

Module 2: HTML Assignment

Web Programming Foundations

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1. Task 1: Basic HTML Structure

1.1 Question

Instructions:

Create `basic.html` with the following requirements:

- Standard HTML structure
- `<h1>` main heading: **Welcome to HTML Lab**
- `<h3>` subheading: Department + Course
- Two paragraphs explaining:
 - What is HTML?
 - Importance of HTML
- Use ``, `<i>`, `<u>`, `
`, `<hr>`
- Display your name in **bold** and *italic*

```
1 <!DOCTYPE html>
2 <html lang="en">
3
4 <head>
5   <meta charset="UTF-8">
6   <title>HTML Basics</title>
7
8   <!-- Internal CSS -->
9   <style>
10    body {
11      font-family: Arial, Helvetica, sans-serif;
12      margin: 30px;
13      line-height: 1.6;
14    }
15
16    h1 {
17      color: #1f2933;
18    }
19
20    h3 {
21      color: #374151;
22    }
23
24    p {
25      margin-bottom: 15px;
26    }
27  </style>
28 </head>
29
30 <body>
31
32   <h1>Welcome to HTML Lab</h1>
33
34   <h3>Department of Computer Science – Web Programming</h3>
35
36   <hr>
37
38   <p>
39     <b>HTML</b> stands for <i>HyperText Markup Language</i>.
40     It is used to create the <u>structure</u> of web pages.<br>
41     HTML uses tags to define elements like headings, paragraphs,
42     images, and links.
43   </p>
44
45   <p>
46     <b>Importance of HTML:</b><br>
47     HTML is the backbone of every website.
48     Without HTML, browsers would have nothing to display.
49   </p>
50
51   <p>
```

```
52      <b><i>Raj</i></b>
53  </p>
54
55  </body>
56
57  </html>
58
```

1.3 Output

Welcome to HTML Lab

Department of Computer Science – Web Programming

HTML stands for HyperText Markup Language. It is used to create the structure of web pages.
HTML uses tags to define elements like headings, paragraphs, images, and links.

Importance of HTML:

HTML is the backbone of every website. Without HTML, browsers would have nothing to display.

Raj

Figure 1: Output of basic.html

2. Task 2: Lists

2.1 Question

Task 2: Working with Text Elements & Lists

Aim: To understand block and inline elements and list structures.

Instructions: Create `lists.html` with the following requirements:

- Heading: **My Skills and Hobbies**
- Unordered list of 5 technical skills
- Ordered list of daily activities
- Use ``, ``, `<mark>`
- Description list (`<dl>`) of 3 terms and definitions

```
1 <!DOCTYPE html>
2 <html lang="en">
3
4 <head>
5   <meta charset="UTF-8">
6   <title>Lists</title>
7
8   <!-- Internal CSS -->
9   <style>
10    body {
11      font-family: Arial, Helvetica, sans-serif;
12      margin: 30px;
13      line-height: 1.6;
14    }
15
16    h2 {
17      color: #1f2933;
18    }
19
20    h3 {
21      color: #374151;
22    }
23
24    ul,
25    ol,
26    dl {
27      margin-bottom: 20px;
28    }
29
30    dt {
31      font-weight: bold;
32    }
33
34    dd {
35      margin-left: 20px;
36    }
37  </style>
38 </head>
39
40 <body>
41
42   <h2>My Skills and Hobbies</h2>
43
44   <h3>Technical Skills</h3>
45   <ul>
46     <li><strong>C++ Programming</strong></li>
47     <li>Python</li>
48     <li><em>HTML</em></li>
49     <li>Cyber Security Basics</li>
50     <li><mark>Linux</mark></li>
51   </ul>
```

```
52 <h3>Daily Activities</h3>
53 <ol>
54     <li>Wake up</li>
55     <li>Attend classes</li>
56     <li>Practice coding</li>
57     <li>Workout</li>
58     <li>Sleep</li>
59 </ol>
60
61 <h3>Key Terms</h3>
62 <dl>
63     <dt>HTML</dt>
64     <dd>Language used to create web pages</dd>
65
66     <dt>Browser</dt>
67     <dd>Software used to view websites</dd>
68
69     <dt>Tag</dt>
70     <dd>Defines an element in HTML</dd>
71 </dl>
72
73 </body>
74
75 </html>
76
77
```

2.3 Output



Figure 2: Output of list.html

3. Task 3: Media Elements

3.1 Question

Task 3: Images and Hyperlinks

Aim: To insert images and implement navigation using hyperlinks.

Instructions: Create `media.html` with the following requirements:

- Insert one image using ``
- Add two hyperlinks:
 - One external link
 - One internal link
- Make the image clickable
- Use the `target="_blank"` attribute

VIT\Codes\Raj\CycleSheet - 1\media.html

```
1 <!DOCTYPE html>
2 <html lang="en">
3
4 <head>
5   <meta charset="UTF-8">
6   <title>Images and Hyperlinks</title>
7
8   <!-- Internal CSS -->
9   <style>
10    body {
11      font-family: Arial, Helvetica, sans-serif;
12      margin: 30px;
13      line-height: 1.6;
14    }
15
16    h2 {
17      color: #1f2933;
18    }
19
20    img {
21      border: 2px solid #ccc;
22      padding: 5px;
23    }
24
25    a {
26      color: blue;
27      text-decoration: none;
28    }
29
30    a:hover {
31      text-decoration: underline;
32    }
33  </style>
34 </head>
35
36 <body>
37
38   <h2>Media Page</h2>
39
40   <!-- Clickable Image with External Link -->
41   <a href="https://www.google.com" target="_blank">
42     
43   </a>
44
45   <br><br>
46
47   <!-- External Hyperlink -->
48   <a href="https://www.wikipedia.org" target="_blank">
49     External Link (Wikipedia)
50   </a>
51
```

```
52 <br><br>
53
54 <!-- Internal Hyperlink -->
55 <a href="basic.html">
56     Internal Link (Basic HTML Page)
57 </a>
58
59 </body>
60
61 </html>
62
```

3.3 Output



Figure 3: Output of media.html

4. Task 4: Semantic HTML

4.1 Question

Aim: To organize content using semantic HTML5 elements.

Instructions: Create `semantic.html` with the following requirements:

- Header containing website title and tagline
- Navigation bar with four links
- Section containing two articles
- Aside with related topics
- Footer containing student name, register number, and academic year

4.2 Code

```
1 <!DOCTYPE html>
2 <html lang="en">
3
4 <head>
5     <meta charset="UTF-8">
6     <title>Semantic Layout</title>
7
8     <!-- Internal CSS -->
9     <style>
10    body {
11        font-family: Arial, Helvetica, sans-serif;
12        margin: 30px;
13        line-height: 1.6;
14    }
15
16    header {
17        border-bottom: 2px solid #333;
18        margin-bottom: 15px;
19    }
20
21    nav {
22        margin-bottom: 20px;
23    }
24
25    nav a {
26        margin-right: 10px;
27        text-decoration: none;
28        font-weight: bold;
29    }
30
31    section {
32        width: 70%;
33        float: left;
34    }
35
36    aside {
37        width: 25%;
38        float: right;
39        border-left: 2px solid #ccc;
40        padding-left: 15px;
41    }
42
43    footer {
44        clear: both;
45        margin-top: 30px;
46        border-top: 2px solid #333;
47        padding-top: 10px;
48        text-align: center;
49    }
50    </style>
51 </head>
```

```
52
53 <body>
54
55     ←— HEADER —→
56     <header>
57         <h1>The First World War</h1>
58         <p>A global conflict that reshaped modern history</p>
59     </header>
60
61     ←— NAVIGATION —→
62     <nav>
63         <a href="semantic.html">Home</a>
64         <a href="causes.html">Causes</a>
65         <a href="battles.html">Battles</a>
66         <a href="aftermath.html">Aftermath</a>
67     </nav>
68
69     ←— MAIN CONTENT —→
70     <section>
71
72         <article>
73             <h2>Overview</h2>
74             <p>
75                 World War I (28 July 1914 – 11 November 1918), also known as the
Great War,
76                 was a global conflict between the Allies and the Central Powers.
77                 It involved Europe, the Middle East, Africa, and the Asia-
Pacific.
78                 The war introduced modern warfare technologies and resulted in
79                 millions of military and civilian casualties.
80             </p>
81         </article>
82
83         <article>
84             <h2>Causes</h2>
85             <p>
86                 The war was caused by rising nationalism, imperial rivalries,
87                 militarism, and complex alliances. The assassination of Archduke
88                 Franz Ferdinand in 1914 triggered a chain reaction of war
declarations
89                 across Europe, eventually drawing many nations into the
conflict.
90             </p>
91         </article>
92
93     </section>
94
95     ←— ASIDE —→
96     <aside>
97         <h3>Related Topics</h3>
98         <ul>
99             <li>Treaty of Versailles</li>
100            <li>Russian Revolution</li>
101            <li>League of Nations</li>
```

```
102      </ul>
103  </aside>
104
105  <!-- FOOTER -->
106  <footer>
107      <p><strong>Raj Tibarewala | 24BYB0038 | 2026</strong></p>
108  </footer>
109
110 </body>
111
112 </html>
113
```

```
1 <!DOCTYPE html>
2 <html lang="en">
3
4 <head>
5   <meta charset="UTF-8">
6   <title>Causes of World War I</title>
7
8   <!-- Internal CSS -->
9   <style>
10    body {
11      font-family: Arial, Helvetica, sans-serif;
12      margin: 30px;
13      line-height: 1.6;
14    }
15
16    header {
17      border-bottom: 2px solid #333;
18      margin-bottom: 15px;
19    }
20
21    nav {
22      margin-bottom: 20px;
23    }
24
25    nav a {
26      margin-right: 10px;
27      text-decoration: none;
28      font-weight: bold;
29    }
30
31    section {
32      width: 70%;
33      float: left;
34    }
35
36    aside {
37      width: 25%;
38      float: right;
39      border-left: 2px solid #ccc;
40      padding-left: 15px;
41    }
42
43    footer {
44      clear: both;
45      margin-top: 30px;
46      border-top: 2px solid #333;
47      padding-top: 10px;
48      text-align: center;
49    }
50   </style>
51 </head>
```

```
52
53 <body>
54
55     ←— HEADER —→
56     <header>
57         <h1>Causes of World War I</h1>
58         <p>Why the world slid into global conflict</p>
59     </header>
60
61     ←— NAVIGATION —→
62     <nav>
63         <a href="semantic.html">Home</a>
64         <a href="causes.html">Causes</a>
65         <a href="battles.html">Battles</a>
66         <a href="aftermath.html">Aftermath</a>
67     </nav>
68
69     ←— MAIN CONTENT —→
70     <section>
71
72         <article>
73             <h2>Main Causes</h2>
74             <p>
75                 The major causes of World War I are often summarized using the
acronym
76                 <strong>M.A.I.N.</strong> – Militarism, Alliances, Imperialism,
and
77                 Nationalism. European powers built massive armies, formed rigid
78                 alliances, competed for colonies, and promoted intense national
pride.
79                 </p>
80             </article>
81
82             <article>
83                 <h2>Immediate Trigger</h2>
84                 <p>
85                     The assassination of Archduke Franz Ferdinand of Austria-Hungary
on
86                     28 June 1914 by Gavrilo Princip set off a chain reaction of war
87                     declarations, eventually pulling most of Europe into conflict.
88                 </p>
89             </article>
90
91         </section>
92
93     ←— ASIDE —→
94     <aside>
95         <h3>Key Terms</h3>
96         <ul>
97             <li>Militarism</li>
98             <li>Alliances</li>
99             <li>Nationalism</li>
100            </ul>
101        </aside>
```

```
102
103     ←— FOOTER —→
104     <footer>
105         <p><strong>Raj Tibarewala | 24BYB0038 | 2026</strong></p>
106     </footer>
107
108 </body>
109
110 </html>
111
```

VIT\Codes\Raj\CycleSheet - 1\Semantic\battles.html

```
1 <!DOCTYPE html>
2 <html lang="en">
3
4 <head>
5   <meta charset="UTF-8">
6   <title>Major Battles of World War I</title>
7
8   <!-- Internal CSS -->
9   <style>
10    body {
11      font-family: Arial, Helvetica, sans-serif;
12      margin: 30px;
13      line-height: 1.6;
14    }
15
16    header {
17      border-bottom: 2px solid #333;
18      margin-bottom: 15px;
19    }
20
21    nav {
22      margin-bottom: 20px;
23    }
24
25    nav a {
26      margin-right: 10px;
27      text-decoration: none;
28      font-weight: bold;
29    }
30
31    section {
32      width: 70%;
33      float: left;
34    }
35
36    aside {
37      width: 25%;
38      float: right;
39      border-left: 2px solid #ccc;
40      padding-left: 15px;
41    }
42
43    footer {
44      clear: both;
45      margin-top: 30px;
46      border-top: 2px solid #333;
47      padding-top: 10px;
48      text-align: center;
49    }
50  </style>
51 </head>
```

```
52
53 <body>
54
55     ←— HEADER —→
56     <header>
57         <h1>Major Battles of World War I</h1>
58         <p>The turning points of the Great War</p>
59     </header>
60
61     ←— NAVIGATION —→
62     <nav>
63         <a href="semantic.html">Home</a>
64         <a href="causes.html">Causes</a>
65         <a href="battles.html">Battles</a>
66         <a href="aftermath.html">Aftermath</a>
67     </nav>
68
69     ←— MAIN CONTENT —→
70     <section>
71
72         <article>
73             <h2>Battle of the Somme</h2>
74             <p>
75                 Fought in 1916, the Battle of the Somme was one of the bloodiest
battles
76                 in history. It marked the first large-scale use of tanks and
resulted
77                 in over one million casualties.
78             </p>
79         </article>
80
81         <article>
82             <h2>Battle of Verdun</h2>
83             <p>
84                 The Battle of Verdun was fought between France and Germany in
1916.
85                 It became a symbol of French resistance and attrition warfare,
86                 lasting nearly ten months.
87             </p>
88         </article>
89
90     </section>
91
92     ←— ASIDE —→
93     <aside>
94         <h3>Other Notable Battles</h3>
95         <ul>
96             <li>Battle of Tannenberg</li>
97             <li>Gallipoli Campaign</li>
98             <li>Battle of Ypres</li>
99         </ul>
100    </aside>
101
102    ←— FOOTER —→
```

```
103 |     <footer>
104 |         <p><strong>Raj Tibarewala | 24BYB0038 | 2026</strong></p>
105 |     </footer>
106 |
107 | </body>
108 |
109 | </html>
110 |
```

```
1 <!DOCTYPE html>
2 <html lang="en">
3
4 <head>
5     <meta charset="UTF-8">
6     <title>Aftermath of World War I</title>
7
8     <!-- Internal CSS -->
9     <style>
10    body {
11        font-family: Arial, Helvetica, sans-serif;
12        margin: 30px;
13        line-height: 1.6;
14    }
15
16    header {
17        border-bottom: 2px solid #333;
18        margin-bottom: 15px;
19    }
20
21    nav {
22        margin-bottom: 20px;
23    }
24
25    nav a {
26        margin-right: 10px;
27        text-decoration: none;
28        font-weight: bold;
29    }
30
31    section {
32        width: 70%;
33        float: left;
34    }
35
36    aside {
37        width: 25%;
38        float: right;
39        border-left: 2px solid #ccc;
40        padding-left: 15px;
41    }
42
43    footer {
44        clear: both;
45        margin-top: 30px;
46        border-top: 2px solid #333;
47        padding-top: 10px;
48        text-align: center;
49    }
50    </style>
51 </head>
```

```
52
53 <body>
54
55     ←— HEADER —→
56     <header>
57         <h1>Aftermath of World War I</h1>
58         <p>The consequences that reshaped the world</p>
59     </header>
60
61     ←— NAVIGATION —→
62     <nav>
63         <a href="semantic.html">Home</a>
64         <a href="causes.html">Causes</a>
65         <a href="battles.html">Battles</a>
66         <a href="aftermath.html">Aftermath</a>
67     </nav>
68
69     ←— MAIN CONTENT —→
70     <section>
71
72         <article>
73             <h2>Treaty of Versailles</h2>
74             <p>
75                 Signed in 1919, the Treaty of Versailles placed heavy penalties
on
76                 Germany, including territorial losses, military restrictions,
77                 and war reparations.
78             </p>
79         </article>
80
81         <article>
82             <h2>Long-Term Impact</h2>
83             <p>
84                 The war led to the collapse of empires, redrew national borders,
85                 and created political instability in Europe. Many historians
86                 believe it directly contributed to the outbreak of World War II.
87             </p>
88         </article>
89
90     </section>
91
92     ←— ASIDE —→
93     <aside>
94         <h3>Historical Effects</h3>
95         <ul>
96             <li>League of Nations</li>
97             <li>Fall of Empires</li>
98             <li>Rise of Extremism</li>
99         </ul>
100    </aside>
101
102    ←— FOOTER —→
103    <footer>
104        <p><strong>Raj Tibarewala | 24BYB0038 | 2026</strong></p>
```

```
105 |     </footer>
106 |
107 | </body>
108 |
109 | </html>
110 |
```

4.3 Output

The First World War

A global conflict that originated in Europe.

[Home](#) [Causes](#) [Battles](#) [Aftermath](#)

Overview

World War I (7 July 1914 – 11 November 1918), also known as the Great War, was a global conflict between the Allies and the Central Powers. It involved Europe, the Middle East, Africa, and the Asia-Pacific. The war introduced modern warfare technologies and resulted in millions of military and civilian casualties.

Causes

The war was caused by rising nationalism, imperial rivalries, militarism, and complex alliances. The assassination of Archduke Franz Ferdinand in 1914 triggered a chain reaction of war declarations across Europe, eventually drawing many nations into the conflict.

Key Terms | 24879800 | 2020

Figure 4: Rendered output of semantic.html

Home Page – semantic.html

Causes of World War I

Why the world went to global conflict

[Home](#) [Causes](#) [Battles](#) [Aftermath](#)

Main Causes

The major causes of World War I are often summarized using the acronym **M.A.I.L.** — Militarism, Alliances, Imperialism, and Industrialism. European powers built massive armies, formed tight alliances, competed for colonies, and pursued intense industrialization.

Immediate Trigger

The assassination of Archduke Franz Ferdinand of Austria-Hungary on 28 June 1914 by Gavrilo Princip set off a chain reaction of war declarations, eventually pulling most of Europe into conflict.

Key Terms | 24879800 | 2020

Figure 5: Rendered output of causes.html

Causes Page – causes.html

Major Battles of World War I

The turning point of the Great War

[Home](#) [Causes](#) [Battles](#) [Aftermath](#)

Battle of the Somme

Fought in 1916, the Battle of the Somme was one of the bloodiest battles in history. It marked the first large-scale use of tanks and resulted in over one million casualties.

Battle of Verdun

The Battle of Verdun was fought between France and Germany in 1916. It became a symbol of fierce resistance and attrition warfare, lasting nearly ten months.

Other Major Battles

- Battle of Somme
- Capture of Verdun
- Battle of Ypres

Key Terms | 24879800 | 2020

Figure 6: Rendered output of battles.html

Battles Page – battles.html

Figure 7: Rendered output of aftermath.html

Aftermath Page – aftermath.html

5. Task 5: Mini Webpage Using Multiple Elements

5.1 Question

Task 5: Mini Webpage Using Multiple Elements

Aim: To practice integrating multiple HTML tags.

Instructions: Create `news.html` with the following requirements:

- Header with site name
- Article with title, two paragraphs, and one image
- Aside with Related News
- Footer with contact information and Back to Top link

VIT\Codes\Raj\CycleSheet - 1\news.html

```
1 <!DOCTYPE html>
2 <html lang="en">
3
4 <head>
5   <meta charset="UTF-8">
6   <title>Daily News</title>
7
8   <!-- Internal CSS -->
9   <style>
10    body {
11      font-family: Arial, Helvetica, sans-serif;
12      margin: 30px;
13      line-height: 1.6;
14    }
15
16    header {
17      border-bottom: 2px solid black;
18      margin-bottom: 15px;
19    }
20
21    article {
22      width: 70%;
23      float: left;
24    }
25
26    article img {
27      margin-top: 10px;
28      width: 100%;
29      max-width: 400px;
30      border: 1px solid #ccc;
31    }
32
33    aside {
34      width: 25%;
35      float: right;
36      border-left: 2px solid #ccc;
37      padding-left: 15px;
38    }
39
40    footer {
41      clear: both;
42      margin-top: 30px;
43      border-top: 2px solid black;
44      padding-top: 10px;
45    }
46  </style>
47 </head>
48
49 <body id="top">
50
51   <!-- HEADER -->
```

```
52 <header>
53     <h1>Daily Tech News</h1>
54 </header>
55
56     <!-- ARTICLE -->
57 <article>
58     <h2>AI Revolution in Education</h2>
59
60     <p>
61         Artificial Intelligence is rapidly transforming the education sector.
62         From automated grading to personalized learning paths, AI tools are
63         helping students learn more efficiently.
64     </p>
65
66     <p>
67         However, experts believe that human guidance is still essential.
68         AI should be used as a supporting tool rather than a complete
69         replacement for teachers.
70     </p>
71
72     
75 </article>
76
77     <!-- ASIDE -->
78 <aside>
79     <h3>Related News</h3>
80     <ul>
81         <li>AI in Healthcare</li>
82         <li>Future of Online Learning</li>
83         <li>Cybersecurity Trends 2026</li>
84     </ul>
85 </aside>
86
87     <!-- FOOTER -->
88 <footer>
89     <p>Contact: dailynews@gmail.com</p>
90     <a href="#top">Back to Top</a>
91 </footer>
92
93 </body>
94
95 </html>
```

5.3 Output



Figure 8: Output of news.html

6. Task 6: Critical Thinking Scenario

6.1 Project 1: EduLearn Academy (Personal Project)

6.1.1 Problem Statement

The objective of this project is to design a single-page informational website for an online learning platform named **EduLearn Academy**. The webpage should be created using only HTML and should demonstrate the use of structural, semantic, and content-related HTML elements.

6.1.2 Design Overview

The EduLearn Academy webpage is structured using semantic HTML elements. The layout includes a header with branding, a navigation bar, a course overview section, faculty details, student reviews presented using an aside element, and a footer containing contact information and navigation links.

6.2 Code

```
1 <!DOCTYPE html>
2 <html lang="en">
3
4 <head>
5   <meta charset="UTF-8">
6   <meta name="viewport" content="width=device-width, initial-scale=1.0">
7   <title>Web Programming Foundations | EduLearn Academy</title>
8   <link rel="stylesheet" href="style.css">
9 </head>
10
11 <body id="top">
12
13   <!-- HEADER -->
14   <header class="site-header">
15     <h1>EduLearn Academy</h1>
16     <p class="tagline">Learn Anywhere, Learn Anytime</p>
17   </header>
18
19   <!-- NAVIGATION -->
20   <nav class="main-nav">
21     <a href="course_page.html">Home</a>
22     <a href="courses.html">Courses</a>
23     <a href="faculty.html">Faculty</a>
24     <a href="contact.html">Contact</a>
25   </nav>
26
27   <!-- MAIN CONTENT -->
28   <main class="content-wrapper">
29
30     <!-- COURSE OVERVIEW -->
31     <section class="course-overview">
32       <h2>Web Programming Foundations</h2>
33
34       <p>
35         The Web Programming Foundations course introduces learners to
36         the
37         core technologies behind modern websites. It builds a strong
38         base
39         in HTML, CSS, and fundamental web concepts, preparing students
40         for
41         advanced frontend and backend development.
42       </p>
43
44       <h3>Topics Covered</h3>
45       <ul>
46         <li>HTML5 Semantic Elements</li>
47         <li>CSS Basics and Layouts</li>
48         <li>Responsive Web Design</li>
49         <li>Web Accessibility</li>
50         <li>Introduction to JavaScript</li>
51       </ul>
52     </section>
53   </main>
54 </body>
```

```
50      <h3>Course Modules</h3>
51      <table>
52          <thead>
53              <tr>
54                  <th>Module No.</th>
55                  <th>Module Name</th>
56                  <th>Duration</th>
57              </tr>
58          </thead>
59          <tbody>
60              <tr>
61                  <td>1</td>
62                  <td>HTML Fundamentals</td>
63                  <td>2 Weeks</td>
64              </tr>
65              <tr>
66                  <td>2</td>
67                  <td>CSS & Layout Techniques</td>
68                  <td>3 Weeks</td>
69              </tr>
70              <tr>
71                  <td>3</td>
72                  <td>Responsive Design</td>
73                  <td>2 Weeks</td>
74              </tr>
75              <tr>
76                  <td>4</td>
77                  <td>Intro to JavaScript</td>
78                  <td>3 Weeks</td>
79              </tr>
80          </tbody>
81      </table>
82  </section>
83
84  <!-- FACULTY DETAILS -->
85  <article class="faculty-details">
86      <h2>Faculty Details</h2>
87
88      
89
90      <h3>DR. KRITHIKA L.B</h3>
91      <p><strong>Designation:</strong> Associate Professor Grade 1</p>
92      <p><strong>Department:</strong> Department of Software and Systems
Engineering</p>
93      <p><strong>Qualification:</strong> Ph.D. in Computer Science</p>
94      <p><strong>Specialization:</strong> Web Technologies & Software
Engineering</p>
95
96      <p>
97          Dr. Krithika L.B. has over 10 years of experience in teaching
and
98          industry-based web development. She has mentored hundreds of
students
```

```
99                 and specializes in building scalable and accessible web
100                applications.
100              </p>
101            </article>
102
103            <!-- STUDENT REVIEWS -->
104            <aside class="student-reviews">
105              <h2>Student Reviews</h2>
106
107              <blockquote>
108                "This course gave me a crystal-clear understanding of how the
109                web works."
110                <cite id="cite">- Kriday Narula</cite>
111              </blockquote>
112
113              <blockquote>
114                "Perfect balance between theory and hands-on learning."
115                <cite id="cite">- Ritik Jindal</cite>
116              </blockquote>
117
118              <blockquote>
119                "A must-have foundation before jumping into JavaScript and
120                React."
121                <cite id="cite">- Priyasha Das</cite>
122              </blockquote>
123            </aside>
124
125          </main>
126
127          <!-- ENROLLMENT -->
128          <section class="enroll-section">
129            <a href="enroll.html" target="_blank" title="Enroll in Web Programming
130            Foundations">
131              Enroll Now
132            </a>
133          </section>
134
135          <!-- FOOTER -->
136          <footer class="site-footer">
137            <p>EduLearn Academy, Bengaluru, India</p>
138            <p>Email: contact@edulearnacademy.com</p>
139            <p>© 2026 EduLearn Academy. All rights reserved.</p>
140            <a href="#top">Back to Top</a>
141          </footer>
142
143        </body>
144
145      </html>
```

VIT\Codes\Raj\Edulearn Academy\contact.html

```
1 <!DOCTYPE html>
2 <html lang="en">
3
4 <head>
5   <meta charset="UTF-8">
6   <title>Contact | EduLearn Academy</title>
7   <link rel="stylesheet" href="style.css">
8 </head>
9
10 <body>
11
12   <header class="site-header">
13     <h1>EduLearn Academy</h1>
14     <p class="tagline">Learn Anywhere, Learn Anytime</p>
15   </header>
16
17   <nav class="main-nav">
18     <a href="course_page.html">Home</a>
19     <a href="courses.html">Courses</a>
20     <a href="faculty.html">Faculty</a>
21     <a href="contact.html">Contact</a>
22   </nav>
23
24   <main class="page-content">
25     <h2>Contact Us</h2>
26
27     <p>Address: EduLearn Academy, Bengaluru, India</p>
28     <p>Email: contact@edulearnacademy.com</p>
29     <p>Phone: +91 98765 43210</p>
30   </main>
31
32   <footer class="site-footer">
33     <p>EduLearn Academy, Bengaluru</p>
34     <p>Email: contact@edulearnacademy.com</p>
35     <p>© 2026 EduLearn Academy</p>
36   </footer>
37
38 </body>
39
40 </html>
41
```

VIT\Codes\Raj\Edulearn Academy\courses.html

```
1 <!DOCTYPE html>
2 <html lang="en">
3
4 <head>
5   <meta charset="UTF-8">
6   <title>Courses | EduLearn Academy</title>
7   <link rel="stylesheet" href="style.css">
8 </head>
9
10 <body>
11
12   <header class="site-header">
13     <h1>EduLearn Academy</h1>
14     <p class="tagline">Learn Anywhere, Learn Anytime</p>
15   </header>
16
17   <nav class="main-nav">
18     <a href="course_page.html">Home</a>
19     <a href="courses.html">Courses</a>
20     <a href="faculty.html">Faculty</a>
21     <a href="contact.html">Contact</a>
22   </nav>
23
24   <main class="page-content">
25     <h2>Our Courses</h2>
26
27     <ul>
28       <li>Web Programming Foundations</li>
29       <li>Advanced JavaScript</li>
30       <li>React Development Bootcamp</li>
31       <li>Backend Development Basics</li>
32     </ul>
33   </main>
34
35   <footer class="site-footer">
36     <p>EduLearn Academy, Bengaluru</p>
37     <p>Email: contact@edulearnacademy.com</p>
38     <p>© 2026 EduLearn Academy</p>
39   </footer>
40
41 </body>
42
43 </html>
44
```

```
1 <!DOCTYPE html>
2 <html lang="en">
3
4 <head>
5   <meta charset="UTF-8">
6   <title>Enroll | EduLearn Academy</title>
7   <link rel="stylesheet" href="style.css">
8 </head>
9
10 <body id="top">
11
12   <header class="site-header">
13     <h1>EduLearn Academy</h1>
14     <p class="tagline">Learn Anywhere, Learn Anytime</p>
15   </header>
16
17   <nav class="main-nav">
18     <a href="course_page.html">Home</a>
19     <a href="courses.html">Courses</a>
20     <a href="faculty.html">Faculty</a>
21     <a href="contact.html">Contact</a>
22   </nav>
23
24   <main class="page-content">
25     <h2>Enroll Now</h2>
26
27     <p>
28       Thank you for your interest in Web Programming Foundations.
29       Enrollment will open soon. Please check back later.
30     </p>
31   </main>
32
33   <footer class="site-footer">
34     <p>EduLearn Academy, Bengaluru</p>
35     <p>Email: contact@edulearnacademy.com</p>
36     <p>© 2026 EduLearn Academy</p>
37     <a href="#top">Back to Top</a>
38   </footer>
39
40 </body>
41
42 </html>
43
```

VIT\Codes\Raj\Edulearn Academy\faculty.html

```
1 <!DOCTYPE html>
2 <html lang="en">
3
4 <head>
5   <meta charset="UTF-8">
6   <title>Faculty | EduLearn Academy</title>
7   <link rel="stylesheet" href="style.css">
8 </head>
9
10 <body>
11
12   <header class="site-header">
13     <h1>EduLearn Academy</h1>
14     <p class="tagline">Learn Anywhere, Learn Anytime</p>
15   </header>
16
17   <nav class="main-nav">
18     <a href="course_page.html">Home</a>
19     <a href="courses.html">Courses</a>
20     <a href="faculty.html">Faculty</a>
21     <a href="contact.html">Contact</a>
22   </nav>
23
24   <main class="page-content">
25     <section>
26       <h2>Meet Our Faculty</h2>
27
28       <article>
29         <h3>Dr. Krithika L.B.</h3>
30         <p>Ph.D. Computer Science</p>
31         <p>Specialization: Web Technologies</p>
32       </article>
33
34       <article>
35         <h3>Mr. Rohan Verma</h3>
36         <p>M.Tech Software Engineering</p>
37         <p>Specialization: JavaScript & React</p>
38       </article>
39     </section>
40   </main>
41
42   <footer class="site-footer">
43     <p>EduLearn Academy, Bengaluru</p>
44     <p>Email: contact@edulearnacademy.com</p>
45     <p>© 2026 EduLearn Academy</p>
46   </footer>
47
48 </body>
49
50 </html>
51
```

VIT\Codes\Raj\Edulearn Academy\style.css

```
1 * {
2     box-sizing: border-box;
3 }
4
5 body {
6     font-family: Arial, Helvetica, sans-serif;
7     margin: 0;
8     line-height: 1.6;
9     background-color: #f5f7fa;
10    color: #333;
11 }
12
13 /* HEADER */
14 .site-header {
15     background-color: #1e293b;
16     color: white
17     padding: 25px;
18     text-align: center;
19 }
20
21 .tagline {
22     font-style: italic;
23     margin-top: 5px;
24 }
25
26 /* NAV */
27 .main-nav {
28     background-color: #334155;
29     padding: 10px;
30     text-align: center;
31 }
32
33 .main-nav a {
34     color: white
35     margin: 0 15px;
36     text-decoration: none;
37     font-weight: bold;
38 }
39
40 .main-nav a:hover {
41     text-decoration: underline;
42 }
43
44 /* MAIN LAYOUT */
45 .content-wrapper {
46     display: flex;
47     gap: 20px;
48     padding: 20px;
49 }
50
51 /* COURSE SECTION */
```

```
52 .course-overview {
53   flex: 2;
54   background: white;
55   padding: 20px;
56   border-radius: 6px;
57 }
58
59 /* TABLE */
60 table {
61   width: 100%;
62   border-collapse: collapse;
63   margin-top: 10px;
64 }
65
66 th,
67 td {
68   border: 1px solid #ccc;
69   padding: 8px;
70   text-align: center;
71 }
72
73 th {
74   background-color: #e2e8f0;
75 }
76
77 /* FACULTY */
78 .faculty-details {
79   flex: 1;
80   background: white;
81   padding: 20px;
82   border-radius: 6px;
83 }
84
85 .faculty-details img {
86   display: block;
87   margin: 10px auto;
88   border-radius: 50%;
89 }
90
91 /* ASIDE */
92 .student-reviews {
93   flex: 1;
94   background: #eef2ff;
95   padding: 20px;
96   border-radius: 6px;
97 }
98
99 blockquote {
100   margin: 15px 0;
101   padding-left: 10px;
102   border-left: 4px solid #6366f1;
103 }
104
```

```
105 cite {
106     display: block;
107     margin-top: 5px;
108     font-style: normal;
109     font-weight: bold;
110     text-align: right;
111 }
112
113 /* ENROLL */
114 .enroll-section {
115     text-align: center;
116     margin: 30px 0;
117 }
118
119 .enroll-section a {
120     background-color: #2563eb;
121     color: white;
122     padding: 12px 25px;
123     text-decoration: none;
124     font-size: 18px;
125     border-radius: 5px;
126 }
127
128 .enroll-section a:hover {
129     background-color: #1d4ed8;
130 }
131
132 /* FOOTER */
133 .site-footer {
134     background-color: #1e293b;
135     color: white;
136     text-align: center;
137     padding: 20px;
138 }
139
140 .site-footer a {
141     color: #93c5fd;
142     text-decoration: none;
143 }
144
145 .page-content {
146     padding: 30px;
147     background: white;
148     margin: 20px;
149     border-radius: 6px;
150 }
151
```

6.3 Output



Figure 9: Rendered output of course page.html

Home Page – course page.html



Figure 10: Rendered output of courses.html

Courses Page – courses.html



Figure 11: Rendered output of contact.html

Contacts Page – contact.html



Figure 12: Rendered output of enroll.html

Enroll Page – enroll.html



Figure 13: Rendered output of faculty.html

Faculty Page – faculty.html

6.4 Project 2: CosmoPedia (Group Project)

6.4.1 Problem Statement

The objective of this project is to design a multi-page educational website named **CosmoPedia**, focusing on the solar system. The website should be created using HTML and should demonstrate the use of semantic structure, navigation, tables, images, and content organization across multiple interconnected webpages.

6.4.2 Design Overview

CosmoPedia is structured as a digital encyclopedia for the solar system. Each webpage represents a celestial body and follows a consistent layout consisting of a header, navigation bar, main content section, and footer. The project uses lists, tables, images, and multimedia elements to present scientific information in an organized and readable format.

6.5 Code

```
1 <!DOCTYPE html>
2 <html lang="en">
3
4 <head>
5   <meta charset="UTF-8">
6   <title>CosmoPedia | Solar System</title>
7
8   <!-- External CSS -->
9   <link rel="stylesheet" href="style.css">
10 </head>
11
12 <body>
13
14   <!-- ----- HEADER ----- -->
15   <header class="site-header">
16     <h1>CosmoPedia</h1>
17     <p class="tagline">A Digital Encyclopedia of Our Solar System</p>
18   </header>
19
20   <!-- ----- NAVIGATION ----- -->
21   <nav class="main-nav">
22     <a href="index.html">Home</a>
23     <a href="mercury.html">Mercury</a>
24     <a href="venus.html">Venus</a>
25     <a href="earth.html">Earth</a>
26     <a href="mars.html">Mars</a>
27     <a href="jupiter.html">Jupiter</a>
28     <a href="saturn.html">Saturn</a>
29     <a href="uranus.html">Uranus</a>
30     <a href="neptune.html">Neptune</a>
31   </nav>
32
33   <!-- ----- MAIN CONTENT ----- -->
34   <main class="page-content">
35
36     <!-- HERO SECTION -->
37     <section class="hero">
38       <h2>The Solar System</h2>
39       <p>
40         Explore the Sun, planets, and the fascinating dynamics of our
cosmic neighborhood.
41       </p>
42     </section>
43
44     <!-- OVERVIEW ARTICLE -->
45     <article class="overview">
46       <p style="font-size: 1.05rem;">
47         Our <b>solar system</b> consists of the <u>Sun</u> and eight
planets that orbit it.
48         Each planet is <i>unique</i> in composition, atmosphere, and
behavior.
49         Click on any planet above to explore detailed information.
```

```
50      </p>
51  </article>
52
53  <!-- PLANET QUICK LINKS -->
54  <section class="planet-grid">
55      <a href="mercury.html" class="planet-card">Mercury</a>
56      <a href="venus.html" class="planet-card">Venus</a>
57      <a href="earth.html" class="planet-card">Earth</a>
58      <a href="mars.html" class="planet-card">Mars</a>
59      <a href="jupiter.html" class="planet-card">Jupiter</a>
60      <a href="saturn.html" class="planet-card">Saturn</a>
61      <a href="uranus.html" class="planet-card">Uranus</a>
62      <a href="neptune.html" class="planet-card">Neptune</a>
63  </section>
64
65  <!-- ASIDE -->
66  <aside class="home-highlight">
67      ■ Select a planet to begin your journey through space.
68  </aside>
69
70 </main>
71
72 <!-- === FOOTER === -->
73  <footer class="site-footer">
74      <p>© 2026 CosmoPedia Project</p>
75  </footer>
76
77 </body>
78
79 </html>
80
```

VIT\Codes\Cosmopedia\mercury.html

```
1 <!DOCTYPE html>
2 <html lang="en">
3
4 <head>
5   <meta charset="UTF-8">
6   <title>Mercury | CosmoPedia</title>
7
8   <link rel="stylesheet" href="style.css">
9
10 <style>
11   .heat-note {
12     background-color: lightgray;
13     color: black;
14     padding: 5px;
15   }
16 </style>
17 </head>
18
19 <body>
20   <header class="site-header">
21     <h1>CosmoPedia</h1>
22     <p class="tagline">A Digital Encyclopedia of Our Solar System</p>
23   </header>
24
25   <nav class="main-nav">
26     <a href="index.html">Home</a>
27     <a href="mercury.html">Mercury</a>
28     <a href="venus.html">Venus</a>
29     <a href="earth.html">Earth</a>
30     <a href="mars.html">Mars</a>
31     <a href="jupiter.html">Jupiter</a>
32     <a href="saturn.html">Saturn</a>
33     <a href="uranus.html">Uranus</a>
34     <a href="neptune.html">Neptune</a>
35   </nav>
36
37   <main class="page-content planet-info">
38     <h2><b><u>Mercury</u></b></h2>
39
40     <div class="planet-frame mercury"></div>
41
42     <p>
43       <b>Mercury</b> is the <u>closest</u> planet to the Sun and the
<i>smallest</i> in the solar system.
44     </p>
45
46     <section class="media-section">
47       <h3>🔊 Audio Narration</h3>
48
49       <div class="audio-card">
50         <audio controls>
51           <source src="audios/mercury.mp3" type="audio/mpeg">
```

```
52          Your browser does not support the audio element.
53      </audio>
54  </div>
55 </section>
56
57
58 <table>
59   <tr>
60     <th>Distance from Sun</th>
61     <td>57.9 million km</td>
62   </tr>
63   <tr>
64     <th>Orbital Period</th>
65     <td>88 days</td>
66   </tr>
67   <tr>
68     <th>Moons</th>
69     <td>None</td>
70   </tr>
71   <tr>
72     <th>Atmosphere</th>
73     <td>Oxygen, Sodium</td>
74   </tr>
75 </table>
76
77 <p class="heat-note">
78   Mercury has extreme temperature variations.
79 </p>
80 </main>
81
82 <footer class="site-footer">
83   <p>© 2026 CosmoPedia Project</p>
84 </footer>
85
86 </body>
87
88 </html>
89
```

VIT\Codes\Cosmopedia\venus.html

```
1 <!DOCTYPE html>
2 <html lang="en">
3
4 <head>
5   <meta charset="UTF-8">
6   <title>Venus | CosmoPedia</title>
7
8   <link rel="stylesheet" href="style.css">
9
10 <style>
11   .hot-note {
12     background-color: lightcoral;
13     color: black;
14     padding: 5px;
15   }
16 </style>
17 </head>
18
19 <body>
20   <header class="site-header">
21     <h1>CosmoPedia</h1>
22     <p class="tagline">A Digital Encyclopedia of Our Solar System</p>
23   </header>
24
25   <nav class="main-nav">
26     <a href="index.html">Home</a>
27     <a href="mercury.html">Mercury</a>
28     <a href="venus.html">Venus</a>
29     <a href="earth.html">Earth</a>
30     <a href="mars.html">Mars</a>
31     <a href="jupiter.html">Jupiter</a>
32     <a href="saturn.html">Saturn</a>
33     <a href="uranus.html">Uranus</a>
34     <a href="neptune.html">Neptune</a>
35   </nav>
36
37   <main class="page-content planet-info">
38     <h2><b><u>Venus</u></b></h2>
39
40     <div class="planet-frame venus"></div>
41
42     <p>
43       <b>Venus</b> is the <u>hottest</u> planet due to its <i>dense
atmosphere</i>.
44     </p>
45
46     <section class="media-section">
47       <h3>🔊 Audio Narration</h3>
48
49       <div class="audio-card">
50         <audio controls>
51           <source src="audios/venus.mp3" type="audio/mpeg">
```

```
52          Your browser does not support the audio element.
53      </audio>
54  </div>
55 </section>
56
57
58 <table>
59   <tr>
60     <th>Distance from Sun</th>
61     <td>108.2 million km</td>
62   </tr>
63   <tr>
64     <th>Orbital Period</th>
65     <td>225 days</td>
66   </tr>
67   <tr>
68     <th>Moons</th>
69     <td>None</td>
70   </tr>
71   <tr>
72     <th>Atmosphere</th>
73     <td>Carbon Dioxide</td>
74   </tr>
75 </table>
76
77 <p class=" hot-note">
78   Venus experiences a runaway greenhouse effect.
79 </p>
80 </main>
81
82 <footer class="site-footer">
83   <p>© 2026 CosmoPedia Project</p>
84 </footer>
85
86 </body>
87
88 </html>
89
```

VIT\Codes\Cosmopedia\earth.html

```
1 <!DOCTYPE html>
2 <html lang="en">
3
4 <head>
5   <meta charset="UTF-8">
6   <title>Earth | CosmoPedia</title>
7
8   <link rel="stylesheet" href="style.css">
9
10 <style>
11   .life-note {
12     background-color: lightgreen;
13     color: black;
14     padding: 5px;
15   }
16 </style>
17 </head>
18
19 <body>
20   <header class="site-header">
21     <h1>CosmoPedia</h1>
22     <p class="tagline">A Digital Encyclopedia of Our Solar System</p>
23   </header>
24
25   <nav class="main-nav">
26     <a href="index.html">Home</a>
27     <a href="mercury.html">Mercury</a>
28     <a href="venus.html">Venus</a>
29     <a href="earth.html">Earth</a>
30     <a href="mars.html">Mars</a>
31     <a href="jupiter.html">Jupiter</a>
32     <a href="saturn.html">Saturn</a>
33     <a href="uranus.html">Uranus</a>
34     <a href="neptune.html">Neptune</a>
35   </nav>
36
37   <main class="page-content planet-info">
38     <h2><b><u>Earth</u></b></h2>
39
40     <div class="planet-frame earth"></div>
41
42     <p>
43       <b>Earth</b> is the only known planet that <u>supports life</u>.
44     </p>
45
46     <section class="media-section">
47       <h3>🔊 Audio Narration</h3>
48
49       <div class="audio-card">
50         <audio controls>
51           <source src="audios/earth.mp3" type="audio/mpeg">
```

```
52          Your browser does not support the audio element.
53      </audio>
54  </div>
55 </section>
56
57
58 <table>
59   <tr>
60     <th>Distance from Sun</th>
61     <td>149.6 million km</td>
62   </tr>
63   <tr>
64     <th>Orbital Period</th>
65     <td>365 days</td>
66   </tr>
67   <tr>
68     <th>Moons</th>
69     <td>1</td>
70   </tr>
71   <tr>
72     <th>Atmosphere</th>
73     <td>Nitrogen, Oxygen</td>
74   </tr>
75 </table>
76
77 <p class="life-note">
78   Earth has liquid water and a stable climate.
79 </p>
80 </main>
81
82 <footer class="site-footer">
83   <p>© 2026 CosmoPedia Project</p>
84 </footer>
85
86 </body>
87
88 </html>
89
```

VIT\Codes\Cosmopedia\mars.html

```
1 <!DOCTYPE html>
2 <html lang="en">
3
4 <head>
5   <meta charset="UTF-8">
6   <title>Mars | CosmoPedia</title>
7
8   <link rel="stylesheet" href="style.css">
9
10 <style>
11   .red-note {
12     background-color: lightpink;
13     color: black;
14     padding: 5px;
15   }
16 </style>
17 </head>
18
19 <body>
20   <header class="site-header">
21     <h1>CosmoPedia</h1>
22     <p class="tagline">A Digital Encyclopedia of Our Solar System</p>
23   </header>
24
25   <nav class="main-nav">
26     <a href="index.html">Home</a>
27     <a href="mercury.html">Mercury</a>
28     <a href="venus.html">Venus</a>
29     <a href="earth.html">Earth</a>
30     <a href="mars.html">Mars</a>
31     <a href="jupiter.html">Jupiter</a>
32     <a href="saturn.html">Saturn</a>
33     <a href="uranus.html">Uranus</a>
34     <a href="neptune.html">Neptune</a>
35   </nav>
36
37   <main class="page-content planet-info">
38     <h2><b><u>Mars</u></b></h2>
39
40     <div class="planet-frame mars"></div>
41
42     <p>
43       <b>Mars</b> is known as the <u>Red Planet</u> due to <i>iron
oxide</i>.
44     </p>
45
46     <section class="media-section">
47       <h3>🔊 Audio Narration</h3>
48
49       <div class="audio-card">
50         <audio controls>
51           <source src="audios/mars.mp3" type="audio/mpeg">
```

```
52          Your browser does not support the audio element.
53      </audio>
54  </div>
55 </section>
56
57
58 <table>
59   <tr>
60     <th>Distance from Sun</th>
61     <td>227.9 million km</td>
62   </tr>
63   <tr>
64     <th>Orbital Period</th>
65     <td>687 days</td>
66   </tr>
67   <tr>
68     <th>Moons</th>
69     <td>2</td>
70   </tr>
71   <tr>
72     <th>Atmosphere</th>
73     <td>Carbon Dioxide</td>
74   </tr>
75 </table>
76
77 <p class="red-note">
78   Mars is a prime candidate for future exploration.
79 </p>
80 </main>
81
82 <footer class="site-footer">
83   <p>© 2026 CosmoPedia Project</p>
84 </footer>
85
86 </body>
87
88 </html>
89
```

```
1 <!DOCTYPE html>
2 <html lang="en">
3
4 <head>
5     <meta charset="UTF-8">
6     <title>Jupiter | CosmoPedia</title>
7
8     <!-- External CSS -->
9     <link rel="stylesheet" href="style.css">
10
11    <!-- Internal CSS -->
12    <style>
13        /* internal page-specific styles */
14        .highlight {
15            background-color: yellow;
16            color: black;
17        }
18
19        .moon-list li {
20            font-weight: bold;
21        }
22    </style>
23 </head>
24
25 <body>
26     <header class="site-header">
27         <h1>CosmoPedia</h1>
28         <p class="tagline">A Digital Encyclopedia of Our Solar System</p>
29     </header>
30
31     <nav class="main-nav">
32         <a href="index.html">Home</a>
33         <a href="mercury.html">Mercury</a>
34         <a href="venus.html">Venus</a>
35         <a href="earth.html">Earth</a>
36         <a href="mars.html">Mars</a>
37         <a href="jupiter.html">Jupiter</a>
38         <a href="saturn.html">Saturn</a>
39         <a href="uranus.html">Uranus</a>
40         <a href="neptune.html">Neptune</a>
41     </nav>
42
43     <main class="page-content planet-info">
44
45         <h2><b><u>Jupiter</u></b></h2>
46
47         <div class="planet-frame jupiter"></div>
48
49         <p><b>Jupiter</b> is the <u>largest</u> planet in the <i>solar
50 system</i>.</p>
51
52         <section class="media-section">
```

```
52      <h3>🔊 Audio Narration</h3>
53
54      <div class="audio-card">
55          <audio controls>
56              <source src="audios/jupiter.mp3" type="audio/mpeg">
57              Your browser does not support the audio element.
58          </audio>
59      </div>
60  </section>
61
62
63      <!-- Table of facts -->
64  <table>
65      <tr>
66          <th>Distance from Sun</th>
67          <td>778.5 million km</td>
68      </tr>
69      <tr>
70          <th>Orbital Period</th>
71          <td>12 years</td>
72      </tr>
73      <tr>
74          <th>Moons</th>
75          <td>79</td>
76      </tr>
77      <tr>
78          <th>Atmosphere</th>
79          <td>Hydrogen, Helium</td>
80      </tr>
81  </table>
82
83      <!-- List of major moons -->
84  <h3>Major Moons</h3>
85  <ul class="moon-list">
86      <li><b>Io</b></li>
87      <li><b>Europa</b></li>
88      <li><b>Ganymede</b></li>
89      <li><b>Callisto</b></li>
90  </ul>
91
92      <p class="highlight">Jupiter is known for the Great Red Spot, a huge
93      storm system.</p>
94
95
96  <footer class="site-footer">
97      <p>© 2026 CosmoPedia Project</p>
98  </footer>
99
100 </body>
101
102 </html>
103
```

VIT\Codes\Cosmopedia\saturn.html

```
1 <!DOCTYPE html>
2 <html lang="en">
3
4 <head>
5   <meta charset="UTF-8">
6   <title>Saturn | CosmoPedia</title>
7
8   <!-- External CSS -->
9   <link rel="stylesheet" href="style.css">
10
11  <!-- Internal CSS -->
12  <style>
13    .ring-note {
14      background-color: lightblue;
15      color: black;
16      padding: 5px;
17    }
18  </style>
19 </head>
20
21 <body>
22   <header class="site-header">
23     <h1>CosmoPedia</h1>
24     <p class="tagline">A Digital Encyclopedia of Our Solar System</p>
25   </header>
26
27   <nav class="main-nav">
28     <a href="index.html">Home</a>
29     <a href="mercury.html">Mercury</a>
30     <a href="venus.html">Venus</a>
31     <a href="earth.html">Earth</a>
32     <a href="mars.html">Mars</a>
33     <a href="jupiter.html">Jupiter</a>
34     <a href="saturn.html">Saturn</a>
35     <a href="uranus.html">Uranus</a>
36     <a href="neptune.html">Neptune</a>
37   </nav>
38
39   <main class="page-content planet-info">
40     <h2><b><u>Saturn</u></b></h2>
41
42     <div class="planet-frame saturn"></div>
43
44     <p>
45       <b>Saturn</b> is famous for its <u>ring system</u> and is a <i>gas
giant</i>.
46     </p>
47
48     <section class="media-section">
49       <h3>🔊 Audio Narration</h3>
50
51       <div class="audio-card">
```

```
52         <audio controls>
53             <source src="audios/saturn.mp3" type="audio/mpeg">
54             Your browser does not support the audio element.
55         </audio>
56     </div>
57 </section>
58
59
60     <table>
61         <tr>
62             <th>Distance from Sun</th>
63             <td>1.43 billion km</td>
64         </tr>
65         <tr>
66             <th>Orbital Period</th>
67             <td>29 years</td>
68         </tr>
69         <tr>
70             <th>Moons</th>
71             <td>82</td>
72         </tr>
73         <tr>
74             <th>Atmosphere</th>
75             <td>Hydrogen, Helium</td>
76         </tr>
77     </table>
78
79     <p class="ring-note">
80         Saturn's rings are made of ice and rock.
81     </p>
82 </main>
83
84 <footer class="site-footer">
85     <p>© 2026 CosmoPedia Project</p>
86 </footer>
87
88 </body>
89
90 </html>
91
```

VIT\Codes\Cosmopedia\uranus.html

```
1 <!DOCTYPE html>
2 <html lang="en">
3
4 <head>
5     <meta charset="UTF-8">
6     <title>Uranus | CosmoPedia</title>
7
8     <!-- External CSS -->
9     <link rel="stylesheet" href="style.css">
10
11    <!-- Internal CSS -->
12    <style>
13        .tilt-note {
14            background-color: lightgreen;
15            color: black;
16            padding: 5px;
17        }
18    </style>
19 </head>
20
21 <body>
22     <header class="site-header">
23         <h1>CosmoPedia</h1>
24         <p class="tagline">A Digital Encyclopedia of Our Solar System</p>
25     </header>
26
27     <nav class="main-nav">
28         <a href="index.html">Home</a>
29         <a href="mercury.html">Mercury</a>
30         <a href="venus.html">Venus</a>
31         <a href="earth.html">Earth</a>
32         <a href="mars.html">Mars</a>
33         <a href="jupiter.html">Jupiter</a>
34         <a href="saturn.html">Saturn</a>
35         <a href="uranus.html">Uranus</a>
36         <a href="neptune.html">Neptune</a>
37     </nav>
38
39     <main class="page-content planet-info">
40         <h2><b><u>Uranus</u></b></h2>
41
42         <div class="planet-frame uranus"></div>
43
44         <p>
45             <b>Uranus</b> rotates on its <u>side</u>, making it <i>unique</i>.
46         </p>
47
48         <section class="media-section">
49             <h3>🔊 Audio Narration</h3>
50
51             <div class="audio-card">
```

```
52         <audio controls>
53             <source src="audios/uranus.mp3" type="audio/mpeg">
54             Your browser does not support the audio element.
55         </audio>
56     </div>
57 </section>
58
59
60     <table>
61         <tr>
62             <th>Distance from Sun</th>
63             <td>2.87 billion km</td>
64         </tr>
65         <tr>
66             <th>Orbital Period</th>
67             <td>84 years</td>
68         </tr>
69         <tr>
70             <th>Moons</th>
71             <td>27</td>
72         </tr>
73         <tr>
74             <th>Atmosphere</th>
75             <td>Hydrogen, Methane</td>
76         </tr>
77     </table>
78
79     <p class="tilt-note">
80         Uranus has an axial tilt of about 98°.
81     </p>
82 </main>
83
84 <footer class="site-footer">
85     <p>© 2026 CosmoPedia Project</p>
86 </footer>
87
88 </body>
89
90 </html>
91
```

VIT\Codes\Cosmopedia\neptune.html

```
1 <!DOCTYPE html>
2 <html lang="en">
3
4 <head>
5     <meta charset="UTF-8">
6     <title>Neptune | CosmoPedia</title>
7
8     <!-- External CSS -->
9     <link rel="stylesheet" href="style.css">
10
11    <!-- Internal CSS -->
12    <style>
13        .wind-note {
14            background-color: lightcoral;
15            color: black;
16            padding: 5px;
17        }
18    </style>
19 </head>
20
21 <body>
22     <header class="site-header">
23         <h1>CosmoPedia</h1>
24         <p class="tagline">A Digital Encyclopedia of Our Solar System</p>
25     </header>
26
27     <nav class="main-nav">
28         <a href="index.html">Home</a>
29         <a href="mercury.html">Mercury</a>
30         <a href="venus.html">Venus</a>
31         <a href="earth.html">Earth</a>
32         <a href="mars.html">Mars</a>
33         <a href="jupiter.html">Jupiter</a>
34         <a href="saturn.html">Saturn</a>
35         <a href="uranus.html">Uranus</a>
36         <a href="neptune.html">Neptune</a>
37     </nav>
38
39     <main class="page-content planet-info">
40         <h2><b><u>Neptune</u></b></h2>
41
42         <div class="planet-frame neptune"></div>
43
44         <p>
45             <b>Neptune</b> is the <u>farthest</u> planet and known for <i>strong
winds</i>.
46         </p>
47
48         <section class="media-section">
49             <h3>🔊 Audio Narration</h3>
50
51             <div class="audio-card">
```

```
52         <audio controls>
53             <source src="audios/neptune.mp3" type="audio/mpeg">
54             Your browser does not support the audio element.
55         </audio>
56     </div>
57 </section>
58
59
60     <table>
61         <tr>
62             <th>Distance from Sun</th>
63             <td>4.5 billion km</td>
64         </tr>
65         <tr>
66             <th>Orbital Period</th>
67             <td>165 years</td>
68         </tr>
69         <tr>
70             <th>Moons</th>
71             <td>14</td>
72         </tr>
73         <tr>
74             <th>Atmosphere</th>
75             <td>Hydrogen, Methane</td>
76         </tr>
77     </table>
78
79     <p class="wind-note">
80         Neptune has the fastest winds in the solar system.
81     </p>
82 </main>
83
84 <footer class="site-footer">
85     <p>© 2026 CosmoPedia Project</p>
86 </footer>
87
88 </body>
89
90 </html>
91
```

VIT\Codes\Cosmopedia\style.css

```
1  /* =====
2   GLOBAL RESET & BASE
3   ===== */
4  *
5  *   box-sizing: border-box;
6  *
7  *
8  body {
9     margin: 0;
10    font-family: Arial, Helvetica, sans-serif;
11    background: radial-gradient(circle at top, #020617, #0b0f1a);
12    color: #e5e7eb;
13    line-height: 1.7;
14 }
15
16 /* =====
17   HEADER
18   ===== */
19 .site-header {
20    text-align: center;
21    padding: 32px;
22    background: #020617;
23    border-bottom: 1px solid #1f2933;
24 }
25
26 .site-header h1 {
27    margin: 0;
28    font-size: 2.6rem;
29    letter-spacing: 1px;
30 }
31
32 .tagline {
33    opacity: 0.8;
34    margin-top: 6px;
35 }
36
37 /* =====
38   NAVIGATION
39   ===== */
40 .main-nav {
41    background-color: #020617;
42    padding: 12px;
43    text-align: center;
44    border-bottom: 1px solid #1f2933;
45 }
46
47 .main-nav a {
48    color: #93c5fd;
49    text-decoration: none;
50    margin: 0 12px;
51    font-weight: bold;
```

```
52     transition: color 0.2s ease;
53 }
54
55 .main-nav a:hover {
56     color: #bfdbfe;
57     text-decoration: underline;
58 }
59
60 /* =====
61      MAIN CONTENT WRAPPER
62 ===== */
63 .page-content {
64     padding: 30px;
65     max-width: 900px;
66     margin: auto;
67 }
68
69 .page-content h2 {
70     margin-top: 0;
71     margin-bottom: 12px;
72     border-bottom: 2px solid #1f2933;
73     padding-bottom: 6px;
74 }
75
76 .page-content p {
77     margin-bottom: 15px;
78 }
79
80 /* =====
81      HOME PAGE - HERO
82 ===== */
83 .hero {
84     text-align: center;
85     padding: 50px 20px;
86 }
87
88 .hero h2 {
89     font-size: 2.4rem;
90     margin-bottom: 10px;
91 }
92
93 .hero p {
94     font-size: 1.1rem;
95     opacity: 0.85;
96 }
97
98 /* =====
99      HOME PAGE - PLANET GRID
100 ===== */
101 .planet-grid {
102     display: grid;
103     grid-template-columns: repeat(auto-fit, minmax(120px, 1fr));
104     gap: 20px;
105     margin: 50px 0;
```

```
106 }
107
108 .planet-card {
109     background: ■ #020617;
110     border: 1px solid #1f2933;
111     padding: 20px;
112     text-align: center;
113     border-radius: 12px;
114     color: ■ #93c5fd;
115     text-decoration: none;
116     font-weight: bold;
117     transition: transform 0.2s ease, box-shadow 0.2s ease;
118 }
119
120 .planet-card:hover {
121     transform: translateY(-6px);
122     box-shadow: 0 0 20px rgba(147, 197, 253, 0.25);
123 }
124
125 /* =====
126          HOME PAGE – ASIDE
127 ===== */
128 .home-highlight {
129     text-align: center;
130     padding: 16px;
131     background-color: ■ #020617;
132     border-left: 4px solid #93c5fd;
133     margin: 30px 0;
134 }
135
136 /* =====
137          PLANET PAGES – PLANET DISPLAY
138 ===== */
139 .planet-frame {
140     width: 260px;
141     height: 260px;
142     margin: 2rem auto;
143     border-radius: 50%;
144     overflow: hidden;
145
146     background-size: cover;
147     background-position: center;
148
149     animation: breathe 6s ease-in-out infinite,
150                slow-spin 60s linear infinite;
151
152     box-shadow: 0 0 30px rgba(255, 255, 255, 0.2);
153 }
154
155 /* Individual planet images */
156 .planet-frame.mercury {
157     background-image: url("images/Mercury.jpg");
158 }
159
```

```
160 .planet-frame.venus {
161   background-image: url("images/Venus.jpg");
162 }
163
164 .planet-frame.earth {
165   background-image: url("images/Earth.jpg");
166 }
167
168 .planet-frame.mars {
169   background-image: url("images/Mars.jpg");
170 }
171
172 .planet-frame.jupiter {
173   background-image: url("images/Jupiter.jpg");
174 }
175
176 .planet-frame.saturn {
177   background-image: url("images/Saturn.jpg");
178 }
179
180 .planet-frame.uranus {
181   background-image: url("images/Uranus.jpg");
182 }
183
184 .planet-frame.neptune {
185   background-image: url("images/Neptune.jpg");
186 }
187
188 /* Animations */
189 @keyframes slow-spin {
190   from {
191     transform: rotate(0deg);
192   }
193
194   to {
195     transform: rotate(360deg);
196   }
197 }
198
199 @keyframes breathe {
200   0% {
201     transform: scale(1) translateY(0);
202   }
203
204   50% {
205     transform: scale(1.04) translateY(-6px);
206   }
207
208   100% {
209     transform: scale(1) translateY(0);
210   }
211 }
212
213 /* ===== */
```

```
214          TABLES
215  ===== */
216  table {
217      width: 100%;
218      border-collapse: collapse;
219      margin-top: 20px;
220      background-color: ■ #020617;
221  }
222
223  th,
224  td {
225      border: 1px solid #1f2933;
226      padding: 10px;
227      text-align: center;
228  }
229
230  th {
231      font-weight: bold;
232  }
233
234  /* =====
235          AUDIO
236  ===== */
237  .audio-card {
238      background: ■ #020617;
239      border: 1px solid #1f2933;
240      border-radius: 14px;
241      padding: 14px;
242      max-width: 460px;
243      margin: 30px auto;
244  }
245
246  .audio-card:hover {
247      box-shadow: 0 0 30px rgba(147, 197, 253, 0.2);
248  }
249
250  audio {
251      width: 100%;
252      accent-color: ■ #93c5fd;
253  }
254
255  /* =====
256          DETAILS / SUMMARY
257  ===== */
258  details {
259      background-color: ■ #020617;
260      border: 1px solid #1f2933;
261      border-radius: 10px;
262      padding: 12px;
263      margin: 20px 0;
264  }
265
266  summary {
```

```
267     font-weight: bold;
268     cursor: pointer;
269 }
270
271 /* =====
272      MARK / ABBR / METER
273 ===== */
274 mark {
275     background-color: ■ #7c2d12;
276     color: □ white
277     padding: 2px 4px;
278 }
279
280 abbr {
281     border-bottom: 1px dotted #93c5fd;
282     cursor: help;
283 }
284
285 meter,
286 progress {
287     width: 100%;
288 }
289
290 /* =====
291      FOOTER
292 ===== */
293 .site-footer {
294     text-align: center;
295     padding: 20px;
296     background-color: ■ #020617;
297     margin-top: 40px;
298     border-top: 1px solid #1f2933;
299 }
300
301 .site-footer p {
302     margin: 0;
303     font-size: 0.9rem;
304     opacity: 0.8;
305 }
306
```

6.6 Output

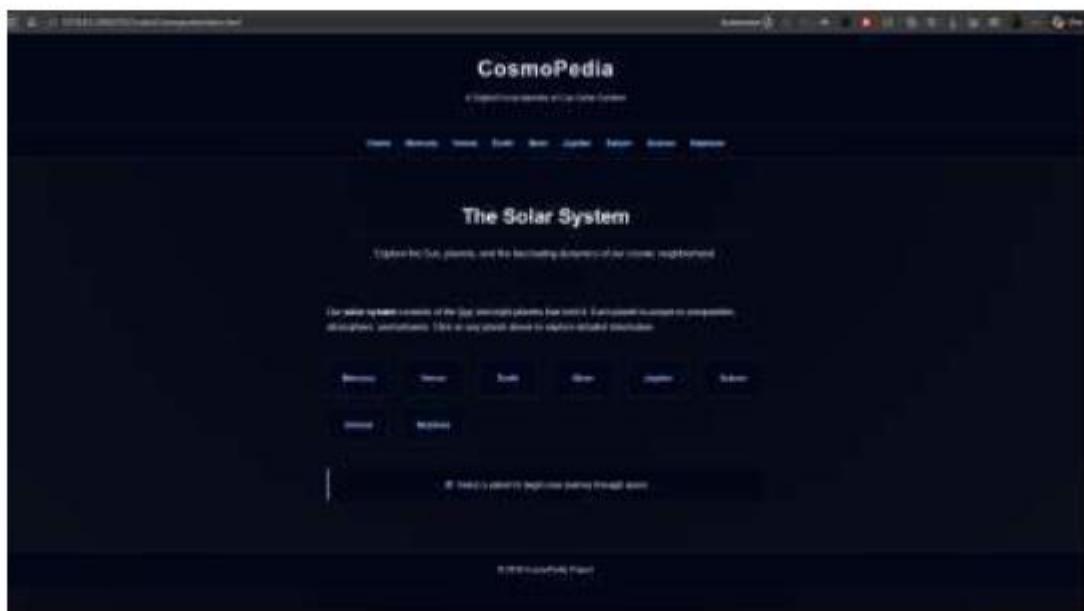


Figure 14: Rendered output of CosmoPedia home page

Home Page – index.html



Figure 15: Rendered output of Mercury page in CosmoPedia

Planet Page – mercury.html

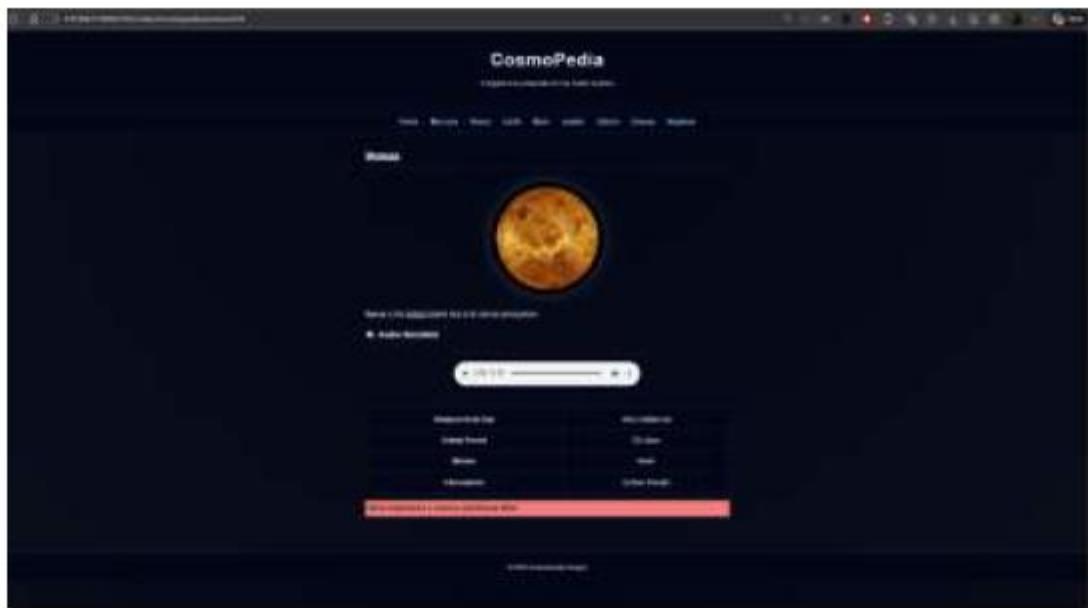


Figure 16: Rendered output of Venus page in CosmoPedia

Planet Page – venus.html



Figure 17: Rendered output of Earth page in CosmoPedia

Planet Page – earth.html

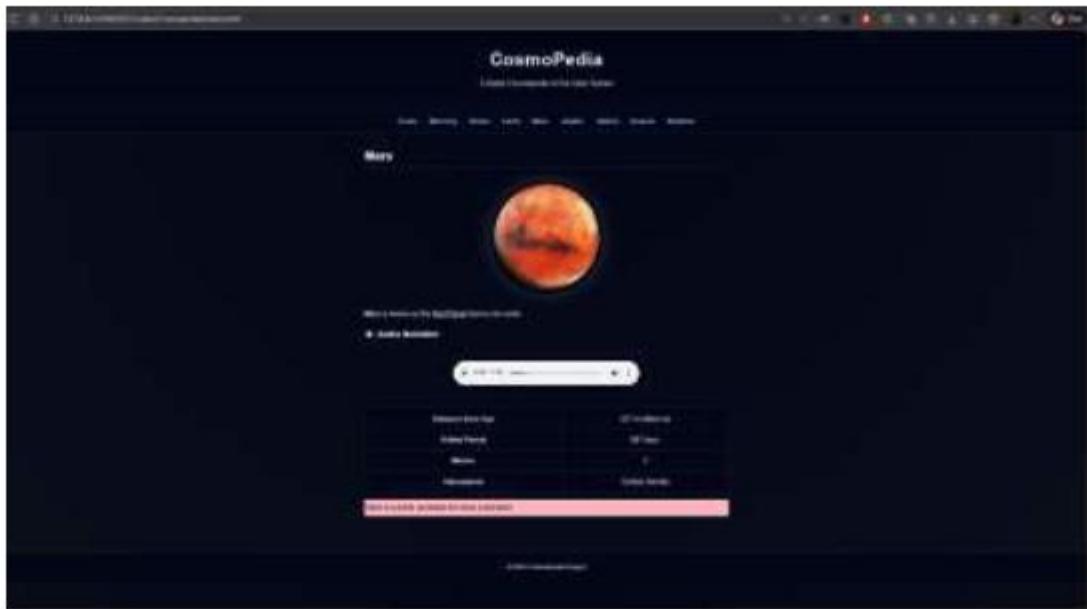


Figure 18: Rendered output of Mars page in CosmoPedia

Planet Page – mars.html

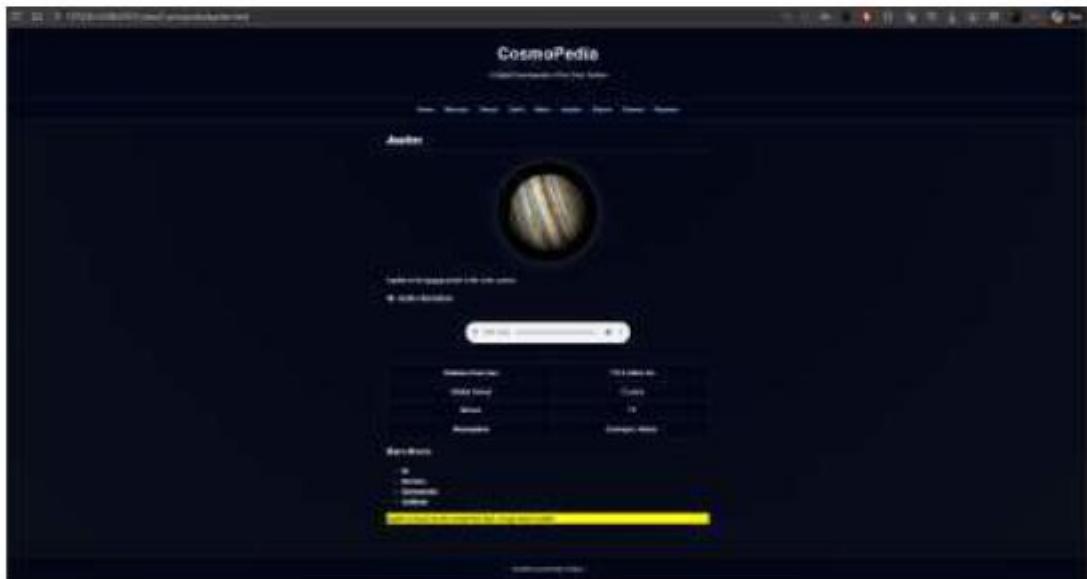


Figure 19: Rendered output of Jupiter page in CosmoPedia

Planet Page – jupiter.html

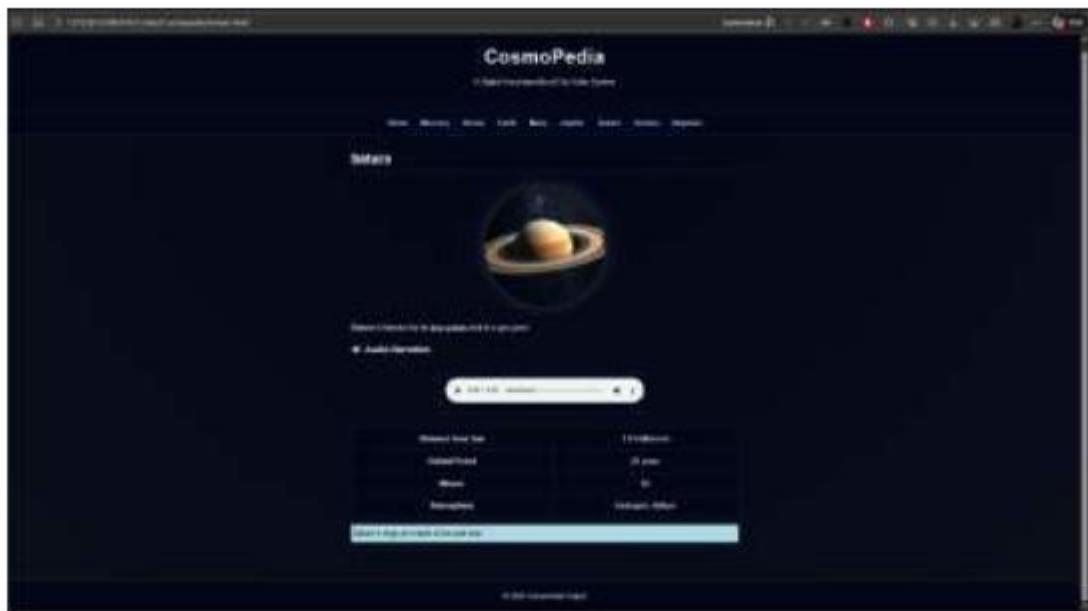


Figure 20: Rendered output of Saturn page in CosmoPedia

Planet Page – saturn.html

Figure 21: Rendered output of Uranus page in CosmoPedia

Planet Page – uranus.html



Figure 22: Rendered output of Neptune page in CosmoPedia

Planet Page – neptune.html