

INSTITUTE OF TECHNOLOGY AND MANAGEMENTSKILLS UNIVERSITY, KHARGHAR, NAVI MUMBAI

HTML LAB MANUAL



Prepared by:

Name of Student

Roll No: (A0594193)

Batch:

2023-27Dept.

of CSE

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING



INSTITUTE OF TECHNOLOGY AND MANAGEMENTSKILLS UNIVERSITY, KHARGHAR, NAVI MUMBAI

CERTIFICATE

his is to certify that Mr. / Ms. Yashika Thakur	
Roll No. 23 of Semester of B.Tech Computer Science & Engineering	
f ITM Skills University, Kharghar, Navi Mumbai, has completed the term work	(
atisfactorily in subjectHTML	
orthe academic year 20 <u>2</u> 3 - 2024_as prescribed in the curriculum.	
lace:	
Pate:	

Subject I/C

HOD

INDEX

Exp. No			List of Ex	periment	Date of Submissi on	Sign
1	Design a page having suitable background colour and text colourwith title "My First Web Page" using all the attributes of the Fonttag.					
2	Create a HTML document giving details of your [Name, Age], [Address, Phone] and [Register Number, Class] aligned in properorder using alignment attributes of Paragraph tag.					
3	Create a web page with an appropriate image towards the left hand side of the page, when user clicks on the image another web page should open.					
4	Create a web page for internal links; when the user clicks on different links on the web page it should go to the appropriate locations/ sections in the same page.					
5	Create a HTML document containing a nested list showing a content page of any book.					
6	Create a web page, showing an unordered list of names of all he PG iploma Programmes (Branches) in your institution.					
7	Create the follow yourbatch:	ing table in HTM	L with following	Data for		
	Reg. Number	Student Name	Year/ Semester	Date of Admissio n		
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	8. Create a web page which divides the page in two equal frames and place the audio and video clips in frame-1 and frame-2 respectively.			
	FRAME-1	FRAME-2		
9	Use frames such that page is divided into 3 frames 20% on left toshow contents of pages, 60% in center to show body of page, remaining on right to show remarks.			
10	countries, when the u	that contains a selection box with a l ser selects a country, its capital shou t; Add CSS to customize the propertie or, bold and font size).	ld be	

Name of Student: _	Yashika Thakur
Roll Number: _	23
Experiment No: 1	

Title: Design a page having suitable background colour and text colourwith title "My First Web Page" using all the attributes of the Fonttag.

Theory:

The `` tag in HTML is used to specify the font, size, color, and other text-related properties within a webpage. It allows web developers to customize the appearance of text elements. Attributes such as `face` define the font family, `size` determines the text size, and `color` sets the text color. These attributes can be applied directly within the `` tag or through CSS for better styling control. However, the use of the `` tag is considered outdated in modern web development, and it's recommended to use CSS for text styling for better separation of content and presentation.

This is the heading in font font tag with its attributes that are color, face and size with values blue ,arial,9 respectively

This is a sample paragraph with different values for same attributes as green , Verdana,3 respectively .

Test Case: Any two (screenshot)

This is a sample paragraph with different values for same attributes as red , Comic Sans MS,7 respectively .

This is the heading in font font tag with its attributes that are color, face and size with values purple ,Courier New,5 respectively

Conclusion:

In conclusion, while the `` tag provides a means to customize text properties within HTML documents, its usage is considered outdated in favor of CSS for better styling control and separation of concerns. Modern web development practices encourage the use of CSS for text styling to enhance maintainability and scalability of web projects.

Experiment No: 2

Title:

Create a HTML document giving details of your [Name, Age], [Address, Phone] and [Register Number, Class] aligned in properorder using alignment attributes of Paragraph tag.

Theory:

In HTML, the tag is used to define paragraphs within a document, providing a way to structure and present text content. The align attribute of the tag allows developers to control the horizontal alignment of text within each paragraph, aligning it to the left, right, center, or justified within its containing element. This attribute is particularly useful for organizing and formatting text-based details, such as personal information, addresses, or lists of items, in a visually appealing manner.

Code:

```
<!DOCTYPE html>
<html lang="en">
<head>
   <title>Personal Details</title>
</head>
<body>
   <h1 align="center">Personal Details</h1>
   Name: Yashika Thakur<br>
      Age: 18 Years
   Address: 123 Main Street, Cityville<br>
      Phone: 555-1234
   Register Number: 123456789<br>
      Class: FY CSE
   </body>
</html>
```

Output: (screenshot)

Personal Details

Name: Yashika Thakur Age: 18 Years

Address: 123 Main Street, Cityville

Register Number: 123456789 Class: FY CSE

Conclusion:

Using the align attribute in conjunction with the tag enables developers to create well-organized and visually coherent layouts for presenting textual information on webpages. However, it's important to note that in modern web development, CSS is typically preferred for controlling layout and alignment, offering more flexibility and maintainability.

Experiment No: 3

Title:

Create a web page with an appropriate image towards the left handside of the page, when user clicks on the image another web page should open.

Theory:

In HTML, the <a> tag is utilized to create hyperlinks, enabling users to navigate to different webpages or resources when clicked. When an <a> tag wraps around an tag, clicking the image triggers the hyperlink behavior, directing users to the specified URL. The href attribute within the <a> tag specifies the destination

webpage's URL, while the target="_blank" attribute-value pair ensures that the linked webpage opens in a new browser tab, preserving the original page's contex.

Code:

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Clickable Image</title>
</head>
<body>
    <h1>Click the Image</h1>
    <a href="https://www.bing.com/chat?"</pre>
form=MW00X7&ef_id=_k_CjwKCAjwtqmwBhBVEiwAL-
WAYVzGK8xRdDl6Zrx5dfG1 L4354ti0weaytMdGPB8TEu9CFpqGxDrhBoCmcYQAvD BwE k &OC
ID=AIDcmmn005jwr7_SEM_k_CjwKCAjwtqmwBhBVEiwAL-
WAYVzGK8xRdDl6Zrx5dfG1 L4354ti0weaytMdGPB8TEu9CFpqGxDrhBoCmcYQAvD BwE k &ga
d source=1&gclid=CjwKCAjwtqmwBhBVEiwAL-
WAYVzGK8xRdDl6Zrx5dfG1 L4354ti0weaytMdGPB8TEu9CFpgGxDrhBoCmcYQAvD BwE"
target="_blank"> <!-- Link to another webpage, opens in a new tab -->
        <img src="bing.png" alt="Click Me" style="float: left; margin-</pre>
right: 20px; width: 200px; height: 200px;"> <!-- Image positioned to the
left -->
    </a>
</body>
</html>
```

Output (Screenshot):

Click the Image



Conclusion:

Utilizing the <a> tag to create clickable images enhances user experience by providing intuitive navigation options within a webpage. However, it's essential to ensure that the destination URLs are relevant and that users understand where clicking the image will take them, maintaining clarity and usability in web design.

Experiment No: 4

Title:

Create a web page for internal links; when the user clicks on differentlinks on the web page it should go to the appropriate locations/sections in the same page.

Theory:

In HTML, internal links are created using anchor tags (<a>) with href attributes pointing to specific IDs within the same webpage. These IDs are typically assigned to elements like <div> or <section> using the id attribute. When a user clicks on an internal link, the browser automatically scrolls to the corresponding section of the webpage identified by the linked ID, providing seamless navigation within the same page.

```
<!DOCTYPE html>
<html lang="en">
<head>
   <meta charset="UTF-8">
   <meta name="viewport" content="width=device-width, initial-scale=1.0">
   <title>Internal Links</title>
</head>
<body>
   <h1>Internal Links Example</h1>
   ul>
       <a href="question_1.html">Quetion1</a>
       <a href="qustion_2.html">Quetion2</a>
       <a href="question 3.html">Quetion1</a>
   <div id="quetion 1">
       <h2>0uestion1</h2>
       This is the content of Question 1.
   </div>
   <div id="question 2">
       <h2>0uetion2</h2>
```

Internal Links Example

- Quetion
- Quetion2Quetion1

Question1

This is the content of Question 1.

Quetion2

This is the content of Question 2.

Ouestion3

This is the content of Question 3.

Conclusion:

Internal links are valuable for enhancing user experience by allowing users to quickly navigate to different sections of a webpage without reloading the entire page. By organizing content into distinct sections and providing internal links, web designers can improve the readability and accessibility of their webpages, leading to a more engaging and user-friendly browsing experience.

Experiment No.: 5

Title:

Create a HTML document containing a nested list showing a contentpage of any book.

Theory:

In HTML, lists can be organized hierarchically using nested ul> (unordered list) orol> (ordered list) elements, allowing for structured presentation of content. In the case

of a content page for a book, each main chapter can be represented as a top-level <1i> (list item), while subtopics or sections within each chapter can be nested within additional <u1> or <o1> elements. This hierarchical organization helps to convey the structure of the book's content in a clear and organized manner, enhancing readability and navigability for readers.

```
<!DOCTYPE html>
<html lang="en">
<head>
   <meta charset="UTF-8">
   <meta name="viewport" content="width=device-width, initial-scale=1.0">
   <title>12th NCERT Physics Book Contents</title>
</head>
<body>
   <h1>12th NCERT Physics Book Contents</h1>

    type="1">

      <strong>Chapter 1:</strong> Electric Charges and Fields
      ul>
         Electric Charges
         Electric Fields
      <strong>Chapter 2:</strong> Electrostatic Potential and
Capacitance
      ul>
         Electristatics
         Potential Energy
         Capacitance
      <strong>Chapter 3:</strong> Current Electricity
      <l
         Electric charges
         Bands
      <strong>Chapter 4:</strong> Moving Charges and Magnetism
         Charge
         Mganetism
      <strong>Chapter 5:</strong> Magnetism and Matter
      <l
         Magnetic Moment
         Charges
      <strong>Chapter 6:</strong> Electromagnetic Induction
         Electromagnetic Charges 
         Electric Induction
```

```
<strong>Chapter 7:</strong> Alternating Current
     ul>
        Current
       Dc/Ac
     <strong>Chapter 8:</strong> Electromagnetic Waves
     ul>
        Electric Waves
     <strong>Chapter 9:</strong> Ray Optics and Optical
Instruments
     <l
        Wave Optics
        Light Rays
        Optical Instruments
     <strong>Chapter 10:</strong> Wave Optics
     ul>
        Sound
        Waves
     <strong>Chapter 11:</strong> Dual Nature of Radiation and
Matter
     <111>
        Light rays
        >li>Dual Nature
        Radiations
        Matter
     <strong>Chapter 12:</strong> Atoms
     <l
        Particles
        Atoms
     <strong>Chapter 13:</strong> Nuclei
     <l
        Introduction
        Nuclei
     <strong>Chapter 14:</strong> Semiconductor Electronics:
Materials, Devices and Simple Circuits
     <l
        semiconductors
        Circuits
        Matarials
        Devices
     <strong>Chapter 15:</strong> Communication Systems
     <l
        Introduction
        Communication
     </body>
```



12th NCERT Physics Book Contents

1. Chapter 1: Electric Charges and Fields

Electric Fields

2. Chapter 2: Electrostatic Potential and Capacitance

Electristatics

Potential Energy

Capacitance

3. Chapter 3: Current Electricity

Electric charges

Bands

Chapter 4: Moving Charges and Magnetism

Charge

Magnetism

5. Chapter 5: Magnetism and Matter

Charges

6. Chapter 5: Megnetism and Matter

Electric charges

Magnetism Despetie Moment

Charges

6. Chapter 5: Electromagnetic Induction

Electromagnetic Charges

Electric Induction

7. Chapter 7: Alemating Current

Ourrent

Del'Ac

8. Chapter 8: Electromagnetic Waves

Electric Waves

Electric Waves

9. Chapter 9: Ray Optics and Optical Instruments

Wave Optics

Uight Rays

Optical Instruments

10. Chapter 11: Dual Nature of Radiation and Matter

Light rays

Dual Nature

Radiations

Matter

12. Chapter 12: Atoms

Particles

Conclusion:

o Atoms

By utilizing nested lists in HTML, the content page of a book can be effectively represented, providing readers with a concise overview of the book's chapters and sections. This structured approach not only facilitates easy navigation but also aids in understanding the organization and hierarchy of the book's content, ultimately improving the user experience for readers.

Experiment No.: 6

Title:

Create a web page, showing an unordered list of names of all he PGiploma Programmes (Branches) in your institution.

Theory:

In HTML, unordered lists are created using the ul> (unordered list) element, allowing developers to present items in a bullet-point format without any specific order. Each list

item is defined within <1i> (list item) tags, providing a structured and easily readable format for presenting information. Unordered lists are commonly used to display collections of items that don't require a sequential order, such as menus, features, or branches of a program. By leveraging unordered lists, web developers can effectively organize and present information in a concise and visually appealing manner, enhancing the user experience and readability of web content.

Code:

```
<!DOCTYPE html>
<html lang="en">
<head>
   <meta charset="UTF-8">
   <meta name="viewport" content="width=device-width, initial-scale=1.0">
   <title>PG Diploma Programmes at ITM Institution</title>
</head>
<body>
   <h1>PG Diploma Programmes at ITM Institution</h1>
   ul >
       PG Diploma in Advanced Computing
       PG Diploma in Data Science
       PG Diploma in Cyber Security
       PG Diploma in Business Analytics
       PG Diploma in Digital Marketing
       PG Diploma in Financial Technology
       PG Diploma in Artificial Intelligence
   </body>
</html>
```

Output (Screenshot):

PG Diploma Programmes at ITM Institution

- PG Diploma in Advanced Computing
- PG Diploma in Data Science
- PG Diploma in Cyber Security
- PG Diploma in Business Analytics
- PG Diploma in Digital Marketing
- PG Diploma in Financial Technology
- PG Diploma in Artificial Intelligence

Conclusion:

In conclusion, the utilization of unordered lists in HTML offers a straightforward and intuitive way to present information in a bullet-point format, suitable for various types of content, including lists of program branches in educational institutions. By structuring content with unordered lists, web designers can create well-organized and easily navigable web pages that efficiently convey information to users.

Experiment No.: 7

Title:

Create the following table in HTML with following Data for your batch:

Theory:

In HTML, the rowspan attribute allows developers to merge cells in a table, spanning multiple rows within the same column. This attribute is particularly useful when organizing tabular data, such as student information or statistical data, where certain values should apply to multiple rows. By using the rowspan attribute, web designers can create more compact and visually appealing tables, reducing redundancy and improving readability. However, it's important to ensure proper structure and alignment when utilizing rowspan to avoid confusing or misleading representations of data.

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Batch Information</title>
    <style>
        table {
            width: 100%;
            border-collapse: collapse;
        }
        th. td {
            border: 1px solid #dddddd;
            padding: 8px;
            text-align: left;
        }
        th {
            background-color: #f2f2f2;
        }
```

```
tr:nth-child(odd) {
     background-color: #f9f9f9; /* Grey background for even rows */
 </style>
</head>
<body>
 <h2 align="center">Batch Information</h2>
 >
     Reg. Number
     Student Name
     Year/Semester
     Date of Admission
   </body>
</html>
```

Batch Information

Reg. Number	Student Name	Year/Semester	Date of Admission

Conclusion:

In conclusion, the rowspan attribute in HTML provides a powerful tool for organizing tabular data efficiently by merging cells across multiple rows, enhancing the presentation and readability of tables. When used appropriately, rowspan helps streamline the display of information, leading to clearer and more concise tables that effectively convey the intended data to users.

Experiment No.:8

Title:

Create a web page which divides the page in two equal frames and place the audio and video clips in frame-1 and frame-2 respectively.

Theory:

In web design, the use of frames divides a webpage into distinct sections, enhancing organization and presentation. Frames facilitate the simultaneous display of multiple types of content, such as audio and video clips, enabling a richer user experience. However, excessive use of frames can lead to cluttered interfaces and compatibility issues across different browsers and devices.

```
<!DOCTYPE html>
<html lang="en">
<head>
<meta charset="UTF-8">
<meta name="viewport" content="width=device-width, initial-scale=1.0">
<title>Audio and Video Frames</title>
<style>
    body, html {
        height: 100%;
        margin: 0;
        padding: 0;
    }
    .container {
        display: flex;
        height: 100%;
    .frame {
```

```
flex: 1;
        border: 1px solid #ccc;
        overflow: auto;
    }
    .container2{
        display: flex;
    }
    .frame2 {
        flex: 1;
        border: 1px solid #ccc;
        overflow: auto;
    }
</style>
</head>
<body>
<div class="container2">
    <div class="frame2" style="background-color: #a5a1a1;">
        <h1 align="center">Audio</h1>
    </div>
    <div class="frame2" style="background-color: #a5a1a1;">
        <h1 align="center">Video</h1>
    </div>
</div>
<div class="container">
    <div class="frame" style=" background-color: #d3d0d0;">
        <audio controls>
            <source src="your_audio_clip.mp3" type="audio/mpeg">
            Your browser does not support the audio element.
        </audio>
    </div>
    <div class="frame">
        <video controls>
            <source src="your_video_clip.mp4" type="video/mp4">
            Your browser does not support the video element.
        </video>
    </div>
</div>
</body>
</html>
```



Conclusion:

While frames offer benefits in content organization and multimedia integration, their judicious use is essential to maintain a balance between functionality and usability in web design. Careful consideration of design principles and user experience is crucial to leverage frames effectively and create engaging web experiences.

Experiment No.: 9

Title:

Use frames such that page is divided into 3 frames 20% on left toshow contents of pages, 60% in center to show body of page, remaining on right to show remarks.

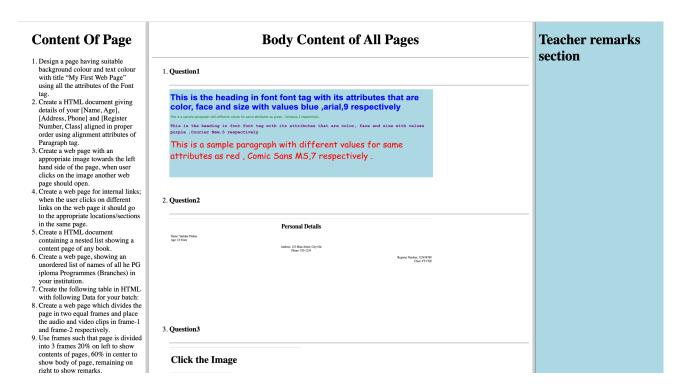
Theory:

Frames in web design allow for the partitioning of a webpage into multiple sections, each displaying different content simultaneously. By allocating specific proportions to each frame, such as 20% for navigation, 60% for main content, and the remainder for additional information, designers can effectively structure and present diverse types of information within a single interface. However, the use of frames has declined in modern web development due to accessibility concerns, SEO limitations, and challenges in maintaining responsiveness across various devices and screen sizes.

Code:

```
<!DOCTYPE html>
<html lang="en">
<head>
<meta charset="UTF-8">
<meta name="viewport" content="width=device-width, initial-scale=1.0">
<title>Three Frames Layout</title>
</head>
<frameset cols="20%, 60%, *">
    <frame src="contents.html" name="contents">
    <frame src="body.html" name="body">
    <frame src="remarks.html" name="remarks">
    <noframes>
        <body>
            This page requires a browser that supports frames.
        </body>
    </noframes>
</frameset>
</html>
```

Output (Screenshot):



Conclusion:

While frames offer a structured approach to displaying content, their drawbacks in terms of accessibility, SEO, and responsiveness necessitate caution in their usage. As modern web design trends favor more flexible and responsive layout techniques, developers should consider alternative approaches such as CSS Grid or Flexbox to achieve similar partitioning effects while maintaining compatibility and usability.

Experiment No.: 10

Title: Create an HTML page that contains a selection box with a list of 5 countries, when the user selects a country, its capital should be printed next to the list; Add CSS to customize the properties of the font of the capital (color, bold and font size).

Theory:

In the realm of cognitive psychology, Jean Piaget's theory of cognitive development posits that children progress through distinct stages of mental growth, from sensorimotor to formal operational, as they interact with their environment and construct knowledge. According to Piaget, these stages involve qualitative shifts in thinking, characterized by the acquisition of new cognitive abilities and understandings about the world. However, critics argue that Piaget's theory may underestimate children's cognitive capacities and overlook the influence of social and cultural factors on development.

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Country Capitals</title>
    <style>
        body {
            font-family: Arial, sans-serif;
        select {
            font-size: 16px;
            padding: 8px;
            margin-bottom: 20px;
        }
        .capital {
            font-weight: bold;
            color: blue;
            font-size: 18px;
            display: none; /* Initially hide the capital */
        input[type="radio"]:checked + .capital {
            display: inline; /* Show the capital when radio button is
checked */
    </style>
</head>
<body>
    <h2>Select a Country:</h2>
    <div>
        <input type="radio" id="usa" name="country" value="Washington</pre>
D.C.">
        <label for="usa">United States</label>
        <span class="capital"> - Washington D.C.</span><br>
```

Select a Country:

- United States
- O United Kingdom
- France
- Germany
- Japan

Conclusion:

In conclusion, while Piaget's theory offers valuable insights into the cognitive processes of children, it's essential to consider alternative perspectives and contextual factors in understanding the complexity of human development.