtype="textfiled">
15. What is the correct HTML for making a drop-down list?  
 a. <input type="list">    b. <select>    c. <input type="dropdown">    d. <list>
16. What is the correct HTML for making a text area?  
 a. <input type="textarea">    b. <input tyupe="textbox">    c. <textarea>
17. What is the correct HTML for inserting an image?  
 a. <img>image.gif</img>  
 b. <image src="image.gif">  
 c. <img href="image.gif">  
 d. 
18. What is the correct HTML for inserting a background image?  
 a. <body background="background.gif">  
 b.<img scr="background.gif" background>  
 c. <background img="background.gif">
19. WWW stands for  
 a World web wall      b. world wide web      c. web world wide
20. Software that acts a security filter that can restrict types of network communication called  
 a. Anti virus      b. anti Phishing      c. firewall      d. anti spamming
- ACTIVE SERVER PAGE**
1. What does ASP stand for?  
 a. A Server Page    b. Active Standard Pages    c. Active Pages    d. All Standard Pages
2. Asp server scripts are surrounded by which delimiters?  
 a. <%>...<%>    b. <&>...</&>
3. How do you write "Hello World" in ASP  
 a. Document. Write("Hello World")  
 b. "Hello World"  
 c. Response. Write ("Hello World")
4. <%= is the same as:  
 a. <%Document. Write    b. <%Write
- c. <%Response      d. <%Equal

**SAIMEDHA**

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5. What is the default scripting language in ASP?  
 a. PERL      b. JavaScript      c. EcmaScript      d. VBScript
6. How can you script your ASP code in JavaScript?  
 a. End the document with:<%language="JavaScript"%>  
 b. Start the document with:<% language = "JavaScript"%>  
 c. JavaScript is the default scripting language  
 d. Start the document with: <%@ language="JavaScript"%>
7. How do you get information from a form that is submitted using the "get" method?  
 a. Request.QueryString      b. Request.From
8. How do you get information from a form that is submitted using the "post" method?  
 a. Request.QueryString      b. request.Form
9. Page 1 has this link:  
<a href="page2.asp?color=green">GO</a> How can page2.asp get the "Color" parameter?  
 a. Response.QueryString("Color")      b. Response.Parameter("Color")  
 c. Request.QueryString("Color")      d. Get("Color")
10. Which ASP property is used to identify user?  
 a. The Application object      b. The Server object      c. An ASP Cookie
11. All users of the same application share ONE Session object.  
 a. True      b. False
12. All users of the same application share ONE Application object.  
 a. False      b. True
13. If a user has Cookies enabled, a session variable is shared by all pages in one application.  
 a. True      b. False
14. Include files must have the file extension ".inc"  
 a. False      b. True
15. Which is the correct way to include the file "time.inc"?  
 a. <include file="time.inc">      b. <!--#include file="time.inc"-->  
 c. <%#include file="time.inc"%>      d. <% include file="time.inc"%>
16. Which one of these events is a standard Global.asa event?  
 a. Session\_Start      b. Session\_Id
17. Global.asa is required for all web sites  
 a. True b. False c. Only for ASP web sites
18. Which of these objects is NOT an ASP component?  
 a. File Access      b. Link Counter      c. AdRotator      d. Counter
19. ASP comes with a standard component that displays a different advertisement each time a user enters or refreshes a page, what is the name of this component?  
 a. Advertise      b. Advertisement      c. RoataateAds      d. AdRotator

**20. How do you create a File System Object?**

- a. Server. Create Object ("FileSystemObject")
- b. server. Create Object ("Scripting. FileSystemObject")
- c. CreateObject:"Scripting. FileSystemObject"
- d. Create ("File SystemObject")

## **INTERNET PROGRAMMING**

|        |        |        |        |        |        |        |        |        |        |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 1 - 2  | 2 - 3  | 3 - 2  | 4 - 4  | 5 - 3  | 6 - 1  | 7 - 3  | 8 - 2  | 9 - 4  | 10 - 2 |
| 11 - 2 | 12 - 1 | 13 - 2 | 14 - 2 | 15 - 2 | 16 - 2 | 17 - 4 | 18 - 1 | 19 - 2 | 20 - 2 |

## **ACTIVE SERVER PAGES**

|        |        |        |        |        |        |        |        |        |        |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 1 - 3  | 2 - 4  | 3 - 3  | 4 - 3  | 5 - 4  | 6 - 4  | 7 - 1  | 8 - 2  | 9 - 3  | 10 - 3 |
| 11 - 2 | 12 - 2 | 13 - 2 | 14 - 2 | 15 - 3 | 16 - 2 | 17 - 3 | 18 - 4 | 19 - 4 | 20 - 2 |