Lab manual – Web Programming

Lab manual – Web Programming
Student version

Department of Computer Engineering
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Index

	retrieve data from a table and show the details.		
15	Design and develop CMS supported web application using Joomla		
17			
18			
19			

General Remarks: (For office use only)							
Test 1:		Test 2:		Assign 1:		Assign 2	

VISION AND MISSION

Government Polytechnic College, Perumbavoor Vision and Mission
Vision Excel as a centre of skill education moulding professionals who sincerely strive for the betterment of society.
Mission • To impart state of the art knowledge and skill to the graduate and moulding them to be competent, committed and responsible for the well being of society. • To apply technology in the traditional skills, thereby enhancing the living standard of the community

Department of Computer Engineering
Vision Excel as a center of skill education in Computer Engineering moulding professionals who sincerely strive for the betterment of themselves and society.
Mission • To impart state of the art, knowledge, skill and attitude to the graduates ensuring sustainable development. • To develop adaptiveness for being competent to acquaint with the technological changes.

PEO, PO and PSOs of the Program

Program Educational Outcome (PEOs)

PEO1: To produce technically competent diploma holders in engineering with scientific, analytical, mathematical and problem solving skills.

PEO2: To develop the habit of quality, safety, selflearning along with environmental awareness..

PEO3: To equip diploma holders with good management practices, interpersonal skills and entrepreneurial discipline with strong adherence to ethics and values.

Program Outcomes (POs)

PO1: **Basic and Discipline specific knowledge:** Apply knowledge of basic mathematics, science and engineering fundamentals and engineering specialization to solve the engineering problems.

PO2: **Problem analysis:** Identify and analyse well-defined engineering problems using codified standard methods.

PO3: **Design/ development of solutions:** Design solutions for well-defined technical problems and assist with the design of systems components or processes to meet specified needs.

PO4: **Engineering Tools, Experimentation and Testing:** Apply modern engineering tools and appropriate technique to conduct standard tests and measurements.

PO5: **Engineering practices for society, sustainability and environment:** Apply appropriate technology in context of society, sustainability, environment and ethical practices.

PO6: **Project Management:** Use engineering management principles individually, as a team member or a leader to manage projects and effectively communicate about well-defined engineering activities.

PO7: **Life-long learning:** Ability to analyse individual needs and engage in updating in the context of technological changes.

Program Specific Outcome (PSO):

PSO1: **Specialization knowledge:** The computer engineering diploma graduate will be able to work in information technology industry in the area of development, implementation, testing and maintenance.

PSO2: **Professional growth:** The computer engineering diploma graduate will be fit for real time software projects.

PSO3: **Entrepreneurship:** A successful career as an entrepreneur with a passion, social commitment and ethical responsibility for real-world applications using optimal resources.

Course Outcome		Blooms Taxonomy Level	Lab Hours
CO1	Familiarise with internet tools	(II ,III)	4
C02	Develop basic web pages using HTML	(II,III)	9
C03	Implement web page styling using CSS	(II,III)	3
C04	Construct basic and dynamic documents with JavaScript	(II,III)	10
C05	Develop PHP server side scripts using string, arrays, methods	(II ,III)	13
C06	Implement database access through PHP and use Joomla	(II ,III)	13

SAFETY PROCEDURES

Problem Statement:

The safety instructions are presented to the attention of the students as a mean of preventing accidents while performing experiments and activities in the web programming lab of the department .The purpose is to draw attention to the risks involved in lab activities to prevent human suffering and damage to equipment.

Safety in the laboratory:

Working in the lab is not allowed without following electricity precautions displayed.

No individual work is allowed in the lab.

Laboratory in charge is responsible for the arrangements of your lab activities; Listen carefully to his/her instructions and follow them.

To do and not to do:

Do's

Do wear ID card and follow dress code.

- ♣ Do log off the computers when you finish.
- ♣ Do ask for assistance if you need help.
- ♣ Do keep your voice low when speaking to others in the LAB.
- ♣ Do ask for assistance in downloading any software.
- ♣ Do make suggestions as to how we can improve the LAB.
- ♣ In case of any hardware related problem, ask LAB in charge for solution.
- ♣ If you are the last one leaving the LAB, make sure that the staff in charge of the LAB is informed to close the LAB.
- ♣ Be on time to LAB sessions.
- ♣ Do keep the LAB as clean as possible.

Don'ts

- ♣ Do not use mobile phone inside the lab.
- ♣ Don't do anything that can make the LAB dirty (like eating, throwing waste papers etc).
- ♣ Do not carry any external devices without permission.
- ♣ Don't move the chairs of the LAB.
- ♣ Don't interchange any part of one computer with another.
- ♣ Don't leave the computers of the LAB turned on while leaving the LAB.
- ♣ Do not install or download any software or modify or delete any system files on any lab computers.
- ♣ Do not damage, remove, or disconnect any labels, parts, cables, or equipment.
- ♣ Don't attempt to bypass the computer security system.

♣ Do not read or modify other user's file.
♣ If you leave the lab, do not leave your personal belongings unattended. We are not responsible for any theft.

Electrical Safety:

Consult Electrical Engineering section available in the campus for electrical safety queries.

The lab equipment is powered from electrical sockets installed on the tables. Do not use equipment that is powered from a damaged socket.

Do not use equipment that is powered from flexible cable with damaged insulation or if it's plug is not assembled properly.

Do not repair or disassemble electrical equipment including replacement of fuses installed in the equipment.

Do not open the main fuse box, unless it is an emergency and you need to switch off main circuit breaker.

Emergency Switches:

The laboratory has circuit breakers, which is located in the main panel. Identify the place.
In an emergency condition, switch off circuit breakers immediately.

Exp No. 1 Date: D D - M M - Y Y

Email-id Creation

Problem Statement:

1. Create an email account on
2. Sign in
3. Sign out
4. Add a contact
5. Send an email
6. Open an email
7. Send an email to multiple people
8. Delete an email
9. Email a picture
10. Email a document

Tools
web browser, image files, document files and an internet connection

Theory:

Gmail is a free web based email. The Gmail address offered 1GB (gigabyte) storage space for emails at a time when all the others were providing only a fraction of that.

Gmail didn't need a special invitation to create an account.

Creating a Gmail account is quick and easy, and also provides you access to other Google products such as YouTube, Google Drive, and Google Plus.

Procedure

Step 1: Open the Gmail web site

To create your Gmail account you only need a web browser and an internet connection. Go to http://gmail.google.com.

Step 2: Enter all the required information in the "Create an Account" online form

After you click on the signup link, you shall be shown the Create an Account form with several fields that need your inputs.

Once you have entered your first and last names, it is time to choose a login name. This is important as your login name will decide the email address you will get, and in case of a Gmail account, would be your-chosen-loginname@gmail.com. So be sure to pick a login name, also called the username, with care.

Step 3: How to choose a login name or username for your email address

Since, email addresses need to be unique which means no two people in the world can have the same address. Your login name needs to be catchy and at the same time describe you so people are able to recall it without much difficulty and associate it with you. The availability of a login or user name can be verified by entering it first in the text field and hitting the check availability button.

Step 4: Choosing a password for your email

Securing your Gmail email account with a strong password is imperative. Think of the password as the key combination to your safe and you need to give the same amount of importance. A combination of uppercase and lowercase letters with some digits thrown in would be a strong enough password. You need to enter the password twice and you can leave the "Remember me on this computer" box unchecked.

Step 5: Protecting your Gmail account with a security question

You now need to either select a security question from the drop down list or enter one - and you need to provide the answer. This additional security helps in getting your email account password if you forget it.

Step 6: Word verification and confirmation

After providing your secondary email address - you can leave this blank, if you don't have one - and your location, you need to enter the characters that you see in the picture above the field in your form. Now you can go through the Terms of Service and click on the "I accept. Create my account." button which will create your very own free Gmail account.

Step 7: Compose and send an email.

Click the red "COMPOSE" button in the upper-left corner of the Gmail window. This will open the New Message window in the bottom left corner.

Enter the recipient into the "To" field. You can add multiple recipients by separating the addresses with commas. You can add a "Cc" line, which sends a copy to the recipients you list, as well as a "Bcc" line, which sends copies to the recipients you list but hides their names from the regular recipients.

Enter the subject of your email in the "Subject" field. Type the body of the email into the large field underneath "Subject". Click the "A" button at the bottom of the window to show the text formatting options. These allow you to change size, font, color and more, just like a word processor.

Click the blue Send button to send the email to the recipients.

Step 7: Send an attachment.

You can attach files up to 25 MB in size to your emails. You can either drag the file directly onto the email you are composing, or you can click the Paperclip button and browse for the file on your computer.

Observations

Solutions to some problems in getting your Gmail email address

Here are solutions to two common problems faced by account creators:

1 Login names of my choice are not available

Gmail is a very popular service and it is likely that the login names you choose are no longer available. The only solution to this trouble is to keep trying to work with different permutations and combinations.

2 Gmail Account Creation Failed

Occasionally you might get a screen that displays an "Account Creation Failed" message. The error message is a result of Gmail's spam filters working overtime. As mentioned on the help pages http://mail.google.com/support/bin/answer.py?answer=67512, Gmail refuses to create email addresses from a computer/connection if it exceeds a defined limit. Web users trying to create a lot of addresses at once, like a class or a group, may hit this limit. This is Gmail's way of protecting itself from users who they believe will be creating email addresses for spamming. The solution is to go through the process of getting your Gmail address from another computer using a different I.S.P.

Result :-

Result

Gmail account created and sent and receive mails.

	Signature of Lab in charge	Remarks
Readiness to do experiment		
Completion of Experiment		

Exp No. 2 Date: D D - M M - Y Y

FAMILIARIZATION OF SEARCH ENGINES

Problem Statement:

1. Search the same keywords in at least six different search engines and compare their results
2. Search the same image in at least three different search engines and compare their results

Tools
Web browser, image files, document files and an internet connection

Theory:

A web search engine is a software system that is designed to search for information on the World Wide Web. The search results are generally presented in a line of results often referred to as search engine results pages (SERPs). The information may be a mix of web pages, images, and other types of files.

How Search Engines Operate

Search engines have two major functions: crawling and building an index, and providing search users with a ranked list of the websites they've determined are the most relevant.

1. Crawling and Indexing

The link structure of the web serves to bind all of the pages together.

Links allow the search engines' automated robots, called "crawlers" or "spiders," to reach the many billions of interconnected documents on the web.

Once the engines find these pages, they decipher the code from them and store selected pieces in massive databases, to be recalled later when needed for a search query. To accomplish the monumental task of holding billions of pages that can be accessed in a fraction of a second, the search engine companies have constructed data centers all over the world.

2. Providing Answers

Search engines are **answer machines**. When a person performs an online search, the search engine scours its corpus of billions of documents and does two things: first, it returns only those results that are relevant or useful to the searcher's query; second, it ranks those results according to the popularity of the websites serving the information. It is both **relevance** and **popularity** that the process of SEO is meant to influence.

Procedure

Search the same keywords in different search engines such as google, yahoo, bing, AOL, Wikipedia, BitTorrent, Google Scholar, AskMeNow etc.

For more efficient Internet searching

1: Use unique, specific terms

It is simply amazing how many Web pages are returned when performing a search. To reduce the number of pages returned, use *unique* terms that are *specific* to the subject you are researching.

2: Use the minus operator (-) to narrow the search

Powerful minus operator, equivalent to a Boolean NOT, can remove many unwanted results.

3: Use quotation marks for exact phrases

Using quotation marks around a phrase will return only those exact words in that order.

4: Don't use common words and punctuation

Common words and punctuation marks *should* be used when searching for a specific phrase inside quotes. There are cases when common words like *the* are significant.

5: Capitalization

Most search engines do not distinguish between uppercase and lowercase, even within quotation marks.

6: Drop the suffixes

It's usually best to enter the base word so that you don't exclude relevant pages.

7: Maximize AutoComplete

Ordering search terms from general to specific in the search box will display helpful results in a drop-down list and is the most efficient way to use AutoComplete. Selecting the appropriate item as it appears will save time typing.

8: Customize your searches

There are several other less well known ways to limit the number of results returned and reduce your search time:

- **The plus operator (+):** As mentioned above, stop words are typically ignored by the search engine. The plus operator tells the search engine to include those words in the result set.
- **The tilde operator (~):** Include a tilde in front of a word to return results that include synonyms. The tilde operator does not work well for all terms and sometimes not at all. A search for *~CSS* includes the synonym *style* and returns fashion related style pages —not exactly what someone searching for CSS wants.
- **The wildcard operator (*):** Google calls it the *fill in the blank* operator. For example, amusement * will return pages with *amusement* and any other term(s) the Google search engine deems relevant. You can't use wildcards for parts of words. So for example, *amusement p** is invalid.
- **The OR operator (OR) or (|):** Use this operator to return results with either of two terms.
- **Numeric ranges:** You can refine searches that use numeric terms by returning a specific range, but you must supply the unit of measurement.
- **Site search:** Many Web sites have their own site search feature, but you may find that Google site search will return more pages. When doing research, it's best to go directly to the source, and site search is a great way to do that.
- **Related sites:** For example, related:www.youtube.com can be used to find sites similar to YouTube.

- **Change your preferences:** Search preferences can be set globally by clicking on the gear icon in the upper-right corner and selecting Search Settings
- **Forums-only search:** Under the Google logo on the left side of the search result page, click More | Discussions or go to Google Groups. Forums are great places to look for solutions to technical problems.
- **Advanced searches:** Click the Advanced Search button by the search box on the Google start or results page to refine your search by date, country, amount, language, or other criteria.
- **Wonder Wheel:** The Google Wonder Wheel can visually assist you as you refine your search from general to specific.

9: Use browser history

If you can remember the general date and time of the search you can look through the browser history to find the Web page.

Observations

Result :-

The output of different search engines are successfully verified

For Office use only	Signature of Lab in charge	Remarks
Readiness to do experiment		
Completion of Experiment		

Exp No. 3 Date: D D - M M - Y Y

BLOGS

Problem Statement:

1. Create a blog in blogger and Publish Post with authentication

Tools
Web browser, image files, document files and an internet connection

Theory:

Blogger is an online service owned by Google that publishes single or multi-user blogs created entirely by the user. The service has quickly become the preferred choice of many novice bloggers and is one of the easiest methods of creating and publishing a blog for free.

Procedure

1. Navigate to www.blogger.com using your web browser of choice.
2. Sign in using your Google Account to get started.
3. If you do not have a Google Account, click “Get Started” to create one
4. Enter a “Display Name” to be used to sign your blog posts and click “Continue”.
5. Click “Create Your Blog Now”
6. Select a “Blog title” and an available URL for your blog.
   You can check if the URL you are considering is available by clicking "Check Availability"(if it is unavailable try adding more letters and don't use things like hyphens,under scores, colons etc).
7. Enter the word verification and click continue.
8. Choose a starter template, which will act as the basic design/layout of your blog.
9. Click “Start Blogging”
10. You can create new blog posts, edit posts, and edit pages from under the “Posting” tab
11. The title of your post goes in the text box next to “Title”.
12. The body of your post will get entered into the “Compose” text editor, where you will also be able to access basic text editor functions such as font size, text color, the ability to insert links.
13. You can also use the “Edit HTML” tab to insert your post in HTML format, if you prefer.
14. The “Post Options” section located underneath the “Compose” text editor will allow you to enable reader comments, HTML settings, and post the time and date.
15. You can now either select “Save Now” to save your post, “Preview” to preview your post before publishing to your blog, or “Publish Post” to publish your post directly to your newly created blog.
16. If you wish to change the design of your blog from the starter template you selected when initially creating your blog, you can do so under the “Design”
17. From within the “Design Tab” you will be able to edit Page Elements, HTML, and change your template with Temple Designer.

18. If you want to adjust other settings such as who is able to view, contribute to, or comment on your blog etc, click the “Settings” tab.
19. You can adjust publishing, comments, archiving, permissions, and all other settings from within the sub-tabs located under the main “Settings” tab.

You can add new authors that are able to contribute to and edit your blog by clicking the “Settings” tab> “Permissions” sub-tab, and selecting “Add Authors”.

Result

Blogs are created

For Office use only	Signature of Lab in charge	Remarks
Readiness to do experiment		
Completion of Experiment		

Exp No. 4 Date: D D - M M - Y Y

WEB PAGE USING BASIC HTML TAGS

Problem Statement :-

Create an html page using the following tags.
1. Set the title of the page as “Basic Html Tags”
2. Within the body perform the following
a) Moving text = “Basic HTML Tags”
b) Different heading tags (h1 to h6)
c) Paragraph
d) Horizontal line
e) Line Break
f) Block Quote
g) Pre tag
h) Different Logical Style (<b>, <u>, <sub>, <sup>….)
i) Listing tags

Tools
Browser, Notepad or any editor

Theory:

HTML Document Structure:

```
<html>
    <head>
        <title></title>
    </head>
    <body>
        <!-- this program is for familiarise basic html tags -->

    </body>
</html>
```

Formatting and Fonts:

 - break tag – makes output on the next line.
<p> - paragraph tag – places a blank line before the line it is on.
<hr> - horizontal tag – creates a line or horizontal rule.
<pre> - preformatted tag - enables one to embed text that is already formatted .
<i> - Italic font
<b> - Bold font

 - Emphasis
<sup> - Superscript
<sub> - Subscript

Font Size:

<font> tag and <h….> tag
<h1> - 24 pt <font size=7> - 36 pt
<h2> - 18 pt <font size=6> - 24 pt
<h3> - 12 pt <font size=5> - 18 pt
<h4> - 12 pt bold <font size=4> - 12 pt bold
<h5> - 10 pt <font size=3> - 12 pt plain
<h6> - 7 pt <font size=2> - 9 pt

Text alignment:

<p align="center"> - align the text in center.
<h1 align="left"> - align the text in left.
<h2 align="right"> - align the text in right.
The "align" tag can be used with <p> tag and <h….> tag

Color:

1. Set background color and text color - <body bgcolor="blue" text="red">
<body bgcolor="#800000">
2. Set text color only - <font color="brown">

Lists:

1. Unordered List (<ul>) (<li> - list item)

```
<ul>
<li>
<li>
</ul>
```

to change actual character (bullet):
<ul type="square"> (other characters are circle, disc (default))

2. Ordered List (<ol>)

```
<ol>
<li>
<li>
</ol>
```

to change numbering scheme:
<ol type=i> (other schems are a,A,I,i,1(default))

3. Definition List (<dl>)

```
<dl>
<dt>
<dd>
</dl>
```

(<dt> - definition term, <dd> - definition data)

Program

In notepad type the necessary code & save with the file name mentioned with .html extension

Result

Program executed and output obtained

For Office use only	Signature of Lab in charge	Remarks
Readiness to do experiment		
Completion of Experiment		

Output

Exp No. 5 Date: D D - M M - Y Y

HYPER LINKS, TABLES & MULTIMEDIA

Problem Statement :

1. Create an html page named as “Table.html” to display your class time table.
a) Provide the title as Time Table.
b) Provide various color options to the cells (High light the lab hours and elective hours with different colors.)
2. Create an html page named as “image.html” to display image at various position & size.
3. Create an html page named as “pagelink.html” , in this convert the file created in the “Exercise1” to single page link by providing the links at the top as well as to the below screen/page.
4. Create an html page named as “hyperlink.html” to link to the above four files. For image link alone give a image to be displayed as a link.

Hardware Requirements:

Pentium IV with 2 GB RAM, 160 GB HARD Disk, Monitor 1024* 768 color 60Hz

Software Requirements:

Windows / Linux operating system Any Browser

Theory:

Hyperlinks:

1. navigate from one web page to other web page:
   Click Here
   a – anchor, href – Hypertext Reference
2. to open a web page in a new browser:
   Click Here
3. navigate in the same web page:

   Back to top
4. to form a link another page to an anchored point:

Tables:

(<caption>- Table caption, <tr> - table row, <th> - column header, <td> - table data)

Attributes with <table> tag:

- border – sets the border width in pixels
- width – sets the width as a percentage of the screen
- cellpadding – give the distance in pixels between inner border and text
- cellspacing – sets the spacing in pixels between inner and outer border

Attributes with <td> tag:

- width – sets width of the cell as a percentage

- valign – puts the data at top, middle or bottom of the cell
- rowspan - Sets the number of rows a cell should span
- colspan - Specifies the number of columns a cell should span

Images:

to place images within pages.
<img src="filename">
Attributes with <img> tag:
- align – to make any following text wrap around the image.

(align options are : bottom(default), middle, top)
- border – to set the border of image
- hspace – setting space left and right
- vspace – setting space above and below the image.
- height – sets the height of image in pixels or as a percentage
- width – sets the width of image in pixels or as a percentage
- alt – to display text when image cannot be displayed

<img src="pattern.jpg"> - set the image in middle of the page.

Background image: to fill the background with an image.
<body background="pattern.jpg">

Image as a link:
<img src="pattern.jpg">

Program

In notepad type the necessary code & save with the file name mentioned with .html extension.

Result

Program executed and output obtained.

For Office use only	Signature of Lab in charge	Remarks
Readiness to do experiment		
Completion of Experiment		

Output

Exp No. 6 Date: D D - M M - Y Y

FRAMES & iFRAMES

Problem Statement :

1. Create an html page named as “frames.html”. Divide the page into two columns of 20%, 80% size. In 20% size call the hyperlinks for “navigationframes.html”, “floatingframes.html”, “mixedframe.html”, “noframe” and make the page to be get displayed on the other column when these links are clicked.
2. Create an html page named as “navigationframe.html”. Divide the page into two columns of 40%, 60% size. In 40% size call the hyperlink file created in above exercise , and make the page to be get displayed on the other column when the link is clicked.
3. Create an html page named as “floatingframes.html”. In this file include a paragraph to explain floating frame, and in floating frame include the any html file created in the above exercise as inline.
4. Create an html page named as “mixedframe.html” . Divide the page into two columns of 25% & 75% size. In 25% display an image and divide the 75% into two rows. (50% & 50%). In the first 50% display the video file created in previous exercise and other 50% the time table created in previous exercise.

Hardware Requirements:

Pentium IV with 2 GB RAM, 160 GB HARD Disk, Monitor 1024* 768 color 60Hz

Software Requirements:

Windows / Linux operating system Any Browser

Theory:

Frames and Framesets:

divide a web page into rows and columns

e.g.

<table>
<tr><td colspan="2">WEB Technology
Author:
Date:</td></tr>
<tr><td>TOC
1.Link1
2.Link2
.
.</td><td>CONTENT</td></tr>
</table>

The main parts are: <frameset>, <frame> and </frameset>

The attribute of <frameset> tag is either “rows” or “cols”, which declares the divisions either in terms of pixels or percentage size.

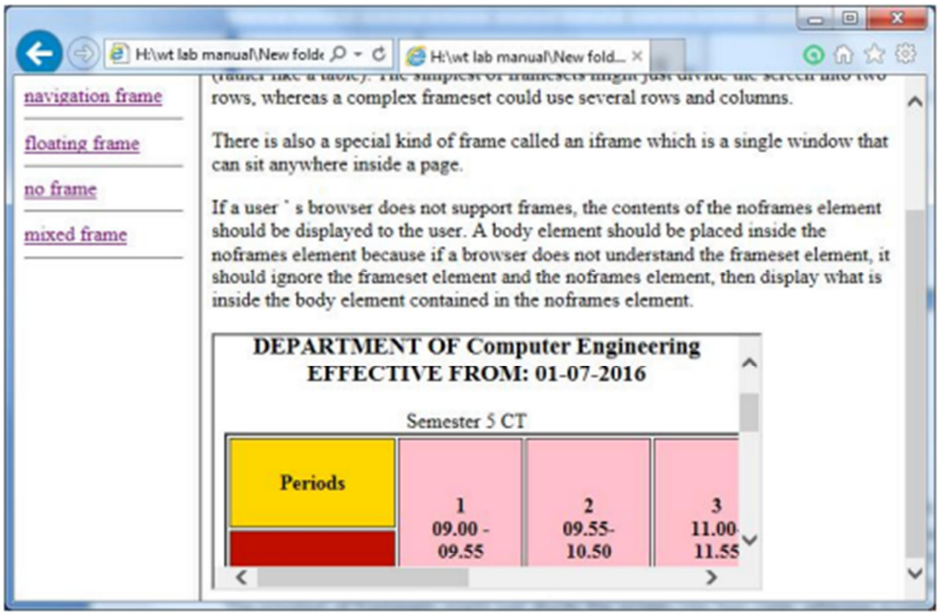
Attributes of <frame> tag:

 name – indicates the name of the frame.
 src – name of source file to be displayed in the frame.

Program

In notepad type the necessary code & save with the file name mentioned with .html extension.

Output



Result

Program executed and output obtained

For Office use only	Signature of Lab in charge	Remarks
Readiness to do experiment		
Completion of Experiment		

Output

Exp No. 7 Date: D D - M M - Y Y

USAGE OF STYLE SHEETS (INLINE, INTERNAL & EXTERNAL)

Problem Statement :-

1. Create a external style sheet named as “external_css.css” and provide some styles for h2, hr, p & a tags.
2. Create an html file named as “Style_sheet.html”
a. Include the external style sheet with necessary tag.
b. Include the internal style sheet for body tags & also use class name, so that the style can be applied for all tags.
c. Include a tags with inline style sheet.

Hardware Requirements:

Pentium IV with 2 GB RAM, 160 GB HARD Disk, Monitor 1024* 768 color 60Hz

Software Requirements:

Windows / Linux operating system Any Browser

Theory:

Basic syntax:
selector {property:value; property:value; …..}
selector => identifier of the element
e.g.
body {background : yellow; color : yellow}
p {font-family: “Times New Roman”; font-size: 14px}
h1,h3 {color : red}
Class:
selector.class-name{property:value; property:value}
e.g.
1. p.right{text-align: right}
use in HTML document:
 Here is some text
2. .left {color : blue}
use in HTML document:
 Here is some text
<h3 class=”left”> Here is another text </h3>
Associate an External Style sheet to an HTML Document:
<head>

<link rel=”stylesheet” type=”text/css”
href=”style1.css”/>
</head>
Embedded style sheet:
<head>
<style type=”text/css”>
p {color:red}
body{background:sienna}
</style>
</head>
Inline Style Sheet:
<p style=”color:red; text-align:right”>
Here is some text. </p>

Program

1. Create a css file in a notepad & save it with the .css extension.
2. In notepad type the necessary code & save with the file name mentioned with .html extension.

Result

Program using inline, internal and external style sheets are executed and output obtained.

For Office use only	Signature of Lab in charge	Remarks
Readiness to do experiment		
Completion of Experiment		

Output

Exp No. 8 Date: D D - M M - Y Y

CALENDAR USING JAVASCRIPT

Problem Statement:

Create an html page named as “calendar.html”
1. Define a method called “day_title(days)” to fill the days in the table.
2. Define a method called “fill_table(month,len)” to fill the table with date, according to the month & number of dates (len).
3. Define a prompt() method to get the year from the user.

Hardware Requirements:

Pentium IV with 2 GB RAM, 160 GB HARD Disk, Monitor 1024* 768 color 60Hz

Software Requirements:

Windows / Linux operating system Any Browser

Theory:

JavaScript runs on the client side of the web, which can be used to design / program how the web pages behave on the occurrence of an event. JavaScript is a dynamic scripting language supporting prototype based object construction.

Step 1 : Read year from the user
Step 2 : Fill the Month name and seven days of the month.
Step 3 : Find the first day of the month
Step 4 : Fill first row from the first day of the month.
Step 5 : Fill rest rows up to number of days in the month.
Step 6 : Repeat step 4 and 5 for rest of the months as first day, the next of previous month’s last day.

Program

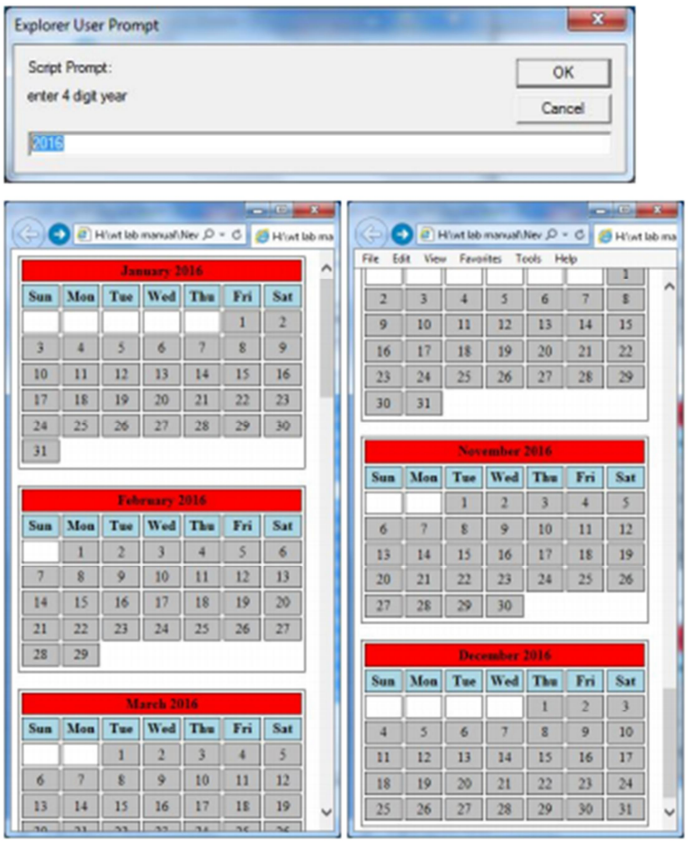
In notepad type the necessary code & save with the file name mentioned with .html extension.

Result

Calendar for all 12 months for a given year using javascript is created.

For Office use only	Signature of Lab in charge	Remarks
Readiness to do experiment		
Completion of Experiment		

Ouput



Exp No. 9 Date: D D - M M - Y Y

EVENT HANDLING – VALIDATING SIMPLE FORM

Problem Statement:

1. Create an html page named as “simple_validation.html”
2. Define a method name as “validate()” to check any blank entry any input field. If so then display all unfilled fields in a single alert box

Hardware Requirements:

Pentium IV with 2 GB RAM, 160 GB HARD Disk, Monitor 10224* 768 color 60Hz

Software Requirements:

Windows / Linux operating system Any Browser

Theory:

1. For the form created in HTML provide various form values checking passed by user.
In Javascript for accessing the form elements’ data three methods can be used
Method 1:
var objval = document.forms[0].elements[0];
Method 2:
var objval = document.form1.myinput;
Method 3:
var objval = document.getElementById(“myinput”);
Display error/success messages as per the user input.
2. A document contains two forms, named specifications and accessories. In the accessories form is a field named acc1 (type=text). There is a submit button in both the forms. Write two different statements that set the contents of that field to "New value" on the click of buttons
3. Create a page that includes a select object to change the background color of the current
page. The property that needs to be set is bgColor, similarly do for foreground color.
Design a HTML page which contains the form element “select” Insert various choices of color in the element
On click of a choice in the color combo box, execute a function This function must access the value of the choice user has selected Background color of the document is set using the property document.bgColor.
Similarly foreground color using document.fgColor. Demonstrate it with the help of a paragraph.
Change the font color of the paragraph depending upon the user choice
5. Put a button in "MAIN HTML" page, on click of that button, execute some JavaScript code that will open one child window. In the "MAIN HTML" page there should be one text field named "location" Inside "Child Window" put one Button.

The window.opener object can be used to access the HTML elements present in the parent browser window from the child window (popup or similar).

6. Scroll some message in Status window of browser.
For setting message in the status bar window.status is used.
Use the function window.setTimeout(func_name, time); to call the function func_name whenever the timer seconds expire.

7. Write down simple JavaScript using timeout such that image will be changed after every 1 ms at a specified position.
When the webpage loads for the first time, display image1. After 1ms change the image to second image.
Use the function window.setTimeout(func_name, time); to call the function func_name whenever the timer seconds expire.
Whenever the function is called, write code to access the image and change the src attribute to set to a different image.

Program

In notepad type the necessary code & save with the file name mentioned with .html extension.

Result

Program executed and output obtained.

For Office use only	Signature of Lab in charge	Remarks
Readiness to do experiment		
Completion of Experiment		

Output

Exp No. 10 Date: D D - M M - Y Y

EVENT HANDLING – CALENDAR FOR A PARTICULAR MONTH

Problem Statement:

Create a html file named as "Claendar_month.html"
1. Add two combo box one to display month & another for year and one button.
2. When the button is clicked display the calendar for the selected values.

Hardware Requirements:

Pentium IV with 2 GB RAM, 160 GB HARD Disk, Monitor 1024* 768 color 60Hz

Software Requirements:

Windows / Linux operating system Any Browser

Theory:

Step 1 : Read month and year of the calendar to be displayed.

Step 2 : First day of the particular month using the function .getDay()

Step 3 : Display the heading of the calendar – Month, year, days.

Step 4 : Keep up to first day of the calendar columns blank and print dates in rest of the row from 1.

Step 5 : Fill rest of the rows, the continuation of the previous till the maximum of the month.

Program

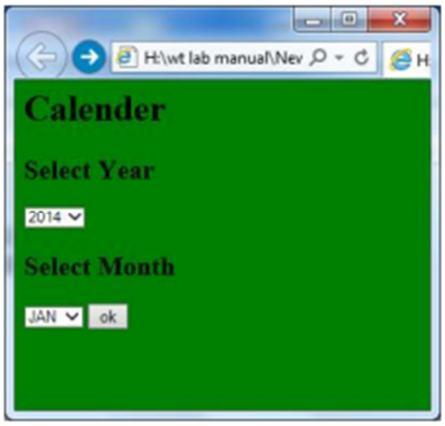
In notepad type the necessary code & save with the file name mentioned with .html extension.

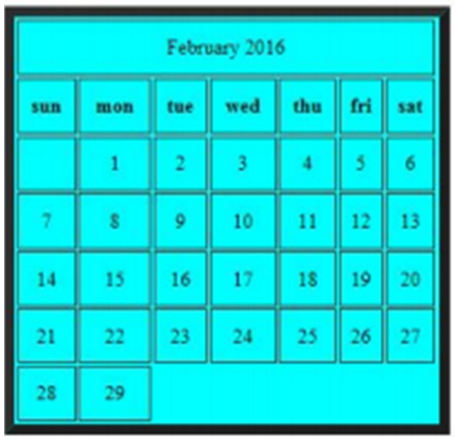
Result

Program executed and output obtained.

For Office use only	Signature of Lab in charge	Remarks
Readiness to do experiment		
Completion of Experiment		

Sample Output





Exp No. 11 Date: D D - M M - Y Y

EVENT HANDLING – ONLINE EXAM

Problem Statement:

1. Create an html file named as exam.html
a. Display four Questions and have four optional answers using radio buttons.
b. Display the result in a alert box.
c. Reset the page into initial condition for next exam.

Hardware Requirements:

Pentium IV with 2 GB RAM, 160 GB HARD Disk, Monitor 1024* 768 color 60Hz

Software Requirements:

Windows / Linux operating system Any Browser.

Theory

Step 1 : Prepare the questions and options in the html page. Options of a question should design as radio buttons with same name and different values.

Step 2 : Calculate the score of each question by checking the correct option of the question is checked or not.

```
form.one[2].checked
```

Step 3 : Display the total score.

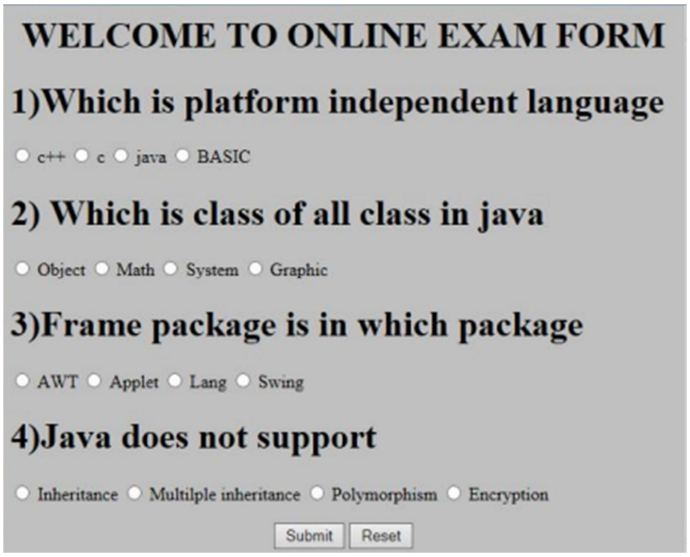
Program

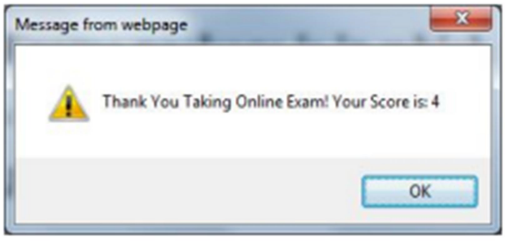
Result

Program executed and output obtained.

For Office use only	Signature of Lab in charge	Remarks
Readiness to do experiment		
Completion of Experiment		

Output





Exp No. 12 Date: D D - M M - Y Y

Registration form using PHP

Problem Statement:

- Design the HTML form with elements username, first name, last name, password, confirm password, email, gender etc
- Display the user input using PHP

Objectives :

1) To Understand Form Handling using PHP

Apparatus/Tools/Equipments/Components :

1) Web Server Environment – LAMP, WAMP
2) Text Editors – Notepad, Wordpad for Windows; VI, GEdit for Linux
3) To see output use Web Browsers – IE, Mozilla, Google Chrome etc

Theory:

PHP Form Handling

The PHP superglobals $_GET and $_POST are used to collect form-data.

Both GET and POST create an array (e.g. array(key => value, key2 => value2, key3 => value3, ...)). This array holds key/value pairs, where keys are the names of the form controls and values are the input data from the user.

Both GET and POST are treated as $_GET and $_POST. These are super globals, which means that they are always accessible, regardless of scope - and you can access them from any function, class or file without having to do anything special.

$_GET is an array of variables passed to the current script via the URL parameters.

$_POST is an array of variables passed to the current script via the HTTP POST method.

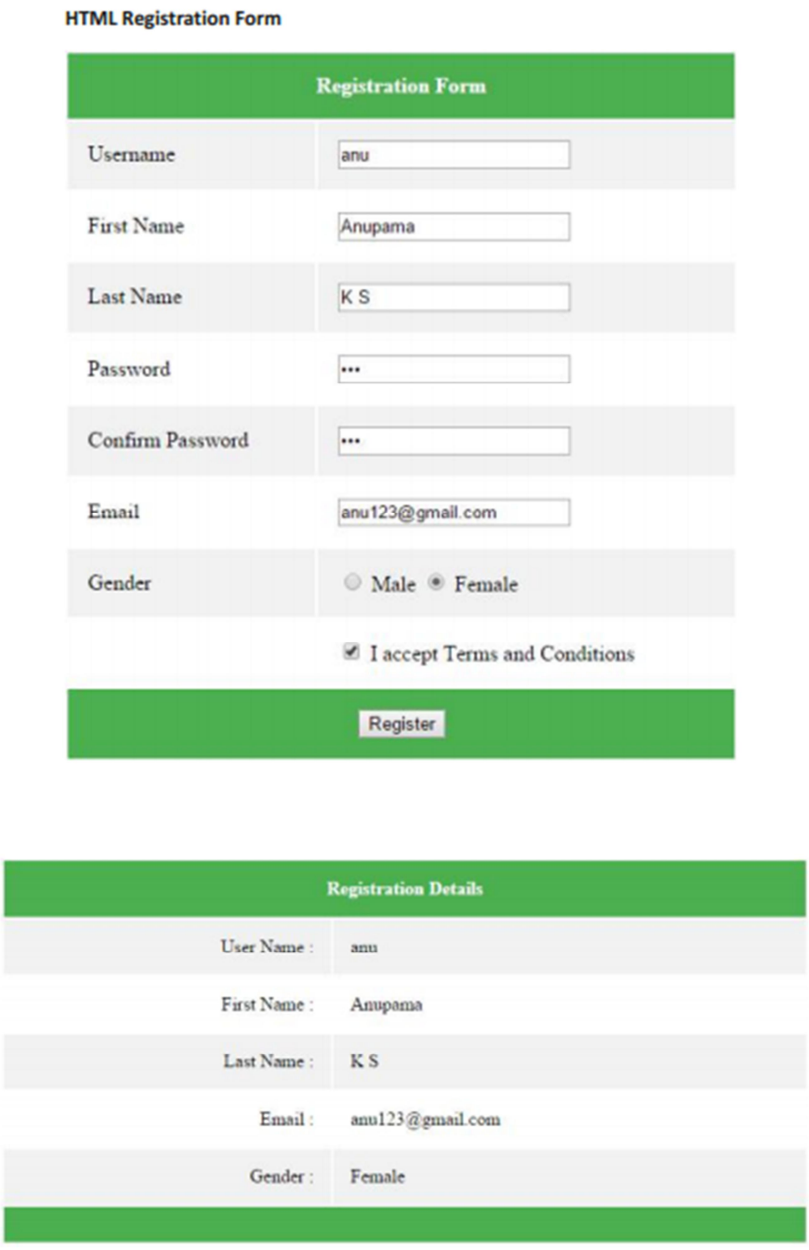
Program :

Result

Program executed and output obtained.

For Office use only	Signature of Lab in charge	Remarks
Readiness to do experiment		
Completion of Experiment		

Output



Exp No. 13 Date: D D - M M - Y Y

Electricity Bill using PHP

Problem Statement

Write a PHP program to input previous reading and present reading and prepare an electricity bill using the following conditions .

Units Consumed Rate
<100 Rs. 3/ Unit
Between 100 and 200 Rs. 4/ Unit
Between 200 and 300 Rs. 5/ Unit
>300 Rs. 6/ Unit

Objectives :

To Understand Form Handling in PHP

Software required :

1) Web Server Environment – LAMP, WAMP
2) Text Editors – Notepad, Wordpad for Windows; VI, GEdit for Linux
3) To see output use Web Browsers – IE, Mozilla, Google Chrome etc

Theory :

PHP Form Handling
The PHP superglobals $_GET and $_POST are used to collect form-data.
Both GET and POST create an array (e.g. array(key => value, key2 => value2, key3 => value3, ...)). This array holds key/value pairs, where keys are the names of the form controls and values are the input data from the user.
Both GET and POST are treated as $_GET and $_POST. These are super globals, which means that they are always accessible, regardless of scope - and you can access them from any function, class or file without having to do anything special.
$_GET is an array of variables passed to the current script via the URL parameters.
$_POST is an array of variables passed to the current script via the HTTP POST method.

Program :

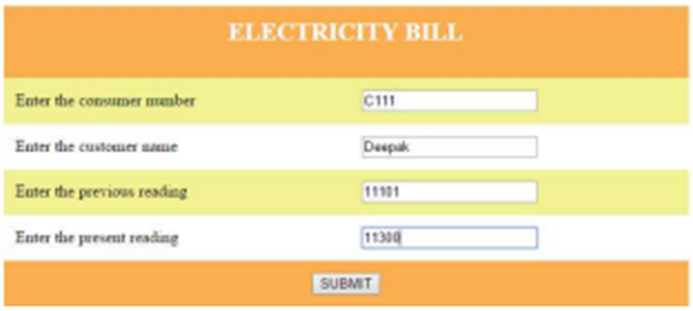
Result

Program executed and output obtained.

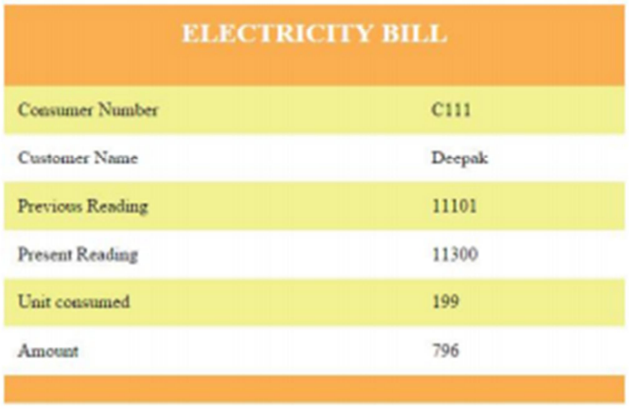
For Office use only	Signature of Lab in charge	Remarks
Readiness to do experiment		
Completion of Experiment		

Output

Input



Output



Exp No. 14 Date: D D - M M - Y Y

MySQL Web Application

Problem Statement

1) Marklist of a student is entered and saved to MySQL table using PHP
2) Data stored in MySQL table is displayed

Objectives:

To understand database connectivity using PHP

Software required:

1) Web Server Environment – LAMP, WAMP
2) Text Editors – Notepad, Wordpad for Windows; VI, GEdit for Linux
3) To see output use Web Browsers – IE, Mozilla, Google Chrome etc

Theory:

MySQL is a database. The data in MySQL is stored in database objects called tables. A table is a collections of related data entries and it consists of columns and rows. Databases are useful when storing information categorically.

a) Create Database “dbmark”

```
CREATE DATABASE `dbmark` ;
```

b) Create Table “tblmark”

```
CREATE TABLE `dbmark` . `tblmark` (
`regno` VARCHAR( 10 ) NOT NULL ,
`name` VARCHAR( 30 ) NOT NULL ,
`english` INT( 3 ) NOT NULL ,
`physics` INT( 3 ) NOT NULL ,
`chemistry` INT( 3 ) NOT NULL ,
`maths` INT( 3 ) NOT NULL ,
PRIMARY KEY ( `regno` )
);
```

Step 1: Create database and table.
Step 2: Create the php program and store in root folder of the LAMP/WAMP server.
Step 3: Write the connection string to establish connection with mysql databse.
Step 4: Validate the input html program, whether entries are proper.
Step 5: Write php codes to store data to the table and retrieve data from the table.

Program

Result

Program executed and output obtained.

For Office use only	Signature of Lab in charge	Remarks
Readiness to do experiment		
Completion of Experiment		

Output

Exp No. 15 Date: D D - M M - Y Y

Web Application using Joomla

Problem Statement :

Design and develop CMS supported web application using Joomla

Objectives:

1)To understand Content Management System

Software required:

1) Web Server Environment – LAMP, WAMP

2) Joomla

3) To see output use Web Browsers – IE, Mozilla, Google Chrome etc

Theory:

Joomla! is a free and open-source content management system (CMS) for publishing web content.

It is built on a model–view–controller web application framework that can be used independently of the CMS that allows you to build powerful online applications.

Step 1: Download the latest Joomla Platform
Simply point your Web browser to http://github.com/joomla/joomla-platform and then click on the "Downloads" button. In the pop-up window that appears, click on either the "Download .tar.gz" button or the "Download .zip" button, depending on your preference.
Step 2: Extract the Joomla Platform in your own environment
After you've downloaded the file, extract it in the location of your choosing.
Step 3: Create a new file
Create a folder named 'examples' within the root directory where you extracted the Joomla Platform. Using your favourite text/code editor, copy/paste code from the following examples (one at a time) into a new file. (Name the file as: 'helloworld.php' or other name that you prefer).
Step 4: Execute your application from the command line interface (CLI)
Using your favourite CLI (maybe Terminal on the Mac, or PuTTy on Windows), navigate to the 'examples' folder where you saved your file. Type "php helloword.php" (or whatever you named your file) and click the enter key on your keyboard.
Step 5: Read the result on your screen

Result

Project implemented to display value of temperature sensor on LCD display and control buzzer accordingly.
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For Office use only	Signature of Lab in charge	Remarks
Readiness to do experiment		
Completion of Experiment		

NOTES

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