Experiment 1: Introduction to HTML & CSS

Overview

This experiment focuses on understanding the basics of HTML (HyperText Markup Language) and CSS (Cascading Style Sheets). HTML is the standard markup language used for creating web pages and describes the structure of the content displayed in a web browser.

Key Concepts

1. **HTML** is the standard markup language for creating web pages.
2. **HTML** stands for **Hyper Text Markup Language**.
3. It defines the structure of a web page and its elements.
4. HTML consists of a series of elements, each telling the browser how to display specific types of content.
5. **HTML elements** are used to label parts of the content, such as:
   - **Headings** (`<h1>` , `<h2>` , etc.)
   - **Paragraphs** (`<p>`)
   - **Links** (`<a>`), and more.

Web Workshop [College LAB]\Exp1\html_page_struct.html

```
1   <!DOCTYPE html>
2   <html>
3     <head>
4       <title>HTML Page Structure</title>
5     </head>
6
7     <body>
8       <h1>This is a Heading</h1>
9       <p>This is a paragraph.</p>
10      <p>This is another paragraph.</p>
11
12      <h2>This is a Heading</h2>
13      <p>This is a paragraph.</p>
14      <p>This is another paragraph.</p>
15
16      <table>
17        <tr>
18          <th>Header 1</th>
19          <th>Header 2</th>
20        </tr>
21        <tr>
22          <td>row 1, cell 1</td>
23          <td>row 1, cell 2</td>
24        </tr>
25        <tr>
26          <td>row 2, cell 1</td>
27          <td>row 2, cell 2</td>
28        </tr>
29    </body>
30  </html>
31
```

This is a Heading

This is a paragraph.

This is another paragraph.

This is a Heading

This is a paragraph.

This is another paragraph.

Header 1	Header 2
row 1, cell 1	row 1, cell 2
row 2, cell 1	row 2, cell 2

Web Workshop [College LAB]\Exp1\css_internal_example.html

```
 1  <!DOCTYPE html>
 2  <html>
 3  <head>
 4      <title>Resume</title>
 5      <style>
 6          body {
 7              font-family: Arial, sans-serif;
 8              margin: 0;
 9              padding: 0;
10              background-color: #f4f4f4;
11          }
12          .container {
13              width: 80%;
14              margin: 0 auto;
15              background: #fff;
16              padding: 20px;
17              box-shadow: 0 0 10px rgba(0, 0, 0, 0.1);
18          }
19          h1, h2, h3 {
20              color: #333;
21          }
22          .header, .section {
23              margin-bottom: 20px;
24          }
25          .header {
26              text-align: center;
27          }
28          .header h1 {
29              margin: 0;
30          }
31          .header img {
32              width: 150px;
33              height: auto;
34              border-radius: 50%;
35              margin-bottom: 10px;
36          }
37          .section h2 {
38              border-bottom: 2px solid #333;
39              padding-bottom: 5px;
40          }
41          .section p {
42              margin: 5px 0;
43          }
44          .contact-info, .education, .experience {
45              margin-bottom: 20px;
46          }
47          .contact-info p, .education p, .experience p {
48              margin: 5px 0;
49          }
50      </style>
51  </head>
52  <body>
53      <div class="container">
54          <div class="header">
55              <img src="my.jpg" alt="Aditya Singh">
56              <h1>Aditya Singh</h1>
57              <p>Student</p>
58          </div>
59          <div class="contact-info section">
60              <h2>Contact Information</h2>
61              <p>Email: adtya882@gmail.com</p>
62              <p>Phone: +91 99999 00000</p>
63              <p>Address: I Block, Alpha 2, Greater Noida</p>
```

```
64            </div>
65            <div class="education section">
66                <h2>Education</h2>
67                <p>Bachelor of Science in Computer Science and Engineering - Artificial
    Intelligence</p>
68                <p>Galgotias College of Engineering and Technology, 2023 - 2027</p>
69            </div>
70            <div class="experience section">
71                <h2>Experience</h2>
72                <p>Web Developer at WebD Lab</p>
73                <p>June 2024 - Present</p>
74                <p>Responsibilities:</p>
75                <ul>
76                    <li>Developed and maintained the webD repo</li>
77                    <li>Collaborated with designers to create user-friendly interfaces</li>
78                    <li>Optimized web applications for maximum speed and scalability</li>
79                </ul>
80            </div>
81        </div>
82    </body>
83    </html>
84
```

Aditya Singh

Student

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Education

Bachelor of Science in Computer Science and Engineering - Artificial Intelligence
Galgotias College of Engineering and Technology, 2023 - 2027

Experience

Web Developer at WebD Lab
June 2024 - Present
Responsibilities:

- Developed and maintained the webD repo
- Collaborated with designers to create user-friendly interfaces
- Optimized web applications for maximum speed and scalability

Experiment 2: Designing Static Web Pages for an Online Bookstore

Objective

Design three static web pages for an online bookstore. The pages include:

1. **Home Page**
2. **Login Page**
3. **Catalogue Page**

Each page is designed using HTML and contains the necessary elements and layout, organized within three frames.

Brief Theory

In this experiment, the following important HTML tags are utilized:

1. `<form>` Tag

- Used to create the **login page**.
- This tag structures a form where users can input their credentials, such as username and password.

Example:

```
<form action="/submit_login" method="post">
  <label for="username">Username:</label>
  <input type="text" id="username" name="username"><br><br>
  <label for="password">Password:</label>
  <input type="password" id="password" name="password"><br><br>
  <input type="submit" value="Login">
</form>
```

2. `<a>` Tag

- Used to create **links** between the home, login, and catalogue pages.
- This tag helps users navigate from one page to another.

Example:

```
<a href="login.html">Login</a>
<a href="catalogue.html">Catalogue</a>
```

3. `<img>` Tag

- Used to add **images** to the webpage, such as book covers, logos, or banners.

Example:

```
<img src="book_cover.jpg" alt="Book Cover" width="200" height="300">
```

Structure

The project structure includes:

- `index.html` (Home Page)
- `login.html` (Login Page)
- `catalogue.html` (Catalogue Page)
- CSS files for styling (optional)
- Images folder for storing image assets

This experiment provides an introduction to creating a multi-page static website with a simple navigation system using HTML.

Web Workshop [College LAB]\Exp2&3&4\index.html

```
 1  <!DOCTYPE html>
 2  <html lang="en">
 3  <head>
 4      <title>Online Book Store</title>
 5      <style>
 6          body {
 7              font-family: Arial, sans-serif;
 8              margin: 0;
 9              padding: 0;
10              background-color: #f0f0f0;
11              background-image: url('https://images7.alphacoders.com/895/thumb-1920-
    895992.jpg');
12              background-size: cover;
13              background-repeat: no-repeat;
14
15          }
16          body::before {
17              content: "";
18              position: absolute;
19              top: 0;
20              left: 0;
21              right: 0;
22              bottom: 0;
23              background: rgba(0, 0, 0, 0.5); /* Semi-transparent black overlay (change
    opacity as needed) */
24              z-index: -1; /* Keeps the overlay behind the content */
25          }
26          /* Tab Menu */
27          .tab-menu {
28              display: flex;
29              flex-direction: row; /* Align buttons horizontally */
30              justify-content: center; /* Center-align buttons */
31              align-items: center;    /* Center-align contents */
32              background-color: #333;
33              padding: 20px;          /* Add padding to detach from corners */
34              margin: 20px;           /* Add margin to detach from surrounding content */
35              border-radius: 10px;    /* Round corners */
36              box-shadow: 0 4px 8px rgba(0, 0, 0, 0.2); /* Add a shadow for depth */
37          }
38
39          .tab-menu h1 {
40              color: white;
41              margin-bottom: 20px;    /* Space between title and buttons */
42          }
43
44          .tab-menu button {
45              background-color: #333;
46              color: white;
47              padding: 14px 20px;
48              border: none;
49              cursor: pointer;
50              transition: background-color 0.3s, transform 0.3s; /* Added transform for
    hover */
51          }
52
53          .tab-menu button:hover {
54              background-color: #555;
55              transform: scale(1.05); /* Slightly enlarge button on hover */
56          }
57
58          .tab-menu button.active {
59              background-color: #555;
60          }
```

```
61
62
63            /* Tab Content */
64            .tab-content {
65                display: none;
66                padding: 20px;
67                background-color: white;
68            }
69
70            .tab-content.active {
71                display: block;
72            }
73
74            /* General Styling */
75            h1 {
76                color: #333;
77            }
78
79            /* Book Catalogue Styling */
80            table {
81                width: 100%;
82                border-collapse: collapse;
83                margin-top: 20px;
84            }
85
86            th, td {
87                text-align: left;
88                padding: 10px;
89            }
90
91            th {
92                background-color: #f2f2f2;
93            }
94
95            td img {
96                display: block;
97                margin: 0 auto;
98            }
99
100           .book-rating {
101                color: gold;
102            }
103
104       </style>
105   </head>
106   <body>
107
108   <!-- Tab Menu -->
109   <div class="tab-menu">
110       <button class="tablink" onclick="openTab(event, 'Home')"
      id="defaultTab">Home</button>
111       <button class="tablink" onclick="openTab(event, 'Login')">Login</button>
112       <button class="tablink" onclick="openTab(event, 'Catalogue')">Catalogue</button>
113   </div>
114
115   <!-- Tab Content: Home -->
116   <div id="Home" class="tab-content">
117       <h1>Welcome to the Online Bookstore</h1>
118       <p>Your one-stop shop for a wide selection of books. Feel free to browse through
      our catalogue or log in to make a purchase.</p>
119   </div>
120
121   <!-- Tab Content: Login -->
122   <div id="Login" class="tab-content">
123       <h1>Login to Your Account</h1>
```

```html
124        <form action="#" method="POST">
125            <label for="username">Username:</label><br>
126            <input type="text" id="username" name="username"><br><br>
127            <label for="password">Password:</label><br>
128            <input type="password" id="password" name="password"><br><br>
129            <input type="submit" value="Login">
130        </form>
131    </div>
132
133    <!-- Tab Content: Catalogue -->
134    <div id="Catalogue" class="tab-content">
135        <h1>Our Book Catalogue</h1>
136
137        <table border="1" cellpadding="10" cellspacing="0">
138            <thead>
139                <tr>
140                    <th>Book Cover</th>
141                    <th>Title</th>
142                    <th>Price</th>
143                    <th>Rating</th>
144                </tr>
145            </thead>
146            <tbody>
147                <tr>
148                    <td><img src="https://m.media-
    amazon.com/images/I/61YRfQplFjL._AC_UF1000,1000_QL80_.jpg" alt="Let Us C" width="100">
    </td>
149                    <td>Let Us C</td>
150                    <td>₹365</td>
151                    <td><span class="book-rating">★★★☆☆</span></td>
152                </tr>
153                <tr>
154                    <td><img src="https://images-na.ssl-images-
    amazon.com/images/P/938605230X.01.LZZZZZZZ.jpg" alt="Core Python Programming"
    width="100"></td>
155                    <td>Core Python Programming</td>
156                    <td>₹1,475</td>
157                    <td><span class="book-rating">★★★★☆</span></td>
158                </tr>
159                <tr>
160                    <td><img src="https://m.media-
    amazon.com/images/I/41OksZQYt+L._SY445_SX342_.jpg" alt="HOW TO WIN FRIENDS AND
    INFLUENCE PEOPLE" width="100"></td>
161                    <td>HOW TO WIN FRIENDS AND INFLUENCE PEOPLE</td>
162                    <td>₹164</td>
163                    <td><span class="book-rating">★★★★★</span></td>
164                </tr>
165            </tbody>
166        </table>
167    </div>
168
169
170    <script>
171        // Function to handle the tab switching
172        function openTab(evt, tabName) {
173            var i, tabcontent, tablinks;
174
175            // Get all elements with the class "tab-content" (the content for each tab)
176            tabcontent = document.getElementsByClassName("tab-content");
177
178            // Hide all tab content by setting display to "none"
179            for (i = 0; i < tabcontent.length; i++) {
180                tabcontent[i].style.display = "none";
181            }
182
183            // Get all elements with the class "tablink" (the buttons for each tab)
```

```
184            tablinks = document.getElementsByClassName("tablink");
185
186            // Remove the "active" class from all tab links
187            for (i = 0; i < tablinks.length; i++) {
188                tablinks[i].className = tablinks[i].className.replace(" active", "");
189            }
190
191            // Show the current tab's content by setting display to "block"
192            document.getElementById(tabName).style.display = "block";
193
194            // Add the "active" class to the clicked tab link to highlight it
195            evt.currentTarget.className += " active";
196        }
197
198        // Set the default tab to Home by simulating a click on the default tab button
199        document.getElementById("defaultTab").click();
200    </script>
201
202
203 </body>
204 </html>
205
```

Home   Login   Catalogue

Welcome to the Online Bookstore

Your one-stop shop for a wide selection of books. Feel free to browse through our catalogue or log in to make a purchase.
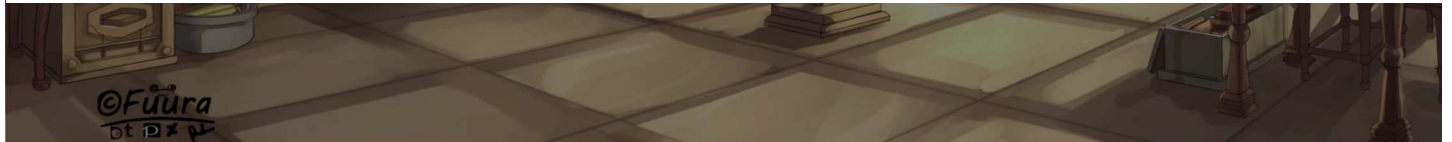
Home   Login   Catalogue

Login to Your Account
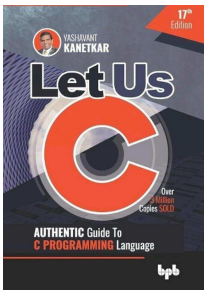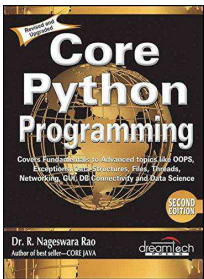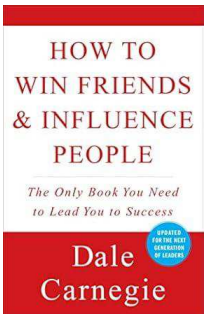
Username:

Password:

Login

Our Book Catalogue

Book Cover	Title	Price	Rating
	Let Us C	₹365	★★★☆☆
	Core Python Programming	₹1,475	★★★★☆
	HOW TO WIN FRIENDS AND INFLUENCE PEOPLE	₹164	★★★★★