

WEB TECHNOLOGIES

LAB MANUAL

Submitted in partial fulfilment of the requirements for the award of the degree of

BACHELOR OF TECHNOLOGY

(Information Technology)



Submitted By: -

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2	Demonstrate the use of Links, Lists and Tables in HTML. You should be able to link separate pages and create named links within a document, using them to build a “table of contents”.
3	Create simple Forms in HTML and demonstrate the use of various form elements like input box, text area, submit and radio buttons etc.
4	Demonstrate the use of cascading style sheets (CSS) (inline, internal and external) to specify various aspects of style, such as colors and text fonts and sizes, in HTML document.
5	Creation of Web pages using HTML5 and CSS3.
6	Demonstrate the use of Bootstrap Framework.
7	Creating web pages using PHP.

PRACTICAL 1 ➡

Create a simple web page by writing HTML using a simple text editor, Notepad. Demonstrate the following components of the web page: Page titles and Headings Paragraphs and Inline images

HTML:

```
<!DOCTYPE html>
<html lang="en">
  <head>
    <meta charset="UTF-8" />
    <meta http-equiv="X-UA-Compatible" content="IE=edge" />
    <meta name="viewport" content="width=device-width, initial-scale=1.0" />
    <title>Practical 1</title>
  </head>
  <body>
    <h1>Web Technology Laboratory</h1>
    <h2>Professor: HANIT KARWAL</h2>
    <h3>Guru Nanak Dev Engineering College, Ludhiana</h3>
    
    <p>
      <strong>
        Guru Nanak Dev Engineering College (GNDEC or GNE Ludhiana)
      </strong>
      is one of the oldest engineering institutions of the northern region
      situated at Gill Park, Ludhiana, Punjab, India. The foundation stone of
      the college was laid on
      <em>8th April 1956 by Hon'ble Dr. Rajendra Prasad</em>, the first
      President of India. The college has been named after 1st Sikh Guru Guru
      Nanak Dev Ji.
    </p>
  </body>
</html>
```

IMAGE:

Web Technology Laboratory

Professor : HANIT KARWAL

Guru Nanak Dev Engineering College, Ludhiana



Guru Nanak Dev Engineering College (GNDEC or GNE Ludhiana) is one of the oldest engineering institutions of the northern region situated at Gill Park, Ludhiana, Punjab, India. The foundation stone of the college was laid on 8th April 1956 by Hon'ble Dr. Rajendra Prasad, the first President of India. The college has been named after 1st Sikh Guru Guru Nanak Dev Ji.

PRACTICAL 2➡

Demonstrate the use of Links, Lists and Tables in HTML. You should be able to link separate pages and create named links within a document, using them to build a “table of contents”.

HTML:

```
<!DOCTYPE html>
<html lang="en">
  <head>
    <meta charset="UTF-8" />
    <meta http-equiv="X-UA-Compatible" content="IE=edge" />
    <meta name="viewport" content="width=device-width, initial-scale=1.0" />
    <title>Practical 2</title>
    <style>
      table,
      th,
      td {
        border: 1px solid black;
        border-collapse: collapse;
      }
    </style>
  </head>
  <body style="text-align: center">
    <h1>Practical 2 [Tables]</h1>
    <br />
    <table style="width: 50%; margin-left: auto; margin-right: auto">
      <tr>
        <th>Site Name</th>
        <th>Links</th>
        <th>Link Address</th>
      </tr>
      <tr>
        <td>Google</td>
        <td><a href="https://www.google.com/" target="_blank">Google</a></td>
        <td>https://www.google.com/</td>
      </tr>
      <tr>
        <td>Facebook</td>
        <td>
          <a href="https://www.facebook.com/" target="_blank">Facebook</a>
        </td>
        <td>https://www.facebook.com/</td>
      </tr>
      <tr>
        <td>GNDEC</td>
        <td>
          <a href="https://www.gndec.ac.in/" target="_blank">GNDEC</a>
        </td>
        <td>https://www.gndec.ac.in/</td>
      </tr>
    </table>
    <ol style="text-align: left">
      <strong>Ordered List</strong>
```

```
<li>GNDEC</li>
<li>Ludhiana</li>
<li>Punjab</li>
</ol>
<ul style="text-align: left">
  <strong>Unordered List</strong>
  <li>GNDEC</li>
  <li>Ludhiana</li>
  <li>Punjab</li>
</ul>
</body>
</html>
```

IMAGE:

Practical 2 [Tables]

Site Name	Links	Link Address
Google	Google	https://www.google.com/
Facebook	Facebook	https://www.facebook.com/
GNDEC	GNDEC	https://www.gndec.ac.in/

Ordered List

1. GNDEC
2. Ludhiana
3. Punjab

Unordered List

- GNDEC
- Ludhiana
- Punjab

PRACTICAL 3➡

Create simple Forms in HTML and demonstrate the use of various form elements like input box, text area, submit and radio buttons etc.

HTML:

```
<!DOCTYPE html>
<html lang="en">
  <head>
    <meta charset="UTF-8" />
    <meta http-equiv="X-UA-Compatible" content="IE=edge" />
    <meta name="viewport" content="width=device-width, initial-scale=1.0" />
    <title>Practical 3</title>
  </head>
  <body>
    <form action="">
      <h1 style="text-align: center;">Payment Form</h1>
      <h2>Content Information</h2>
      <p>
        Name: <input type="text" name="name" placeholder="Ekam Preet Singh" />
      </p>
      <fieldset>
        <legend>Gender</legend>
        <p>
          Male <input type="radio" name="gender" id="male" /> Female
          <input type="radio" name="gender" id="female" />
        </p>
      </fieldset>
      <p>
        Address:
        <br>
        <textarea
          name="address"
          id="address"
          cols="100"
          rows="8"
          placeholder="House No., City, State, Country"
        ></textarea>
      </p>
      <p>Email <input type="email" name="email" placeholder="abc@xyz.com" /></p>
      <p>
        Card Type:
        <select name="card_type" id="card_type">
          <option value="">--Select a card Type --</option>
          <option value="Visa">Visa</option>
          <option value="MasterCard">Master Card</option>
          <option value="RuPay">RuPay</option>
        </select>
      </p>
    </form>
  </body>
</html>
```

```
        <input type="submit" value="Submit" />
    </form>
</body>
</html>
```

IMAGE:

Payment Form

Content Information

Name:

Gender

Male ☐ Female ☐

Address:

House No., City, State, Country

Email

Card Type:

--Select a card Type --

PRACTICAL 4➔

Demonstrate the use of cascading style sheets (CSS) (inline, internal and external) to specify various aspects of style, such as colors and text fonts and sizes, in HTML document.

HTML:

```
<!DOCTYPE html>
<html lang="en">
  <head>
    <meta charset="UTF-8" />
    <meta http-equiv="X-UA-Compatible" content="IE=edge" />
    <meta name="viewport" content="width=device-width, initial-scale=1.0" />
    <title>Practical 4</title>
    <style>
      .internal {
        margin: 20px 50px;
        background-color: #3edbf0;
        color: #02475e;
        font-weight: 500;
        font-family: "Arial Narrow Bold", sans-serif;
        padding: 30px;
        border-radius: 20px;
      }
    </style>
    <link rel="stylesheet" href="./Practical-4.css" />
  </head>
  <body>
    <h1 style="text-align: center">Use of Cascading Style Sheets (CSS)</h1>
    <div style="text-align: center; font-size: 3em">
      Inline, Internal & External CSS
    </div>

    <div
      style="
        margin: 20px 50px;
        background-color: #ff8474;
        color: #02475e;
        font-weight: 500;
        font-family: 'Arial Narrow Bold', sans-serif;
        padding: 30px;
        border-radius: 20px;
      "
    >
      Inline CSS An inline style may be used to apply a unique style for a
      single element. To use inline styles, add the style attribute to the
      relevant element. The style attribute can contain any CSS property.
    </div>

    <div class="internal">
      Internal CSS An internal style sheet may be used if one single HTML page
      has a unique style. The internal style is defined inside the style
```



```
    element, inside the head section.
</div>
<div class="external">
    External CSS With an external style sheet, you can change the look of an
    entire website by changing just one file! Each HTML page must include a
    reference to the external style sheet file inside the <link /> element,
    inside the head section.
</div>
</body>
</html>
```

CSS:

```
.external {
    margin: 20px 50px;
    background-color: #fea82f;
    color: #02475e;
    font-weight: 500;
    font-family: "Arial Narrow Bold", sans-serif;
    padding: 30px;
    border-radius: 20px;
}
```

IMAGE:

Use of Cascading Style Sheets (CSS)

Inline, Internal & External CSS

Inline CSS An inline style may be used to apply a unique style for a single element. To use inline styles, add the style attribute to the relevant element. The style attribute can contain any CSS property.

Internal CSS An internal style sheet may be used if one single HTML page has a unique style. The internal style is defined inside the style element, inside the head section.

External CSS With an external style sheet, you can change the look of an entire website by changing just one file! Each HTML page must include a reference to the external style sheet file inside the element, inside the head section.

PRACTICAL 5➡

Creation of Web pages using HTML5 and CSS3.

HTML:

```
<!DOCTYPE html>
<html lang="en">
  <head>
    <meta charset="UTF-8" />
    <meta http-equiv="X-UA-Compatible" content="IE=edge" />
    <meta name="viewport" content="width=device-width, initial-scale=1.0" />
    <title>Practical 5</title>
    <link rel="stylesheet" href="./Practical-5.css" />
  </head>
  <body>
    <header id="main-header">
      <div class="container">
        <h1>My Website</h1>
      </div>
    </header>

    <nav id="navbar">
      <div class="container">
        <ul>
          <li><a href="#">Home</a></li>
          <li><a href="#">About</a></li>
          <li><a href="#">Services</a></li>
          <li><a href="#">Contact</a></li>
        </ul>
      </div>
    </nav>

    <div class="container">
      <section id="showcase">
        <h1>
          Lorem ipsum dolor sit, amet consectetur adipisicing elit. In nesciunt
          quam molestias neque
        </h1>
      </section>
      <section id="main">
        <h1>Welcome</h1>
        <p>
          Lorem ipsum dolor sit amet, consectetur adipisicing elit. Repellat
          adipisci reiciendis a distinctio nihil natus! Consequatur libero
          sapiente fugiat unde harum earum odit quod accusantium rerum nesciunt
          est, asperiores recusandae nemo assumenda nisi distinctio totam.
          Similique neque pumenda nobis corrupti architecto totam earum
          perspiciatis quisquam at dolor reiciendis quidem ipsum debitis! Ad
          dolorum temporibus eum itaque! In non fugit distinctio repellat
          ducimus, a debitis quos!
        </p>
      </section>
    </div>
  </body>
</html>
```

```

<aside id="sidebar">
  <p>
    Lorem ipsum dolor sit amet consectetur adipisicing elit. Dicta dolore
    necessitatibus rem quae, omnis eum libero quia excepturi, consequuntur
    magni fuga explicabo, incidunt quaerat repellendus reiciendis ad
    officiis molestias! Asperiores animi quam libero consequuntur commodi
    iure, corporis velit, et odio optio facilis quia temporibus magnam,
    porro cupiditate dolorem consequatur impedit!
  </p>
</aside>
</div>

<footer id="main-footer">
  <p>Copyright 2021 &copy; Ekam Preet Singh 1921028/1905327</p>
</footer>
</body>
</html>

```

CSS:

```

body {
  background-color: #f4f4f4;
  columns: #555;
  font: Arial, Helvetica, sans-serif 16px;
  line-height: 1.6em;
  margin: 0;
}

.container {
  width: 80%;
  margin: auto;
  overflow: hidden;
}

#main-header {
  background-color: coral;
  color: #fff;
}

#navbar {
  background-color: #333;
  color: #fff;
}

#navbar ul {
  padding: 0;
  list-style: none;
}

#navbar li {
  display: inline;
}

#navbar a {

```

```
    color: #fff;
    text-decoration: none;
    font: 18px;
    padding-right: 15px;
}

#showcase {
    min-height: 100px;
    margin-bottom: 30px;
    text-align: center;
    margin: auto;
    width: 70%;
}

#showcase h1 {
    color: #333;
    font-size: 40px;
    line-height: 1.2em;
    padding-top: 30px;
}

#main {
    float: left;
    width: 70%;
    padding: 0 30px;
    box-sizing: border-box;
}

#sidebar {
    float: right;
    width: 30%;
    background-color: #333;
    color: #fff;
    padding: 10px;
    box-sizing: border-box;
}

#main-footer {
    background-color: #333;
    color: #fff;
    text-align: center;
    padding: 20px;
    margin-top: 40px;
    margin-bottom: 0;
}
```

IMAGE:



PRACTICAL 6➡

Demonstrate the use of Bootstrap Framework.

HTML:

```
<!DOCTYPE html>
<html lang="en">
  <head>
    <meta charset="UTF-8" />
    <meta http-equiv="X-UA-Compatible" content="IE=edge" />
    <meta name="viewport" content="width=device-width, initial-scale=1.0" />
    <title>Practical 6</title>
    <link
      rel="stylesheet"
      href="https://cdn.jsdelivr.net/npm/bootstrap@4.6.0/dist/css/bootstrap.min.css"
      integrity="sha384-B0vP5xmATw1+K9KRQjQERJvTumQW0nPEzvF6L/Z6nronJ3oU0FUFPcjEUQouq2+1"
      crossorigin="anonymous"
    />
  </head>
  <body style="padding: 50px">
    <nav class="navbar navbar-expand-lg navbar-dark bg-dark">
      <a class="navbar-brand" href="#">Navbar</a>
      <button
        class="navbar-toggler"
        type="button"
        data-toggle="collapse"
        data-target="#navbarTogglerDemo02"
        aria-controls="navbarTogglerDemo02"
        aria-expanded="false"
        aria-label="Toggle navigation"
      >
        <span class="navbar-toggler-icon"></span>
      </button>

      <div class="collapse navbar-collapse" id="navbarTogglerDemo02">
        <ul class="navbar-nav mr-auto mt-2 mt-lg-0">
          <li class="nav-item active">
            <a class="nav-link" href="#"
              >Home <span class="sr-only">(current)</span></a>
          </li>
          <li class="nav-item">
            <a class="nav-link" href="#">Link</a>
          </li>
          <li class="nav-item">
            <a
              class="nav-link disabled"
              href="#"
              tabindex="-1"
              aria-disabled="true"
              >Disabled</a>
          </li>
        </ul>
      </div>
    </nav>
  </body>
</html>
```

```

</ul>
<form class="form-inline my-2 my-lg-0">
  <input
    class="form-control mr-sm-2"
    type="search"
    placeholder="Search"
  />
  <button class="btn btn-outline-success my-2 my-sm-0" type="submit">
    Search
  </button>
</form>
</div>
</nav>
<br />
<div class="alert alert-success" role="alert">
  <h4 class="alert-heading">Well done!</h4>
  <p>
    Aww yeah, you successfully read this important alert message. This
    example text is going to run a bit longer so that you can see how
    spacing within an alert works with this kind of content.
  </p>
  <hr />
  <p class="mb-0">
    Whenever you need to, be sure to use margin utilities to keep things
    nice and tidy.
  </p>
</div>

<br />

<form class="needs-validation" novalidate style="margin: 0 50px">
  <div class="form-row">
    <div class="col-md-6 mb-3">
      <label for="validationTooltip01">First name</label>
      <input
        type="text"
        class="form-control"
        id="validationTooltip01"
        placeholder="Mark"
        required
      />
      <div class="valid-tooltip">Looks good!</div>
    </div>
    <div class="col-md-6 mb-3">
      <label for="validationTooltip02">Last name</label>
      <input
        type="text"
        class="form-control"
        id="validationTooltip02"
        placeholder="Zuckerberg"
        required
      />
      <div class="valid-tooltip">Looks good!</div>
    </div>
  </div>
</form>

```

```

<div class="form-row">
  <div class="col-md-6 mb-3">
    <label for="validationTooltip03">City</label>
    <input
      type="text"
      class="form-control"
      id="validationTooltip03"
      required
    />
    <div class="invalid-tooltip">Please provide a valid city.</div>
  </div>
  <div class="col-md-3 mb-3">
    <label for="validationTooltip04">State</label>
    <select class="custom-select" id="validationTooltip04" required>
      <option selected disabled value="">Choose...</option>
      <option>...</option>
    </select>
    <div class="invalid-tooltip">Please select a valid state.</div>
  </div>
  <div class="col-md-3 mb-3">
    <label for="validationTooltip05">Zip</label>
    <input
      type="text"
      class="form-control"
      id="validationTooltip05"
      required
    />
    <div class="invalid-tooltip">Please provide a valid zip.</div>
  </div>
</div>
<button class="btn btn-primary" type="submit">Submit form</button>
</form>
</body>
</html>

```

IMAGE:

Navbar
Home
Link
Disabled

Well done!

Aww yeah, you successfully read this important alert message. This example text is going to run a bit longer so that you can see how spacing within an alert works with this kind of content.

Whenever you need to, be sure to use margin utilities to keep things nice and tidy.

First name

Last name

City

State

Zip

PRACTICAL 7➡

Creating web pages using PHP.

HTML:

```
<!DOCTYPE html>
<html lang="en">
  <head>
    <meta charset="UTF-8" />
    <meta http-equiv="X-UA-Compatible" content="IE=edge" />
    <meta name="viewport" content="width=device-width, initial-scale=1.0" />
    <title>Practical 7</title>
    <link rel="stylesheet" href="./Practical-7.css" />
  </head>
  <body>
    <div class="contact-title">
      <h1>Welcome To This Website</h1>
      <h2>We Are Happy To Help You</h2>
    </div>

    <div class="contact-form">
      <form action="Practical-7.php" method="POST" id="contact-form">
        <input
          type="text"
          name="name"
          class="form-control"
          placeholder="Your Name"
          required
        />
        <br />
        <input
          type="email"
          name="email"
          class="form-control"
          placeholder="Your Email"
          required
        />
        <br />
        <textarea
          name="message"
          class="form-control"
          placeholder="Message"
          rows="4"
          required
        ></textarea>
        <br />
        <input type="submit" class="form-control submit" value="Send message" />
      </form>
    </div>
  </body>
</html>
```

CSS:

```
body {
  margin: 0;
  padding: 0;
  text-align: center;
  background: rgb(34, 36, 0);
  background: linear-gradient(
    215deg,
    rgba(34, 36, 0, 1) 6%,
    rgba(9, 121, 118, 1) 51%,
    rgba(132, 0, 255, 1) 86%
  );
  background-repeat: no-repeat;
  height: 100%;
  background-attachment: fixed;
  background-position: center;
}

.contact-title {
  margin-top: 100px;
  color: #fff;
  text-transform: uppercase;
  transition: all 4s ease-in-out;
}

.contact-title h1 {
  font-size: 32px;
  line-height: 10px;
}

.contact-title h2 {
  font-size: 16px;
}

form {
  margin-top: 50px;
  transition: all 4s ease-in-out;
}

.form-control {
  width: 600px;
  background: transparent;
  border: none;
  outline: none;
  border-bottom: 1px solid #333;
  color: #fff;
  font-size: 18px;
  margin-bottom: 16px;
}

input {
  height: 45px;
}

form .submit {
```

```

background: #ff5722;
border-color: transparent;
color: #fff;
font-size: 20px;
font-weight: bold;
letter-spacing: 2px;
height: 50px;
margin-top: 20px;
}

form .submit:hover {
  background-color: #f44;
  cursor: pointer;
}

```

PHP:

```

<?php
$name=$_POST['name'];
$visitor_email=$_POST['email'];
$message=$_POST['message'];

$email_from='ekampreet1921028@gndec.ac.in';
$email_subject="New Form Submission";
$email_body="User Name: $name.\n"."User Email: $visitor_email.\n"."User Message: $message
.\n";
$to="ekampreetsingh2001@gmail.com";
$headers="From: $email_from \r\n";
$headers .= "Reply-To: $visitor_email \r\n";
mail($to,$email_subject,$email_body,$headers);
header("Location: Practical-7.html");
?>

```

IMAGE:

WELCOME TO THIS WEBSITE

WE ARE HAPPY TO HELP YOU

Your Name

Your Email

Message

Send message