Government Girls' Polytechnic, Bilaspur

Name of the Lab: **Internet & Web Technology Lab**

Title of the Practical : **Dynamic Web Page Design Lab**

Class: **CSE 6th Semester**

Teachers Assessment:20 End Semester Examination:50

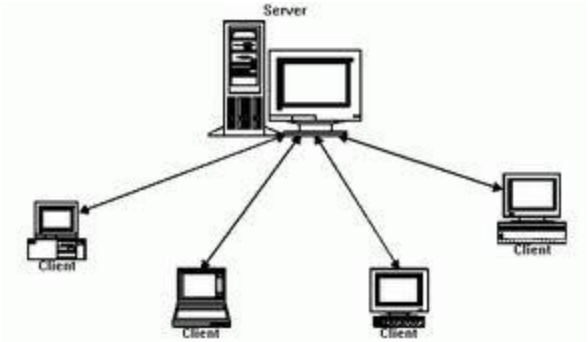
EXPERIMENT NO:-1

1. **OBJECTIVE: -** Study on client server model.

2. **HARDWARE & SYSTEM SOFTWARE REQUIRED :-** Computers, Networking devices

3. **SOFTWARE REQUIRED :-** Not Required

4. **THEORY: -** The client–server model of computing is a distributed application structure that partitions tasks or workloads between the providers of a resource or service, called servers, and service requesters, called clients. Often clients and servers communicate over a computer network on separate hardware, but both client and server may reside in the same system.
   Sever - A server machine is a host that is running one or more server programs which share their resources with clients.
   Client - A client does not share any of its resources, but requests a server's content or service function. Clients therefore initiate communication sessions with servers which await incoming requests.
   Specific types of clients include web browsers, email clients, and online chat clients.
   Specific types of servers include web servers, ftp servers, application servers, database servers, name servers, mail servers, file servers, print servers, and terminal servers. Most web services are also types of servers.
   A Client–server architecture enables the roles and responsibilities of a computing system to be distributed among several independent computers that are known to each other only through a network. This creates an additional advantage to this architecture: greater ease of maintenance



5. **FLOW CHART (IF REQUIRED) :-** Not Required

6. **PROGRAM INPUTS & OUTPUT :-** Not Required

7. **OBSERVATIONS: -** The client–server characteristic describes the relationship of cooperating programs in an application. The server component provides a function or service to one or many clients, which initiate requests for such services. The client–server model has become one of the central ideas of network computing.

EXPERIMENT NO:-2

1. **OBJECTIVE: -** Study on terminology related to dynamic web pages.

2. **HARDWARE & SYSTEM SOFTWARE REQUIRED: -** Computers.

3. **SOFTWARE REQUIRED :-** ASP, VBScript or other s/w to create Web pages, Database s/w such as MS Access or SQL etc.

4. **THEORY: -** A website is a collection of related web pages containing images, videos or other digital assets. A website is hosted on at least one web server, accessible via a network such as the Internet or a private local area network through an Internet address also called URL.

   A dynamic web page is a kind of web page that has been prepared with fresh information (content and/or layout), for each individual viewing. It is not static because it changes with the time (ex. a news content), the user (ex. preferences in a login session), the user interaction (ex. web page game), the context (parametric customization), or any combination of the foregoing. A dynamic website is one that changes or customizes itself frequently and automatically, based on certain criteria.

   Dynamic websites can have two types of dynamic activity: Code and Content. Dynamic code is invisible or behind the scenes and dynamic content is visible or fully displayed.

   Some terms related to Dynamic web-site-

   ASP

   Active Server Pages, also known as Classic ASP or ASP Classic, is Microsoft's first attempt to create a dynamic <HTML> page: a single Internet page that can provide different information depending on context, like the current user, the current date, a random mechanism, etc.

   Client Side Actions

   The term "client-side" refers to Internet actions that take place on your own computer, as opposed to the site's remote server.

   JavaScript

   A client-side programming language created by Sun and Netscape. JavaScript can be embedded in HTML pages to create interactive effects and do tasks like validate form data. JavaScript is a separate language from Java.

   Database

   A database is a file (or group of files) that store information in an organized fashion, usually in tables, and allows you to add new data, update or delete existing data.

5. **FLOW CHART (IF REQUIRED) :-** Not Required.

6. **PROGRAM INPUTS & OUTPUT: -** The main purpose of a dynamic website is automation. A dynamic website can operate more effectively, be built more efficiently and is easier to maintain, update and expand. It is much simpler to build a template and a database than to build hundreds or thousands of individual, static HTML web pages.
7. **OBSERVATIONS: -** The dynamic page generation was made possible by the Common Gateway Interface, stable in 1993. Then Server Side Includes pointed a more direct way to deal with server-side scripts, at the web servers.

EXPERIMENT NO:-3

1. **OBJECTIVE: -** Study of data types & operators of VB scripts.

2. **HARDWARE & SYSTEM SOFTWARE REQUIRED :-** Computers

3. **SOFTWARE REQUIRED :-** VB Script platform

4. **THEORY: -** VBScript has only one data type called a Variant. A Variant is a special kind of data type that can contain different kinds of information, depending on how it is used. Because Variant is the only data type in VBScript, it is also the data type returned by all functions in VBScript.

Datatype	Description of Uses for Each Data Type
Byte	Integer numbers between 0 to 255
Boolean	*True* and *False*
Currency	Monetary values
Date	Date and time
Double	Extremely large numbers with decimal points
Empty	The value that a variant holds before being used
Error	An error number
Integer	Large integers between -32,768 and 32,767
Long	Extremely large integers (-2,147,483,648 and 2,147,483,647)
Object	Objects
Null	No valid data
Single	Large numbers with decimal points
String	Character strings

Operators- Operators are used to "do operations" or manipulate variables and values. For
example, addition is an example of a mathematical operator and concatenation is an example of a string operator. Types of operators in VB Script are as follows –
Arithmetic Operators (+,-,*,/,mod)
Operators used to perform mathematical calculations.
Assignment Operator (=)
Operator used to assign a value to a property or variable.
Comparison Operators (<,>, <=,>=, ==,!=)
Operators used to perform comparisons.
Concatenation Operators (&)
Operators used to combine strings.
Logical Operators (And, or, Not, Xor)
Operators used to perform logical operations.

5. **FLOW CHART (IF REQUIRED) :-** Not Required.
6. **PROGRAM INPUTS & OUTPUT :-**
7. **OBSERVATIONS: -** In VBScript, operators are used to perform an operation. For example, an operator could be used to assign a value to a variable. An operator could also be used to compare two values.

EXPERIMENT NO:-4

1. **OBJECTIVE: -** A program using dim statement and also performs addition, subtraction multiplication and division of two numbers.

2. **HARDWARE & SYSTEM SOFTWARE REQUIRED :-** Computers, windows 98 or above it

3. **SOFTWARE REQUIRED :-**VBScript platform
4. **THEORY:-**

```
 <html>
<body>
<!-- arithmetic_operation.html
-->
<script language="vbscript">
     Dim a
     Dim b
      a=1
      b=1
    document.writeln("a + b = " & (a + b))
    document.writeln("0 - 3 = " & (0 - 3))
    document.writeln("- 3 = " & (- 3))
    document.writeln("9 * 9 = " & (9 * 9))
    document.writeln("20 / 3 = " & (20 / 3))
    document.writeln("20 \ 3 = " & (20 \ 3))
    document.writeln("20 Mod 3 = " & (20 Mod 3))
    document.writeln("3 ^ 4 = " & (3 ^ 4))
</script>
</body>
</html>
```

5. **FLOW CHART (IF REQUIRED) :-** Not Required
6. **PROGRAM INPUTS & OUTPUT :-** Output of the program -

```
 a + b = 2
 0 - 3 = -3
 - 3 = -3
 9 * 9 = 81
20 / 3 = 6.66666666666667
20 \ 3 = 6
20 Mod 3 = 2
3 ^ 4 = 81
```

7. **OBSERVATIONS: -** The program is running successfully.

EXPERIMENT NO:-5

1. **OBJECTIVE: -** A program based on if statement to check number is even or odd.

2. **HARDWARE & SYSTEM SOFTWARE REQUIRED :-** Computers, windows 98 or above it

3. **SOFTWARE REQUIRED :-** VBScript platform

4. **THEORY:-**

```
<html>
<body>
<script type="text/vbscript">
 Dim myNumber
 myNumber = 7
 If myNumber /2=0 Then
        document.write("Number is even")
 Else
        document.write("Number is Odd")
 End If

</script>
</body>
</html>
```

5. **FLOW CHART (IF REQUIRED) :-** Not Required

6. **PROGRAM INPUTS & OUTPUT :-** Output of the program –

   Number is odd

7. **OBSERVATIONS: -** In this program first *If Statement* myNumber is indeed equal to 7 then mynumber/2 will not be equal to 0 so the else block will be executed & the output will be Odd.

   The code that resides within an if statement is only executed if the condition statement of that If Statement is True.

EXPERIMENT NO:- 6

1. **OBJECTIVE: -** A program based on Select Case.

2. **HARDWARE & SYSTEM SOFTWARE REQUIRED :-** Computers, windows 98 or above it

3. **SOFTWARE REQUIRED :-** VBScript platform

4. **THEORY :-**

```
<html>
<body>
<script type="text/vbscript">
Dim myName
myName = "ABCDEFGH"
Select Case myName
Case "Bob"
        document.write("Hello! How are you Bob?")
Case "Sara"
        document.write("Hi! How do you do Sara?")
Case "Charles"
        document.write("Are you busy Charles?")
Case Else
        document.write("Who are you?")
End Select
</script>
</body>
</html>
```

5. **FLOW CHART (IF REQUIRED) :-** Not Required

6. **PROGRAM INPUTS & OUTPUT: -** Output of the program is -
   Who are you?

7. **OBSERVATIONS: -** In this prog the Select Case will write something different to the web browser depending on the name stored in the variable *myName*. When the variable cannot match any of the cases included then the *Else* case will be executed.

EXPERIMENT NO:-8

1. **OBJECTIVE: -** Program based on Browser name and version &File handling

2. **HARDWARE & SYSTEM SOFTWARE REQUIRED:-**

Intel P-III Processor and above

64 MB RAM and above

HDD 4.3 GB Hard Disc and above

3. SOFTWARE REQUIRED: - Linux Operating System (Red Hat)

4. THEORY:-

Some more file processing command in Linux o/s:

More: it displays a specified file information page wise.

Syntax: $more [option] [file name]

Less: using this command we are able to display one screen full page at a time.

Syntax: $less [option] [file name]

Head: using this command we are able to display the requested lines from a specified files. By default head command display 10 lines.

Syntax: $head [option] [file name]

Tail: using this command we are able to display the requested lines from a specified files. By default tail command display last 10 lines.

Syntax: $tail [option] [file name]

5. OBSERVATION: Studied above all commands and run successfully.

EXPERIMENT NO.9

Objective: Program to Read data from database & process it Update the database & Deleting the data.

Hardware and system software requirement: Extended Version 80386 processor, 2-3 ram and window

Software requirement : operating system DOS,Windows, unix

Theory :Most of practical database application are efficiently managed with multiple database file.

That is, the data to be stored in a database file is divided into more than one database file

This makes the database files small and modular and leads to modular and efficient

Program file.It also results in reduced disk space requirements.

After set the relation.move the record pointer to a recordWith a given code in the

parent file (DEPOSITS.bdf),the record pointer in the child(MASTER.dbf) automatically moves

to the record with the same code.

Program input and output: (A) UPDATE COMMMAND

```
SELECT  1
USE MASTER ORDER CODE
SELECT  2
USE DEPOSITS ORDER CODE

SELECT 1
UPDATE  ON  CODE  FROM  DEPOSITS  REPLACE  GR_DEPOSIT WITH GR_DEPOSIT
+ DEPOSIT ->AMOUNT
LIST  FIELDS CODE,NAME,GR_DEPOSIT
                    OUTPUT
Record#   CODE   NAME                  GR_DEPOSIT
```

1	1200	A K Arora	0
2	1250	G K Deb	10000
3	1251	S Srikant	8000
4	1260	Ragini Sharma	15000

(B) APPEND FROM

USE MASTER

APPEND FROM A:MASTER1

APPEND FROM 1 FOR PIN="110021" .OR. CODE> "1300"

OUTPUT

CODE	NAME	ADDRESS	CITY	PIN
1260	Ragini Sharma	B-123, sarojini Nagar	New Delhi	110021

(C) COPY TO

USE MASTER

COPY TO A:SAMPLE

COPY TO MASTER2 FOR CODE<"1260"

COPY TO MASTER3 FILED CODE,NAME,ADDRESS

OUTPUT

CODE	NAME	ADDRESS
1200	A K Arora	17 , IIT Campus
1250	G K Deb	12, New Market
1251	S Srikant	12B ,Pahar Ganj

Observation: The Database command has successfully executed.