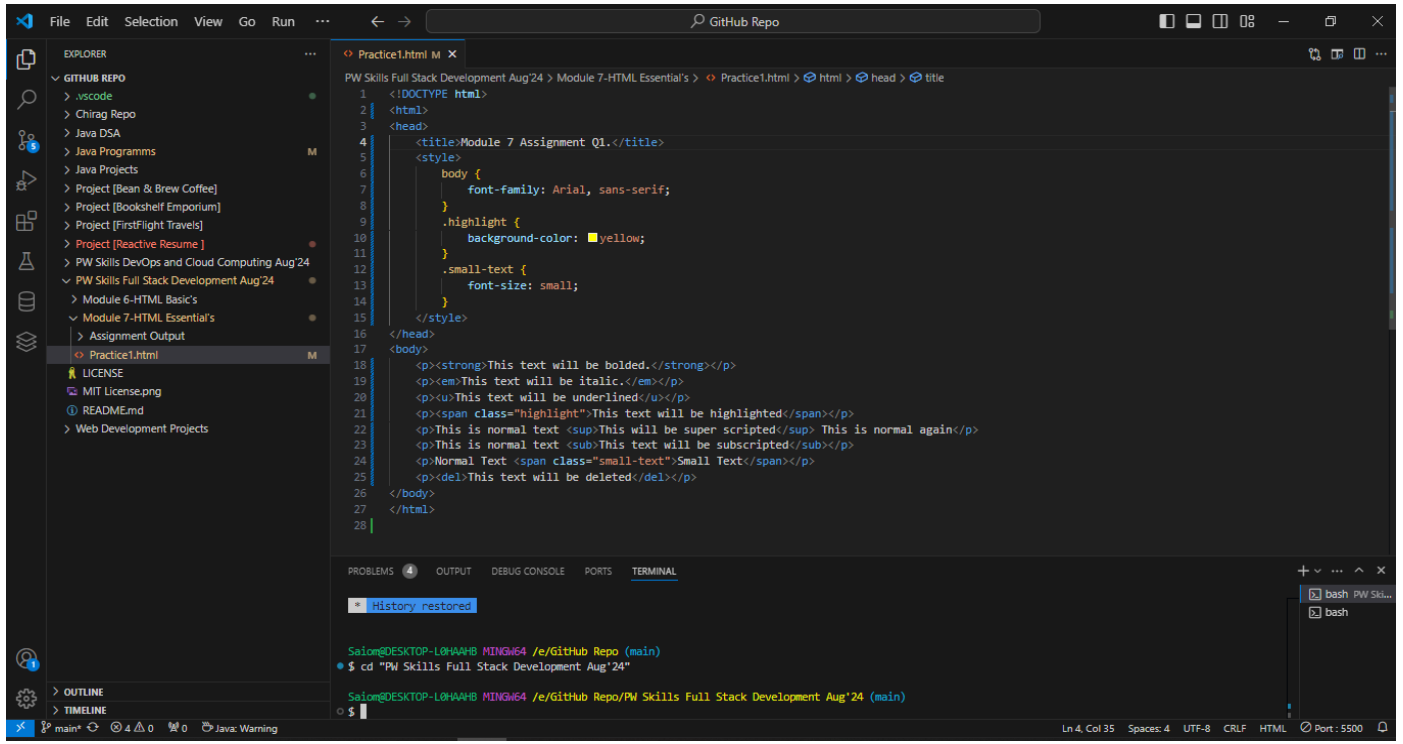


Module -7 Assignment

Q1.) Build a simple webpage that displays text as shown in the below image.

Output-



```
1 <!DOCTYPE html>
2 <html>
3 <head>
4   <title>Module 7 Assignment Q1.</title>
5   <style>
6     body {
7       font-family: Arial, sans-serif;
8     }
9     .highlight {
10      background-color: yellow;
11    }
12    .small-text {
13      font-size: small;
14    }
15  </style>
16 </head>
17 <body>
18   <p><strong>This text will be bolded.</strong></p>
19   <p><em>This text will be italic.</em></p>
20   <p><u>This text will be underlined</u></p>
21   <p><span class="highlight">This text will be highlighted</span></p>
22   <p>This is normal text <sup>This will be super scripted</sup> This is normal again</p>
23   <p>This is normal text <sub>This text will be subscripted</sub></p>
24   <p>Normal Text <span class="small-text">Small Text</span></p>
25   <p><del>This text will be deleted</del></p>
26 </body>
27 </html>
28
```

PROBLEMS (4) OUTPUT DEBUG CONSOLE PORTS TERMINAL

History restored

Saion@DESKTOP-L0HAAHB MINGW64 /e/Github Repo (main)

• \$ cd "PW Skills Full Stack Development Aug'24"

Saion@DESKTOP-L0HAAHB MINGW64 /e/Github Repo/PW Skills Full Stack Development Aug'24 (main)

\$

This text will be bolded.

This text will be italic.

This text will be underlined

This text will be highlighted

This is normal text ^{This will be super scripted} This is normal again

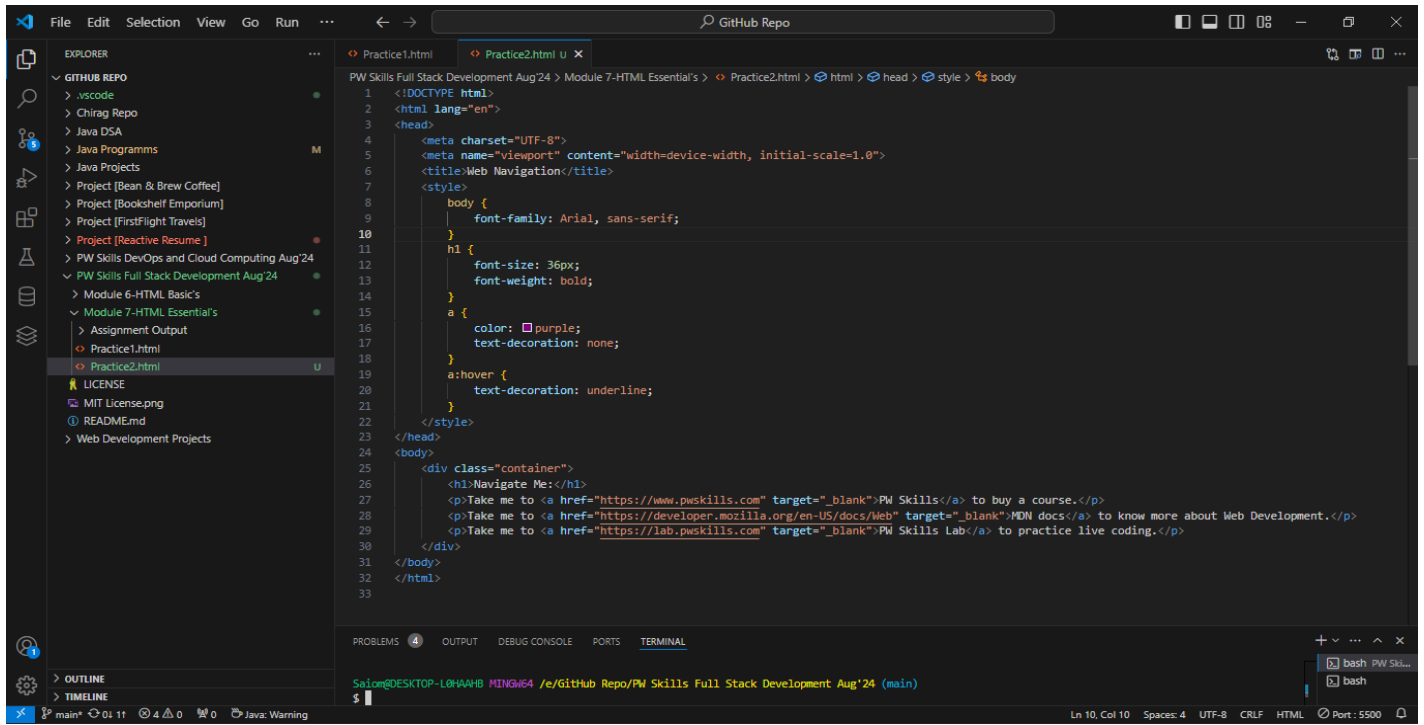
This is normal text _{This text will be subscripted}

Normal Text Small Text

~~This text will be deleted~~

Q2.) Build a simple webpage that helps users navigate different web development-related websites. Note: On clicking the hyperlink, the web pages should open in a new tab. Below is a reference image.

Output-



The screenshot shows a VS Code editor window with a file explorer on the left and a code editor in the center. The file explorer shows a project structure with a 'Web Development Projects' folder containing 'Practice1.html' and 'Practice2.html'. The code editor displays the content of 'Practice2.html', which is an HTML document with a title 'Web Navigation' and three hyperlinks. The hyperlinks are styled with a purple color and an underline on hover. The terminal at the bottom shows the command prompt for the project directory.

```
1 <!DOCTYPE html>
2 <html lang="en">
3 <head>
4   <meta charset="UTF-8">
5   <meta name="viewport" content="width=device-width, initial-scale=1.0">
6   <title>Web Navigation</title>
7 </head>
8 <body>
9   <div>
10     <h1>Web Navigation</h1>
11   </div>
12   <div>
13     <a href="https://www.pwskills.com" target="_blank">PW Skills</a> to buy a course.</p>
14     <a href="https://developer.mozilla.org/en-US/docs/Web" target="_blank">MDN docs</a> to know more about Web Development.</p>
15     <a href="https://lab.pwskills.com" target="_blank">PW Skills Lab</a> to practice live coding.</p>
16   </div>
17 </body>
18 </html>
```

Navigate Me:

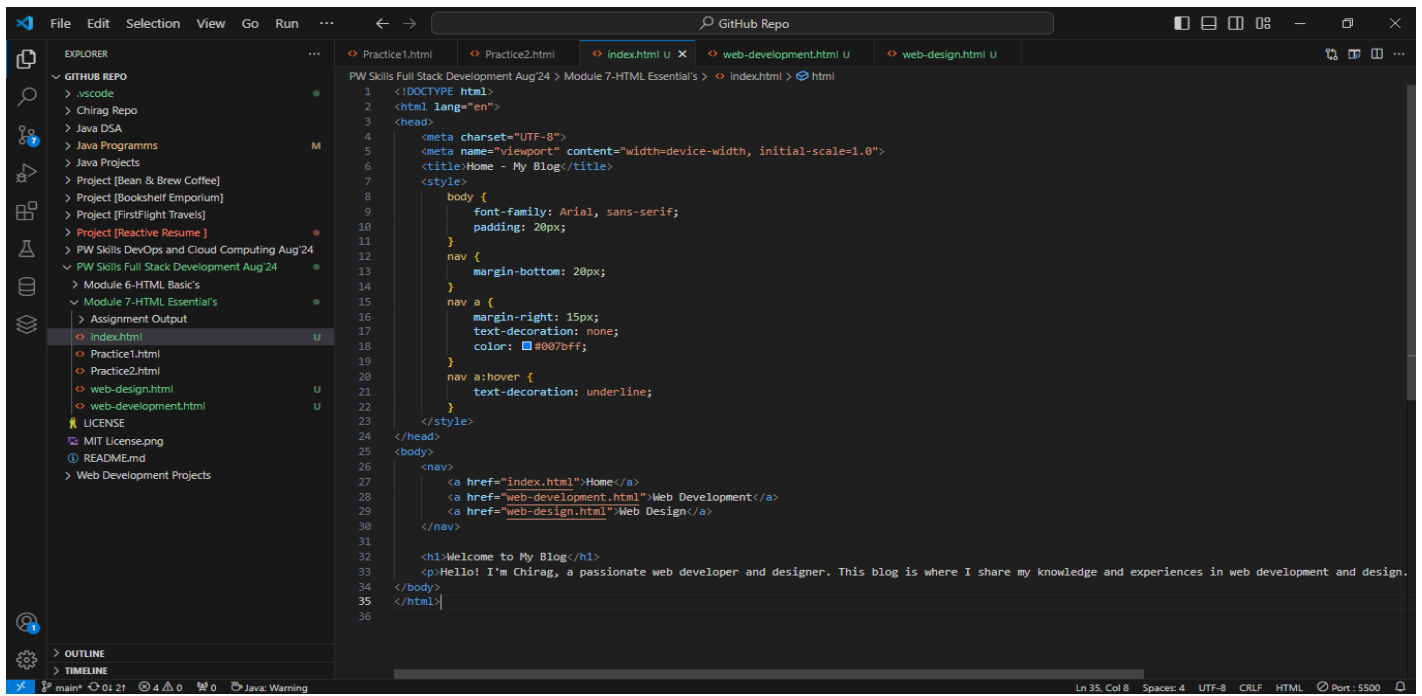
Take me to [PW Skills](https://www.pwskills.com) to buy a course.

Take me to [MDN docs](https://developer.mozilla.org/en-US/docs/Web) to know more about Web Development.

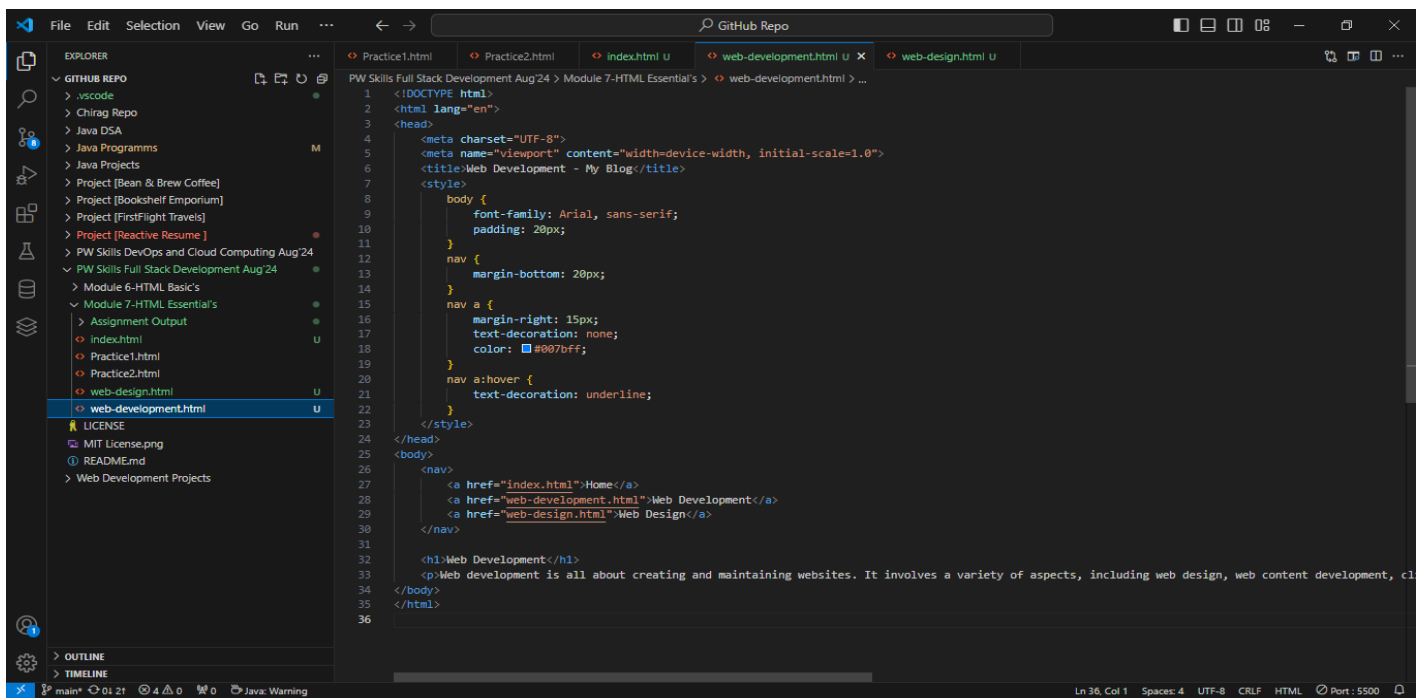
Take me to [PW Skills Lab](https://lab.pwskills.com) to practice live coding.

Q3.) Build a simple blog web page with 3 pages home, web development, and web design. Each page must contain hyperlinks to other pages in the top, a heading of the page topic and a paragraph of information. For the home page you can add some information about yourself.

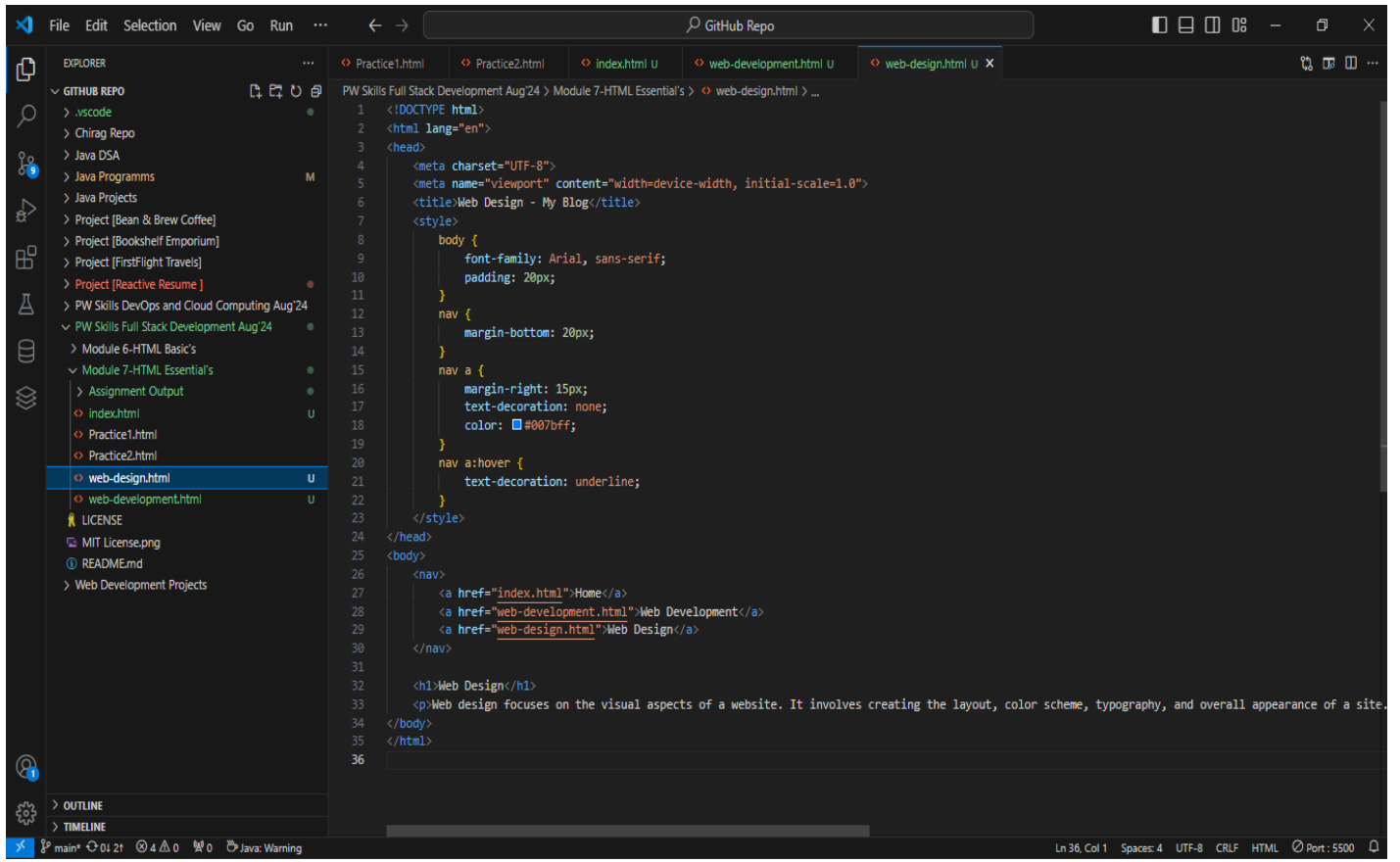
Output-



```
1 <!DOCTYPE html>
2 <html lang="en">
3 <head>
4   <meta charset="UTF-8">
5   <meta name="viewport" content="width=device-width, initial-scale=1.0">
6   <title>Home - My Blog</title>
7   <style>
8     body {
9       font-family: Arial, sans-serif;
10      padding: 20px;
11    }
12    nav {
13      margin-bottom: 20px;
14    }
15    nav a {
16      margin-right: 15px;
17      text-decoration: none;
18      color: #007bff;
19    }
20    nav a:hover {
21      text-decoration: underline;
22    }
23  </style>
24 </head>
25 <body>
26   <nav>
27     <a href="index.html">Home</a>
28     <a href="web-development.html">Web Development</a>
29     <a href="web-design.html">Web Design</a>
30   </nav>
31
32   <h1>Welcome to My Blog</h1>
33   <p>Hello! I'm Chirag, a passionate web developer and designer. This blog is where I share my knowledge and experiences in web development and design.
34 </body>
35 </html>
```



```
1 <!DOCTYPE html>
2 <html lang="en">
3 <head>
4   <meta charset="UTF-8">
5   <meta name="viewport" content="width=device-width, initial-scale=1.0">
6   <title>Web Development - My Blog</title>
7   <style>
8     body {
9       font-family: Arial, sans-serif;
10      padding: 20px;
11    }
12    nav {
13      margin-bottom: 20px;
14    }
15    nav a {
16      margin-right: 15px;
17      text-decoration: none;
18      color: #007bff;
19    }
20    nav a:hover {
21      text-decoration: underline;
22    }
23  </style>
24 </head>
25 <body>
26   <nav>
27     <a href="index.html">Home</a>
28     <a href="web-development.html">Web Development</a>
29     <a href="web-design.html">Web Design</a>
30   </nav>
31
32   <h1>Web Development</h1>
33   <p>Web development is all about creating and maintaining websites. It involves a variety of aspects, including web design, web content development, c
34 </body>
35 </html>
```



[Home](#) [Web Development](#) [Web Design](#)

Welcome to My Blog

Hello! I'm Chirag, a passionate web developer and designer. This blog is where I share my knowledge and experiences in web development and design. Explore the different sections to learn more!

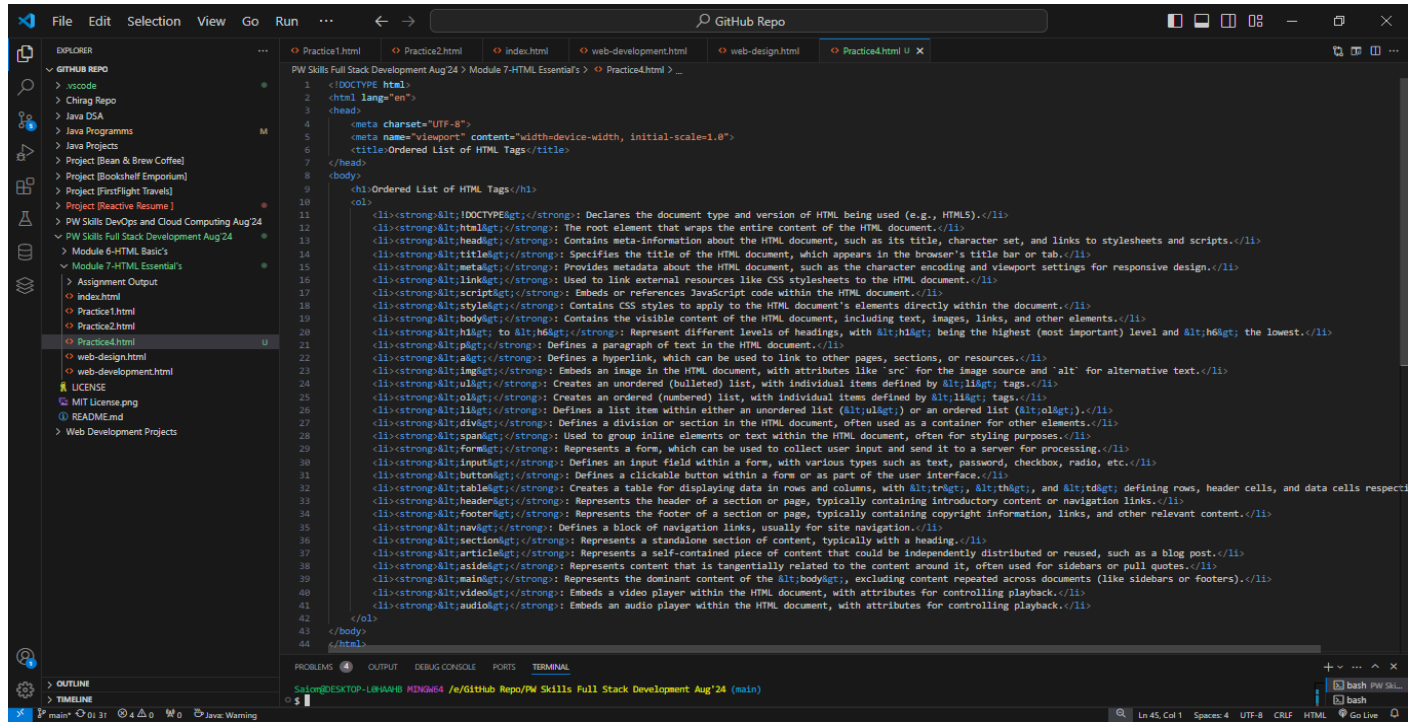
Web Development

Web development is all about creating and maintaining websites. It involves a variety of aspects, including web design, web content development, client-side/server-side scripting, and network security configuration. It is a constantly evolving field, with new tools and technologies being introduced regularly.

Web Design

Web design focuses on the visual aspects of a website. It involves creating the layout, color scheme, typography, and overall appearance of a site. Good web design is essential for creating a user-friendly and aesthetically pleasing experience, which can significantly impact the success of a website.

Output-



Ordered List of HTML Tags

1. **<!DOCTYPE>**: Declares the document type and version of HTML being used (e.g., HTML5).
2. **<html>**: The root element that wraps the entire content of the HTML document.
3. **<head>**: Contains meta-information about the HTML document, such as its title, character set, and links to stylesheets and scripts.
4. **<title>**: Specifies the title of the HTML document, which appears in the browser's title bar or tab.
5. **<meta>**: Provides metadata about the HTML document, such as the character encoding and viewport settings for responsive design.
6. **<link>**: Used to link external resources like CSS stylesheets to the HTML document.
7. **<script>**: Embeds or references JavaScript code within the HTML document.
8. **<style>**: Contains CSS styles to apply to the HTML document's elements directly within the document.
9. **<body>**: Contains the visible content of the HTML document, including text, images, links, and other elements.
10. **<h1>** to **<h6>**: Represent different levels of headings, with **<h1>** being the highest (most important) level and **<h6>** the lowest.
11. **<p>**: Defines a paragraph of text in the HTML document.
12. **<a>**: Defines a hyperlink, which can be used to link to other pages, sections, or resources.
13. ****: Embeds an image in the HTML document, with attributes like 'src' for the image source and 'alt' for alternative text.
14. ****: Creates an unordered (bulleted) list, with individual items defined by **** tags.
15. ****: Creates an ordered (numbered) list, with individual items defined by **** tags.
16. ****: Defines a list item within either an unordered list (****) or an ordered list (****).
17. **<div>**: Defines a division or section in the HTML document, often used as a container for other elements.
18. ****: Used to group inline elements or text within the HTML document, often for styling purposes.
19. **<form>**: Represents a form, which can be used to collect user input and send it to a server for processing.
20. **<input>**: Defines an input field within a form, with various types such as text, password, checkbox, radio, etc.
21. **<button>**: Defines a clickable button within a form or as part of the user interface.
22. **<table>**: Creates a table for displaying data in rows and columns, with **<tr>**, **<th>**, and **<td>** defining rows, header cells, and data cells respectively.
23. **<header>**: Represents the header of a section or page, typically containing introductory content or navigation links.
24. **<footer>**: Represents the footer of a section or page, typically containing copyright information, links, and other relevant content.
25. **<nav>**: Defines a block of navigation links, usually for site navigation.
26. **<section>**: Represents a standalone section of content, typically with a heading.
27. **<article>**: Represents a self-contained piece of content that could be independently distributed or reused, such as a blog post.
28. **<aside>**: Represents content that is tangentially related to the content around it, often used for sidebars or pull quotes.
29. **<main>**: Represents the dominant content of the **<body>**, excluding content repeated across documents (like sidebars or footers).
30. **<video>**: Embeds a video player within the HTML document, with attributes for controlling playback.
31. **<audio>**: Embeds an audio player within the HTML document, with attributes for controlling playback.

Output-



HTML

The standard markup language used for creating web pages. It structures the content on the web.

CSS

A style sheet language used to describe the presentation of a document written in HTML. It controls the layout, colors, fonts, and overall visual appearance of a website.

JavaScript

A programming language that enables dynamic and interactive content on web pages, such as animations, form validation, and user interactions.

React

A JavaScript library for building user interfaces, particularly single-page applications. It allows developers to create reusable UI components.

Node.js

A runtime environment that allows developers to run JavaScript on the server side. It's used for building scalable and efficient back-end services.

Express.js

A lightweight web application framework for Node.js, used for building web applications and APIs. It simplifies the process of setting up a server.

MongoDB

A NoSQL database that stores data in flexible, JSON-like documents. It's used for handling large volumes of unstructured data in modern web applications.

MySQL

A relational database management system that uses SQL (Structured Query Language) for managing and querying structured data.

Git

A version control system that tracks changes in the source code during development. It allows multiple developers to collaborate on the same project.

GitHub

A web-based platform that hosts Git repositories. It provides version control, collaboration features, and project management tools.

Webpack

A module bundler for JavaScript applications. It packages all the modules and assets into a single file, optimizing the load time of web pages.

Docker

A platform for developing, shipping, and running applications in containers. It ensures that applications run consistently across different environments.

NGINX

A web server that can also be used as a reverse proxy, load balancer, and HTTP cache. It's known for its high performance and stability.

REST API

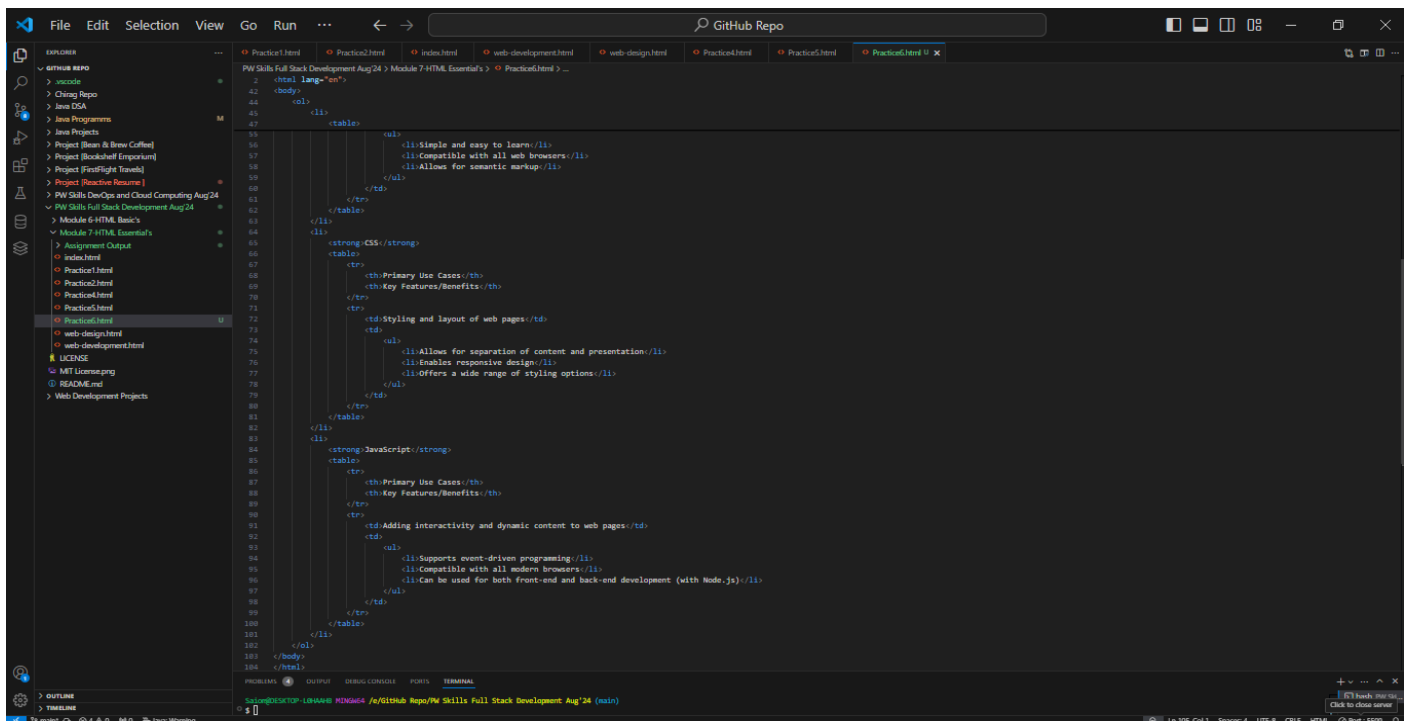
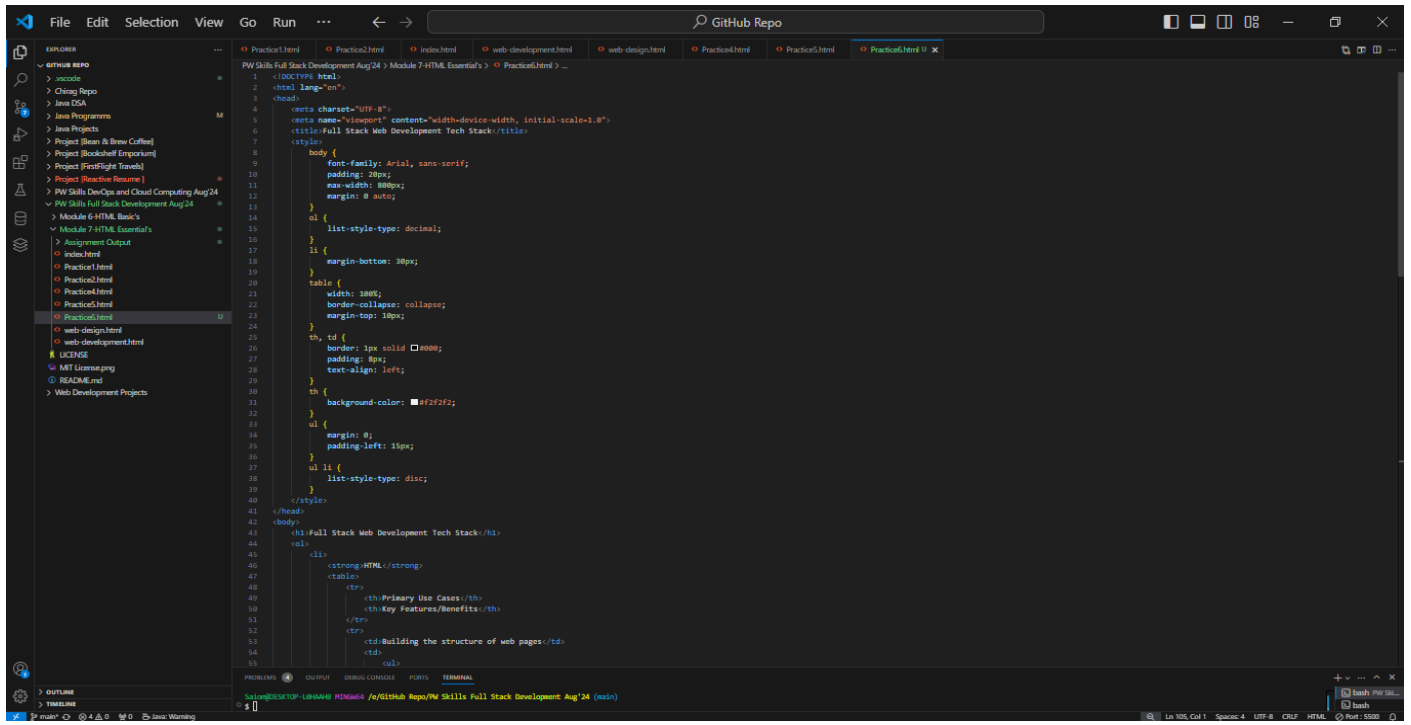
A set of rules that allows different software applications to communicate over the internet. RESTful APIs use HTTP requests to perform CRUD operations on data.

GraphQL

An open-source data query and manipulation language for APIs. It allows clients to request exactly the

Q6.) Create an ordered list of the full stack web development tech stack HTML, CSS, and JS. For each tech stack, create a table that lists the tech stack name, its primary use cases, and some key features or benefits. Below is a reference image.

Output-



Full Stack Web Development Tech Stack

1. HTML

Primary Use Cases	Key Features/Benefits
Building the structure of web pages	<ul style="list-style-type: none">Simple and easy to learnCompatible with all web browsersAllows for semantic markup

2. CSS

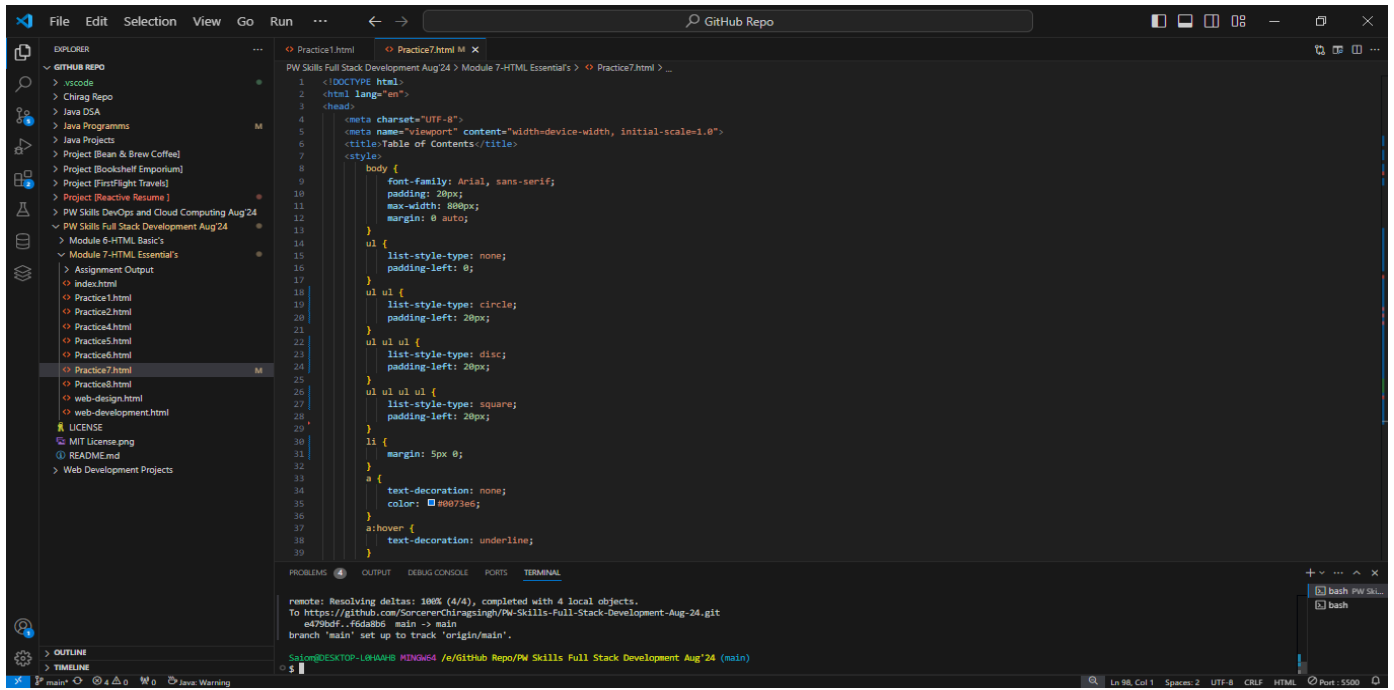
Primary Use Cases	Key Features/Benefits
Styling and layout of web pages	<ul style="list-style-type: none">Allows for separation of content and presentationEnables responsive designOffers a wide range of styling options

3. JavaScript

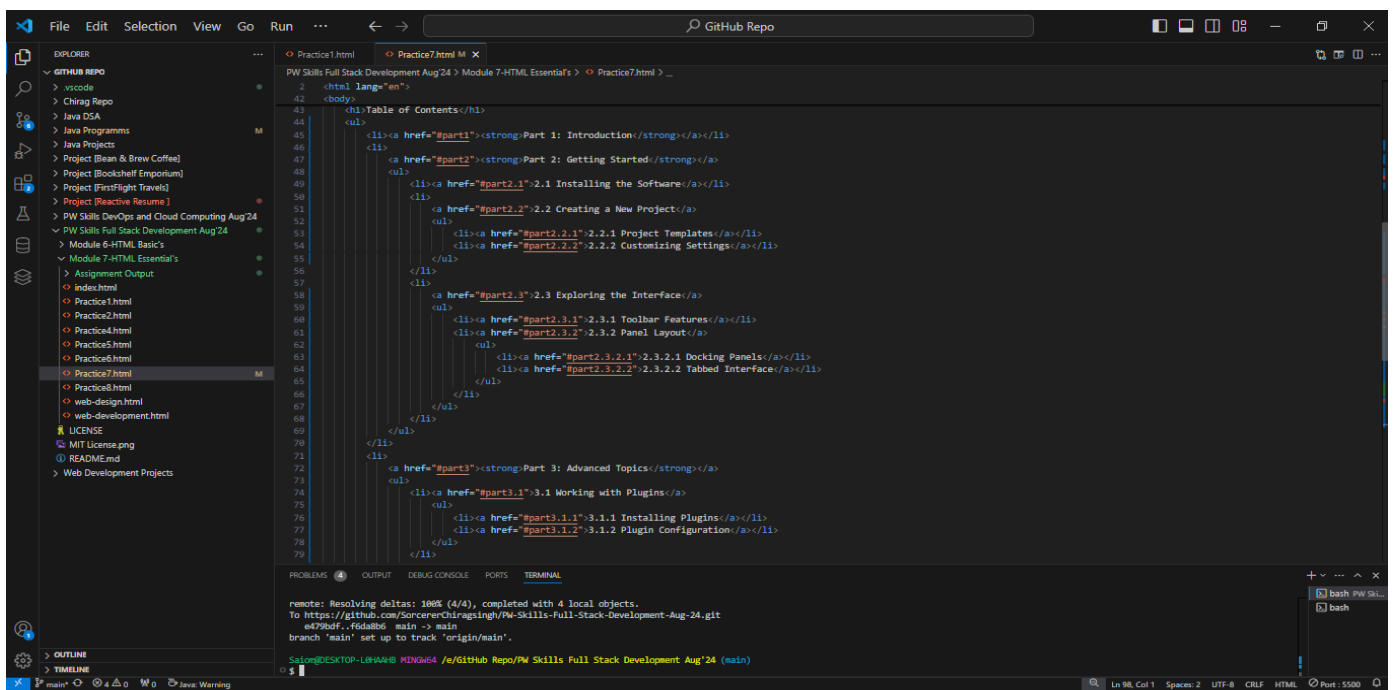
Primary Use Cases	Key Features/Benefits
Adding interactivity and dynamic content to web pages	<ul style="list-style-type: none">Supports event-driven programmingCompatible with all modern browsersCan be used for both front-end and back-end development (with Node.js)

Q7.) Build a complex nested list structure representing a multi-level table of contents. Use unordered lists () and list items () with inline-block styling to create a structured layout. Apply formatting tags to enhance the presentation of list items.

Output-



```
1 <!DOCTYPE html>
2 <html lang="en">
3 <head>
4 <meta charset="UTF-8">
5 <meta name="viewport" content="width=device-width, initial-scale=1.0">
6 <title>Table of Contents</title>
7 <style>
8 {
9   font-family: Arial, sans-serif;
10   padding: 20px;
11   max-width: 800px;
12   margin: 0 auto;
13 }
14 ul {
15   list-style-type: none;
16   padding-left: 0;
17 }
18 ul ul {
19   list-style-type: circle;
20   padding-left: 20px;
21 }
22 ul ul ul {
23   list-style-type: disc;
24   padding-left: 20px;
25 }
26 ul ul ul ul {
27   list-style-type: square;
28   padding-left: 20px;
29 }
30 li {
31   margin: 5px 0;
32 }
33 a {
34   text-decoration: none;
35   color: #007366;
36 }
37 a:hover {
38   text-decoration: underline;
39 }
```



```
1 <html lang="en">
2 <body>
3 <h1>Table of Contents</h1>
4 <ul>
5 <li><a href="#part1"><strong>Part 1: Introduction</strong></a></li>
6 <li><a href="#part2"><strong>Part 2: Getting Started</strong></a>
7 <ul>
8 <li><a href="#part2.1">2.1 Installing the Software</a></li>
9 <li><a href="#part2.2">2.2 Creating a New Project</a>
10 <ul>
11 <li><a href="#part2.2.1">2.2.1 Project Templates</a></li>
12 <li><a href="#part2.2.2">2.2.2 Customizing Settings</a></li>
13 </ul>
14 </li>
15 <li><a href="#part2.3">2.3 Exploring the Interface</a>
16 <ul>
17 <li><a href="#part2.3.1">2.3.1 Toolbar Features</a></li>
18 <li><a href="#part2.3.2">2.3.2 Panel Layout</a>
19 <ul>
20 <li><a href="#part2.3.2.1">2.3.2.1 Docking Panels</a></li>
21 <li><a href="#part2.3.2.2">2.3.2.2 Tabbed Interface</a></li>
22 </ul>
23 </li>
24 </ul>
25 </li>
26 </ul>
27 <li><a href="#part3"><strong>Part 3: Advanced Topics</strong></a>
28 <ul>
29 <li><a href="#part3.1">3.1 Working with Plugins</a>
30 <ul>
31 <li><a href="#part3.1.1">3.1.1 Installing Plugins</a></li>
32 <li><a href="#part3.1.2">3.1.2 Plugin Configuration</a></li>
33 </ul>
34 </li>
35 </ul>
36 </li>
37 </ul>
38 </body>
39 </html>
```

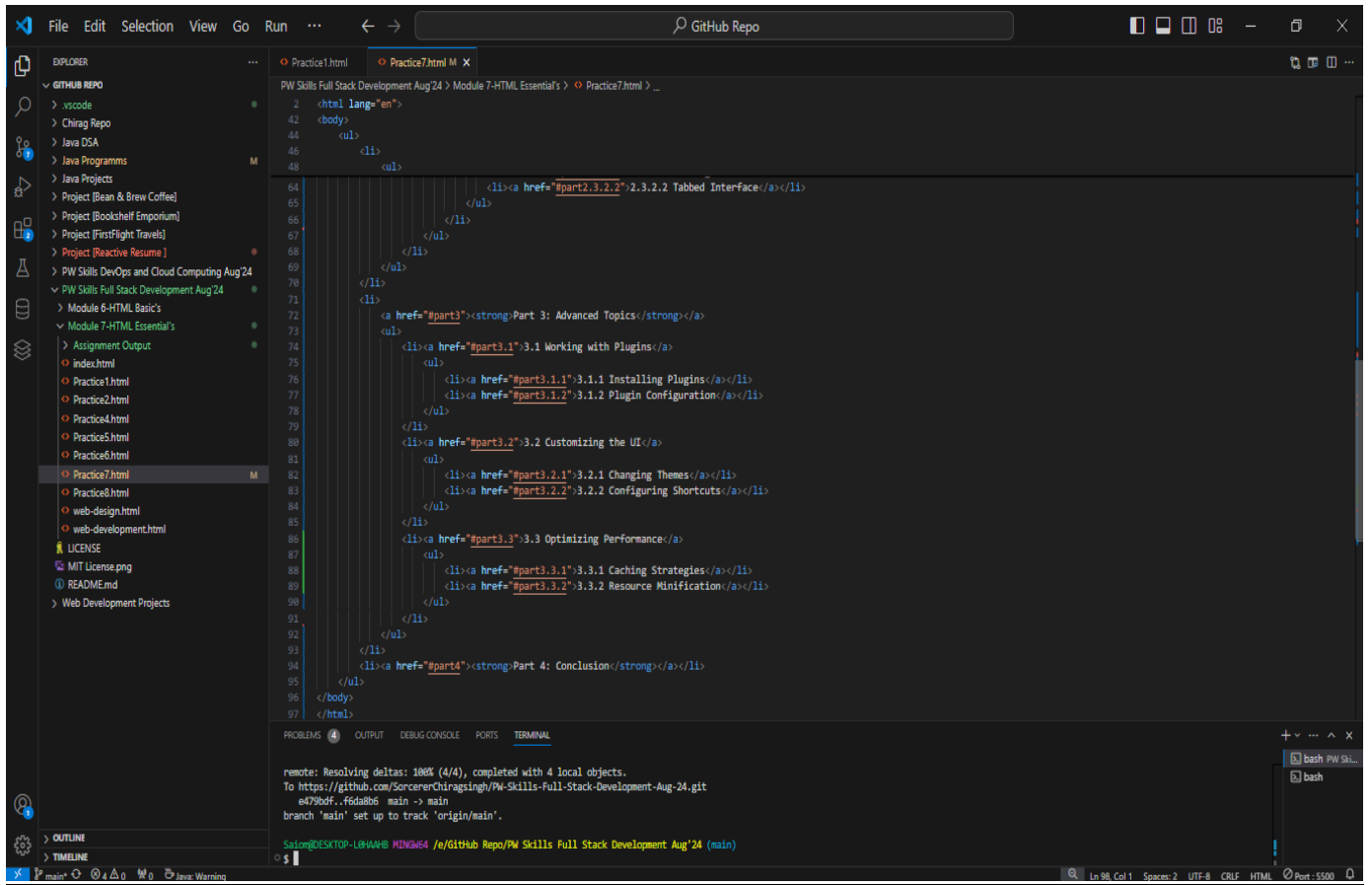


Table of Contents

Part 1: Introduction

Part 2: Getting Started

- 2.1 Installing the Software
- 2.2 Creating a New Project
 - 2.2.1 Project Templates
 - 2.2.2 Customizing Settings
- 2.3 Exploring the Interface
 - 2.3.1 Toolbar Features
 - 2.3.2 Panel Layout
 - 2.3.2.1 Docking Panels
 - 2.3.2.2 Tabbed Interface

Part 3: Advanced Topics

- 3.1 Working with Plugins
 - 3.1.1 Installing Plugins
 - 3.1.2 Plugin Configuration
- 3.2 Customizing the UI
 - 3.2.1 Changing Themes
 - 3.2.2 Configuring Shortcuts
- 3.3 Optimizing Performance
 - 3.3.1 Caching Strategies
 - 3.3.2 Resource Minification

Part 4: Conclusion

Q8.) Create a table to display a conference schedule. Each row corresponds to a time slot, and each column corresponds to a room. Some time slots might have multiple sessions running simultaneously in different rooms. Utilize rowspan and colspan attributes as necessary to accommodate this complex schedule.

(use table attribute “cellpadding” to give extra padding in each table cell).

```

1 <!DOCTYPE html>
2 <html lang="en">
3 <head>
4   <meta charset="UTF-8">
5   <meta name="viewport" content="width=device-width, initial-scale=1.0">
6   <title>Conference Schedule</title>
7   <style>
8     table {
9       width: 80%;
10      margin: 20px auto;
11      border-collapse: collapse;
12      border: 2px solid black;
13    }
14    th {
15      border: 1px solid black;
16      padding: 10px;
17      text-align: center;
18    }
19    th[colspan="5"] {
20      font-size: 24px;
21      padding: 20px 0;
22    }
23  </style>
24 </head>
25 <body>
26   <table>
27     <tr>
28       <th colspan="5">Conference Schedule</th>
29     </tr>
30     <tr>
31       <th>Time</th>
32       <th>Room 1</th>
33       <th>Room 2</th>
34       <th>Room 3</th>
35       <th>Room 4</th>
36     </tr>
37     <tr>
38       <td>9:00 AM - 10:00 AM</td>
39       <td rowspan="2">Keynote</td>
40       <td>Session A</td>
41       <td>Session B</td>
42       <td rowspan="2">Session C</td>
43     </tr>
44   </table>

```

```

45     <tr>
46       <td>10:30 AM - 11:30 AM</td>
47       <td>Session A</td>
48       <td>Session D</td>
49       <td>Session E</td>
50       <td>Session F</td>
51     </tr>
52     <tr>
53       <td>12:00 PM - 1:00 PM</td>
54       <td colspan="4">Lunch Break</td>
55     </tr>
56     <tr>
57       <td>1:00 PM - 2:00 PM</td>
58       <td>Session G</td>
59       <td>Session H</td>
60       <td>Session I</td>
61       <td>Session J</td>
62     </tr>
63   </table>
64 </body>
65 </html>

```

Conference Schedule				
Time	Room 1	Room 2	Room 3	Room 4
9:00 AM - 10:00 AM	Keynote	Session A	Session B	Session C
10:30 AM - 11:30 AM		Session D	Session E	
12:00 PM - 1:00 PM	Lunch Break			
1:00 PM - 2:00 PM	Session G	Session H	Session I	Session J

