# Experiment No: 1

**PART A**

**Aim:** Design static client-side web page using various HTML 5 tags.

**Required Resources:** Web Browser, Notepad.

**Objectives:**

1. To design and create web pages using HTML5 and CSS3.

**Outcomes:**

1. Understand the core concepts and features of Web Technology
2. Design static web pages using HTML5 and CSS3

**Theory:**

- **HTML:**
  - HTML is a language for describing web pages.
  - HTML stands for **H**yper **T**ext **M**arkup**L**anguage
  - HTML is a **markup** language
  - A markup language is a set of markup **tags**
  - The tags **describe** document content
  - HTML documents contain HTML **tags** and plain **text**
  - HTML documents are also called **web pages**

✔ **HTML Tags:**

- **HTML Headings**

  HTML headings are defined with the <h1> to <h6> tags.

  **Example**

```
<h1>This is a heading</h1>
<h2>This is a heading</h2>
<h3>This is a heading</h3>
```

- **HTML Paragraphs**

  HTML paragraphs are defined with the <p> tag.

  **Example**

```
<p>This is a paragraph. </p>
<p>This is another paragraph. </p>
```

- **HTML Links**

  HTML links are defined with the <a> tag.

  **Example**

  <a href="http://www.w3schools.com">This is a link</a>

  **Note:** The link address is specified in the href attribute.

- **HTML Images**

  HTML images are defined with the <img> tag.

## Example: Static Web page using basic HTML tags

**Output:**

Welcome to terna engineering College

aaaaaaaaaaaaaaaaaaaaaa

Click here
Click here


| Name | Class | Roll No | Subject | | |
|---|---|---|---|---|---|
| | | | SOOAD | WTL | CN |
| aaa | TE | 01 | 80 | 50 | 60 |
| aaa | TE | 02 | 86 | 54 | 64 |
| ccc | TE | 03 | 80 | 50 | 60 |

A. Computer
B. IT
C. ET
D. Mechanical

## Source Code:

**main.html**

```
<HTML>
<HEAD>
<TITLE>MY FIRST WEB PAGE</TITLE>
</HEAD>

<BODY  BGCOLOR="lightgreen"  >
<h1><center><font  color="white"><u><marquee>Welcome to terna engineering
College</marquee></u></font></center></h1>
<p>aaaaaaaaaaaaaaaaaaaaaaa</p>
<a href="exp2.html"> Click here </a><br>
<a href="www.google.com"> Click here </a>
<br>

<center>
<img src="terna-engineering-college-nerul.jpg"  height="200"  width="600">
</center>
<hr color="orange">
<br>
<br>


<table  width="80%"  border="2"  bgcolor="lightblue">

<tr>
<th rowspan="2">Name</th>
<th rowspan="2">Class</th>
<th rowspan="2">Roll No</th>
<th colspan="3">Subject</th>
</tr>

<tr>
<th>SOOAD</th>
<th>WTL</th>
<th>CN</th>
</tr>

<tr>
<td>aaa</td>
<td>TE</td>
<td>01</td>
<td>80</td>
<td>50</td>
```

```
<td>60</td>
</tr>

<tr>
<td>aaa</td>
<td>TE</td>
<td>02</td>
<td>86</td>
<td>54</td>
<td>64</td>
</tr>

<tr>
<td>ccc</td>
<td>TE</td>
<td>03</td>
<td>80</td>
<td>50</td>
<td>60</td>
</tr>

</table>

<ol type="A">

<li> Computer</li>
<li> IT</li>
<li> ET</li>
<li> Mechanical</li>

</ol><br>

<ul type="square">

<li> Computer</li>
<li> IT</li>
<li> ET</li>
<li> Mechanical</li>

</ul>
</BODY>
</HTML>
```

**Conclusion:** Here we studied how to design static web pages using HTML and how to use various HTML tags.

PART B

(PART B: TO BE COMPLETED BY STUDENTS)

***(Students must submit the soft copy as per following segments within two hours of the practical. The soft copy must be uploaded on the Blackboard or emailed to the concerned lab in charge faculties at the end of the practical in case the there is no Blackboard access available)***

| | |
|---|---|
| Roll. No. 50 | Name: Amey Thakur |
| Class: TE-Comps B | Batch: B3 |
| Date of Experiment: 17/07/2020 | Date of Submission: 17/07/2020 |
| Grade: | |

**WDL Experiment - 1**

**Link:** https://idiopathic-arc.000webhostapp.com/

**B.1 Software Code written by a student:**

***(Paste your HTML code, related to your case study completed during the 2 hours of practical in the lab here)***

- index.html

```
<!DOCTYPE html>

<html lang="en" dir="ltr">

 <head><title>Amey B-50</title></head>

 <body bgcolor="#000000">

  <header>

   <div class="container">

    <div id="branding"><center>

        <h1 style="color:#0044ff">Search <span class="highlight">Space</span> | <span class="highlight">Explore</span> Extent</h1></center></div>

    <nav><center><p> <style>
```

```
a:link {
  color: #db0000;
  background-color: transparent;
  text-decoration: none;
}
a:visited {
  color: #db0000;
  background-color: transparent;
  text-decoration: none;
}
a:hover {
  color: #db0000;
  background-color: transparent;
  text-decoration: underline;
}
a:active {
  color: #db0000;
  background-color: transparent;
  text-decoration: underline;
}
          </style>
           <a href="index.html">Home</a>
           <a href="galaxy.html">Galaxy</a>
           <a href="about.html">About</a>
         </p></center> </nav></div>
    </header>
    <section id="showcase">
```

```
    <div class="container">
     <h1 style="color:#0044ff"><center>Explore The Universe</center></h1> <center>
        <p style="color:#ffffff">Galaxies are concentrations of stars, gas, dust, and dark matter.
        <p style="color:#ffffff">Astronomers classify galaxies into three major categories: elliptical, spiral and irregular.</p>
      <p style="color:#ffffff">They come in a variety of shapes and sizes. Some are fated to collide, like the Milky Way and Andromeda.</p>
      <p style="color:#ffffff">These galaxies span a wide range of sizes, from dwarf galaxies containing as few as 100 million stars to giant galaxies with more than a trillion stars.</p>
     </center> </div></section>
  <section id="newsletter">
    <div class="filly">
     <style>
div.filly{
 text-align: center;
}
</style>
    <h1 style="color:#0044ff">Travel The Milky Way</h1>
    <form>
     <input type="email" placeholder="Best Email">
     <button style="color:#d40000" type="submit" class="button_1">Dive In</button>
    </form> </div>  </section>
 <section id="col">
    <div class="container">
     <center>
     <style>
* {
 box-sizing: border-box;
```

```
}
.col {
  float: left;
  width: 33.33%;
  padding: 5px;
}
/* Clearfix (clear floats) */
.row::after {
  content: "";
  clear: both;
  display: table;
}
</style>
        <div class="col">
        <img src="./img/Dark_matter.jpg">
        <h3 style="color:#999999">Dark Matter</h3>
           <p style="color:#d40000">Dark matter is a form of matter thought to account for approximately 85% of the matter in the universe and about a quarter of its total mass–energy density or about 2.241×10−27 kg/m3.</p> </div>
      <div class="col">
        <img src="./img/Stars.jpg">
        <h3 style="color:#999999">Stars</h3>
          <p style="color:#d40000">Stars are huge celestial bodies made mostly of hydrogen and helium that produce light and heat from the churning nuclear forges inside their cores. Aside from our sun, the dots of light we see in the sky are all light-years from Earth.</p>
      </div>
      <div class="col">
        <img src="./img/Gas_and_Dust.jpg">
        <h3 style="color:#999999">Gas and Dust</h3>
```

```
        <p style="color:#d40000">Much of the space between the stars is filled with atomic and molecular gas (primarily hydrogen and helium) and tiny pieces of solid particles or dust (composed mainly of carbon, silicon and oxygen). </p>

      </div>

    </center>

    </div>

   </section>

  <footer> <center>

    <p style="color:#0044ff">Search Space | Explore Extent © Amey Thakur B-50</p>

</center>  </footer>

 </body>

</html>
```

- about.html

```
<!DOCTYPE html>

<html lang="en" dir="ltr">

 <head>

     <title>Search Space | Explore Extent</title>

  </head>

  <body bgcolor="#000000">

    <header>

     <div class="container">

       <div id="branding">

         <center>

             <h1 style="color:#0044ff">Search <span class="highlight">Space</span> | <span class="highlight">Explore</span> Extent</h1>

         </center>

       </div>

       <nav>
```

```
        <center>
          <p>
         <style>
a:link {
  color: #db0000;
  background-color: transparent;
  text-decoration: none;
}
a:visited {
  color: #db0000;
  background-color: transparent;
  text-decoration: none;
}
a:hover {
  color: #db0000;
  background-color: transparent;
  text-decoration: underline;
}
a:active {
  color: #db0000;
  background-color: transparent;
  text-decoration: underline;
}
          </style>
           <a href="index.html">Home</a>
           <a href="galaxy.html">Galaxy</a>
           <a href="about.html">About</a>
```

```
        </p>
        </center>
       </nav>
      </div>
    </header>
 <section id="main">
  <div class="container">
    <style>
    * {
    box-sizing: border-box;
    }
    .col {
    float: left;
    width: 33.33%;
    padding: 5px;
    }
    /* Clearfix (clear floats) */
    .row::after {
    content: "";
    clear: both;
    display: table;
    }
   div {
    border: 1px solid black;
    margin-right: 100px;
    margin-left: 100px;
    background-color: #000000;
```

```
}
</style>
    <article id="main-col">
     <div class="col">
     <h1 style="color:#0044ff" class="page-title">About Us</h1>
     <p style="color:#ffffff">Search Space | Explore Extent Leadership</p>
```

Search Space is led by Administrator Amey Thakur, Search Space's 1st administrator. Before building Space Search Organisation, Amey served in the NBA, representing Laker's First MVP, serving on the NBA Services Committee and the Science, Space and Technology Committee. Amey's career in Space Research began in the NBA.

```
     <aside id="sidebar">
       <h3 style="color:#0044ff">What We do</h3>
      <p style="color:#ffffff">
       <table border="1">
       <tr style="color:#ffffff">
       <th>Name</th>
       <th>Department</th>
       <th>Class</th>
       <th>Division</th>
       <th>Roll Number</th>
       <P style="color:#ffffff">Web Designing Laboratory
       Experiment -1 </P>
       </tr>
       <tr style="color:#db0000">
       <td>Amey Thakur</td>
       <td>Computer Engineering</td>
       <td>Third Year</td>
       <td>B</td>
```

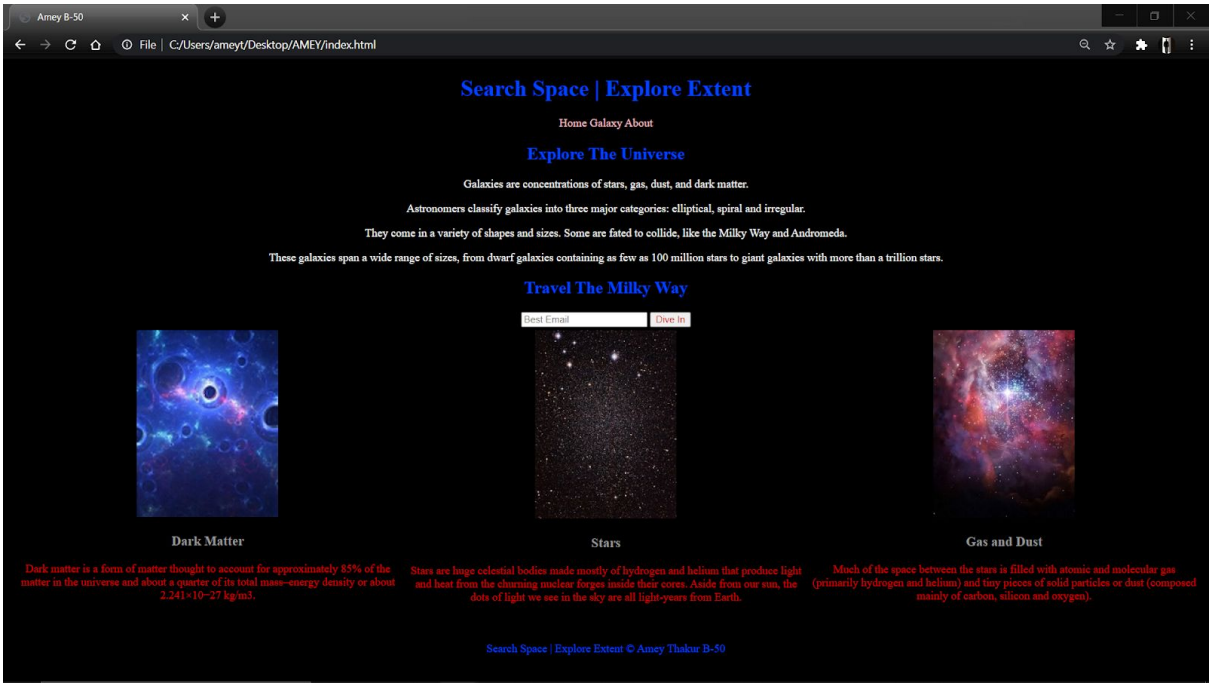
```
          <td>50</td>
          </tr>
          </table>
         </p>
         </aside>
        </div>
       </article>
       <section id="map">
         <div class="col">
          <h1 style="color:#0044ff" class="page-title">Contact Us</h1>
           <p style="color:#ffffff">
           <strong>Address:</strong>
           <br>Plot No. 12, Sector-22, Opp. Nerul Railway Station,
           <br>Phase-II, Nerul (W), Navi Mumbai 400706.
          </p>
          <p style="color:#ffffff">
           <strong>Phone:</strong>
           <br>100/112
          </p>
                                                                    <p><iframe
src="https://www.google.com/maps/embed?pb=!1m14!1m8!1m3!1d60348.39629541313
!2d73.016516!3d19.029644!3m2!1i1024!2i768!4f13.1!3m3!1m2!1s0x0%3A0x945916129
1e7ded5!2sTerna%20Engineering%20College!5e0!3m2!1sen!2sin!4v1595193146892!5m2!
1sen!2sin" width="400" height="300" frameborder="0" style="border:0;" allowfullscreen=""
aria-hidden="false" tabindex="0"></iframe></p>
         </div>
       </section>
     </div>
   </section>
```

```
  <footer>
   <section id="ft">
    <div class="center">
   <center>
  <p style="color:#0044ff">Search Space | Explore Extent © Amey Thakur B-50</p>
</center>
</div>
</section>
  </footer>
 </body>
</html>
```

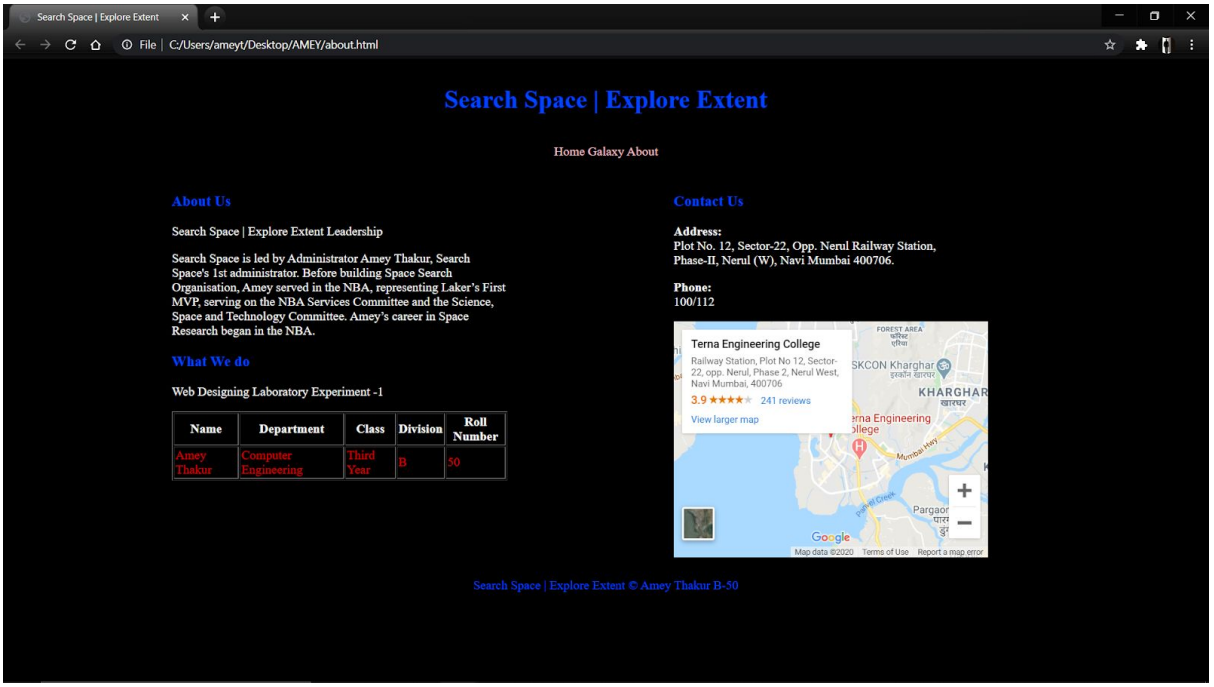
### B.2 Input and Output:

***(Paste your output that you are getting after running HTML code in form of screenshots.)***

- index.html



- about.html




## B.3 Conclusion:

***(Students must write the conclusion as per the attainment of individual outcome)***

We designed a static client-side web page using various HTML5 tags.

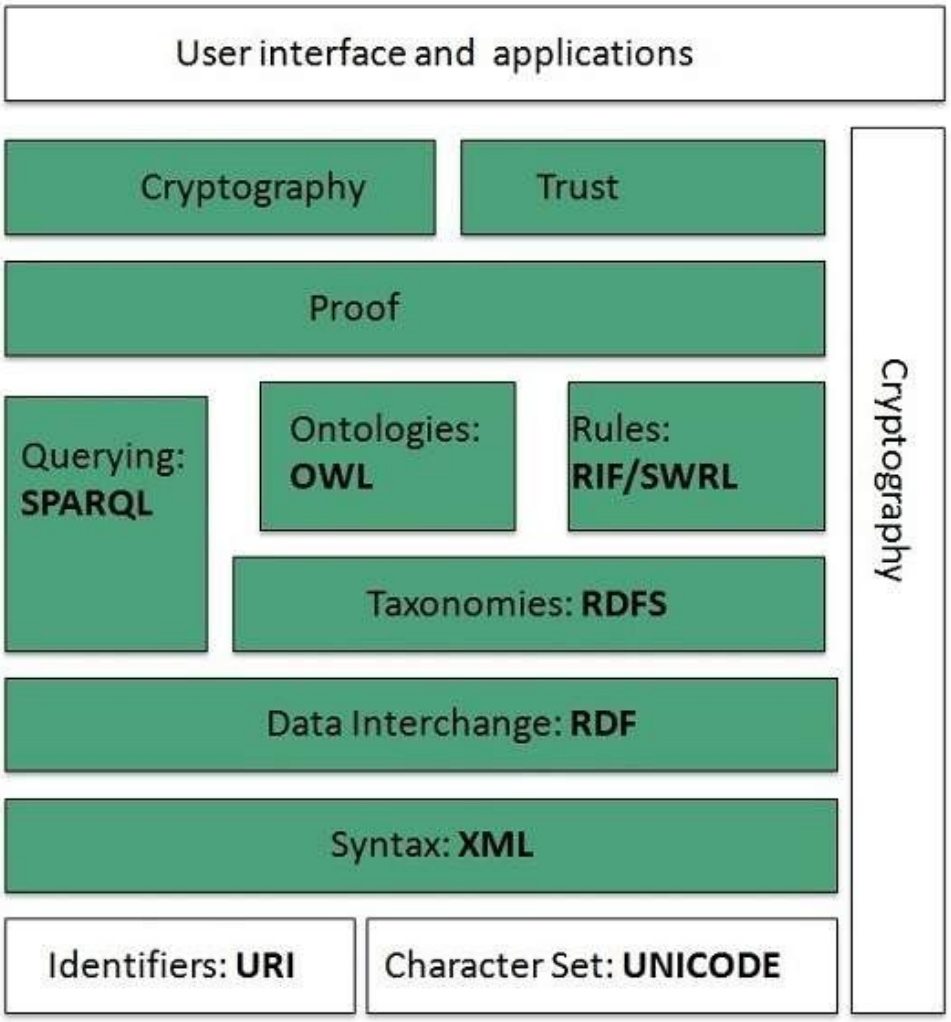
## B.4 Question of Curiosity

### 1. What is WWW? Differentiate between www and internet and draw the architecture of www.

**Ans:** The World Wide Web (WWW) is a network of online content that is formatted in HTML and accessed via HTTP. The term refers to all the interlinked HTML pages that can be accessed over the Internet. The World Wide Web was originally designed in 1991 by Tim Berners-Lee while he was a contractor at CERN.

The Internet is a global network of networks while the Web, also referred formally as World Wide Web (www) is collection of information which is accessed via the Internet. Another way to look at this difference is; the Internet is infrastructure while the Web is service on top of that infrastructure. Alternatively, the Internet can be viewed as a big book-store while the Web can be viewed as a collection of books on that store. At a high level, we can even think of the Internet as hardware and the Web as software!

WWW architecture is divided into several layers as shown in the following diagram:




**2. What are HTTP and FTP? Explain the same.**

**Ans:**

- HTTP

The HyperText Transfer Protocol was originally designed to transfer hypertext documents and the various assets needed to render them. In practice, this is the way information is transferred on the web -- HTML, CSS, images, data are all transferred between web servers and web browsers, as well as between one server and another this way.

HTTP was designed to retrieve a resource from a URL that may or may not match the remote file system (in many web apps, the structure of the URLs has very little to do with the file locations). There is often only a single request in a single http connection and the data uses the same connection as the request.

HTTP is used for many things outside its original design parameters, and it has become one of the most common protocols on the modern internet.

- FTP

FTP is a File Transfer Protocol, for transferring files.

FTP is significantly older, it is a protocol designed to enable the transfer of files over a long-running session. There are a wide array of commands and the intent is to allow you to navigate and browse a remote file system and retrieve files (originally over a separate data connection).

FTP still sees a lot of use, but many files are actually transferred over HTTP instead.

**3. What do you mean by SMTP? Explain in brief.**

**Ans:** SMTP

1. SMTP stands for Simple Mail Transfer Protocol.
2. SMTP is a set of communication guidelines that allow the software to transmit an electronic mail over the internet is called Simple Mail Transfer Protocol.
3. It is a program used for sending messages to other computer users based on e-mail addresses.
4. It provides a mail exchange between users on the same or different computers, and it also supports:
    - It can send a single message to one or more recipients.
    - Sending a message can include text, voice, video or graphics.
    - It can also send the messages on networks outside the internet.
5. The main purpose of SMTP is used to set up communication rules between servers. The servers have a way of identifying themselves and announcing what kind of communication they are trying to perform. They also have a way of handling errors such as incorrect email address. For example, if the recipient address is wrong, then receiving a server reply with an error message of some kind.