1. Introduction

HTML (HyperText Markup Language) is the standard language for creating web pages. This lab manual is designed to provide hands-on practice with HTML elements, structure, and best practices.

By the end of this lab course, students should be able to:

- Structure a basic web page
- Use HTML elements effectively
- Design forms, tables, lists, and embed media
- Create links and manage navigation

2. Lab Requirements

- A computer with a text editor installed (e.g., VS Code, Sublime Text, Atom, Notepad++)
- Modern web browser (e.g., Chrome, Firefox)
- Basic knowledge of computer file systems

3. Lab Setup Instructions

- 1. Create a working folder, e.g., 'html_lab/'
- 2. For each experiment, create a new '.html' file.
- 3. Save your work frequently.
- 4. Open your HTML files in a browser to test.

4. Experiments

Experiment 1: Basic HTML Structure

<!DOCTYPE html>

<html>

<head>

<title>My First Web Page</title>

```
</head>
<body>
<h1>Welcome to My Page</h1>
This is my first paragraph.
This is another paragraph with a line break.<br>See how it works!
</body>
</html>
```

Experiment 2: Lists in HTML

```
<!DOCTYPE html>
<html>
<head>
 <title>HTML Lists</title>
</head>
<body>
 <h2>Ordered List</h2>
 <0|>
   First Item
   Second Item
   Third Item
 <h2>Unordered List</h2>
 Apple
   Banana
   Cherry
 </body>
</html>
```

Experiment 3: Creating Links and Images

```
<!DOCTYPE html>
<html>
<head>
    <title>Links and Images</title>
</head>
<body>
    <h1>My Favorite Website</h1>
    <a href="https://www.Google.com" target="_blank">Visit Google</a>
<h1>My Favorite Image</h1>
    <img src="image.jpg" alt="A beautiful scenery" width="300">
</body>
</html>
```

Experiment 4: Creating Tables

```
Math
4td>Math
95

Jane
4td>Science
4td>90

>90

</body>
</html>
```

Experiment 5: HTML Forms

```
<!DOCTYPE html>
<html>
<head>
  <title>Simple Form</title>
</head>
<body>
  <h1>Registration Form</h1>
  <form action="/submit">
    Name: <input type="text" name="name"><br><br>
    Email: <input type="email" name="email"><br><br>
    Password: <input type="password" name="password"><br><br>
    Gender:
    <input type="radio" name="gender" value="male"> Male
    <input type="radio" name="gender" value="female"> Female<br><br>
    <input type="submit" value="Register">
  </form>
</body>
</html>
```

Experiment 6: Embedding Multimedia

```
<!DOCTYPE html>
<html>
<head>
  <title>Media Embedding</title>
</head>
<body>
  <h1>My Favorite Video</h1>
  <video width="320" height="240" controls>
    <source src="video.mp4" type="video/mp4">
    Your browser does not support the video tag.
  </video>
  <h1>My Favorite Song</h1>
  <audio controls>
    <source src="audio.mp3" type="audio/mp3">
    Your browser does not support the audio tag.
  </audio>
</body>
</html>
```

5. Assignments and Exercises

- 1. Create a Personal Portfolio Web Page
- 2. Create a Table Showing Your Weekly Schedule
- 3. Design a Form for Feedback
- 4. Embed a YouTube Video and a Map

6. References

- MDN Web Docs HTML (https://developer.mozilla.org/en-US/docs/Web/HTML)
- W3Schools HTML Tutorial (https://www.w3schools.com/html/)