

Assignment Instructions: Using Nested Tables

Objective

In this assignment, you are required to create a simple HTML document that demonstrates the use of **nested tables** and a **definition list** (`<dl>`).

You will also be tested using a custom JavaScript test case to ensure that your HTML file meets the required structure and content.

Instructions

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Instructions

1. Implementing Nested Tables and Definition Lists

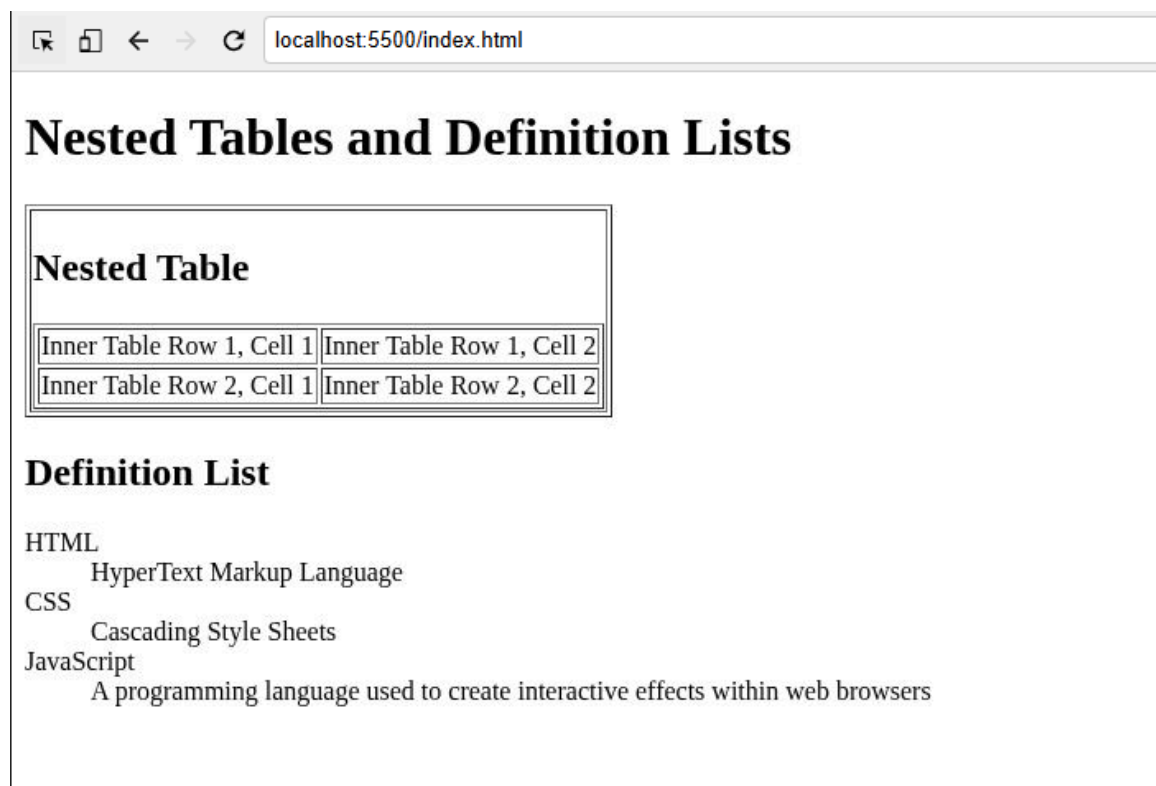
You will start with a blank `index.html` file. Follow the instructions below to implement the required HTML content:

1. **HTML Structure:** You need to create the basic structure of an HTML document.
2. **Content:** The document must include:
 - A main heading using an `<h1>` tag.
 - A main table (`<table>`) containing a nested table inside one of its cells.
 - A definition list (`<dl>`) that contains several terms and their definitions.
3. **The HTML file should be structured as follows:**
 - The `<html>` tag must have a `lang='en'` attribute.
 - The `<head>` section must contain a `<meta charset='UTF-8'>` tag and a `<meta name='viewport'>` tag for responsiveness.
 - The `<title>` tag must be set to 'Using Nested Tables and Definition List Tag'.
 - The `<body>` section should include:
 - An `<h1>` heading labeled "Nested Tables and Definition Lists".
 - A main `<table>` with `border="1"`, containing a single `<td>` cell.
 - Inside this cell:
 - An `<h2>` heading labeled "Nested Table".

- A nested <table> (also with border="1") containing:
 - Two rows and two cells per row:
 - First row:
 - Cell 1: "Inner Table Row 1, Cell 1"
 - Cell 2: "Inner Table Row 1, Cell 2"
 - Second row:
 - Cell 1: "Inner Table Row 2, Cell 1"
 - Cell 2: "Inner Table Row 2, Cell 2"
- An <h2> heading labeled "Definition List".
- A <dl> element that defines:
 - Term: <dt>HTML</dt> — Definition: <dd>HyperText Markup Language</dd>
 - Term: <dt>CSS</dt> — Definition: <dd>Cascading Style Sheets</dd>
 - Term: <dt>JavaScript</dt> — Definition: <dd>A programming language used to create interactive effects within web browsers</dd>

2. HTML Code: Heading Tags Implementation

Here is the exact HTML code you need to implement inside your index.html file:



3. Explanation of the HTML Code

1. HTML Structure:

- Begin your HTML document with the <!DOCTYPE html> declaration, indicating that this is an HTML5 document.

- The `<html lang='en'>` tag wraps the entire content of your document, specifying that the language is English.
- Inside the `<head>` section, include the following:
 - A `<meta charset='UTF-8'>` tag, ensuring that the document uses UTF-8 character encoding.
 - A `<meta name='viewport' content='width=device-width, initial-scale=1.0'>` tag, making sure that the page is responsive and scales properly on different devices.
 - The `<title>` tag should be set to 'Using Nested Tables and Definition List Tag', which will appear in the browser tab.

2. Body Content:

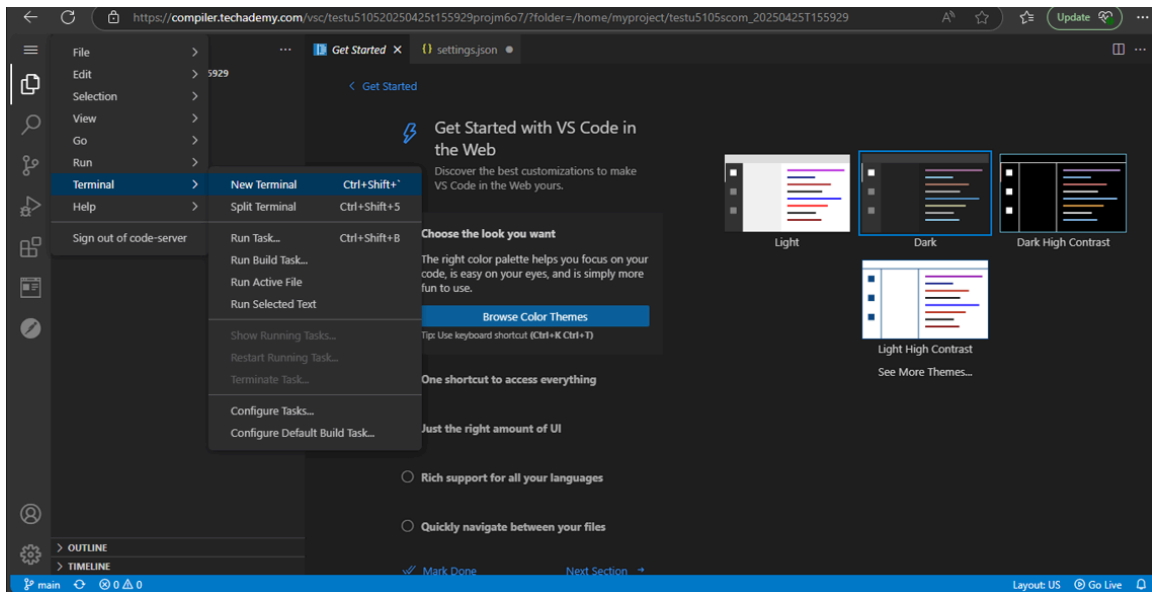
- An `<h1>` heading introduces the topic of the page.
- A top-level `<table>` includes one row and one cell, which itself contains another `<table>`.
- The nested `<table>` helps demonstrate how tabular content can be embedded within other tables, commonly used in layout-intensive designs.
- The `<h2>` element inside the cell provides context for the nested table.
- Below the tables, another `<h2>` introduces a definition list.
- The `<dl>` structure is used to semantically represent term-definition pairs, which is helpful for glossaries or structured data displays.

Assessment Guidelines

Step 1:

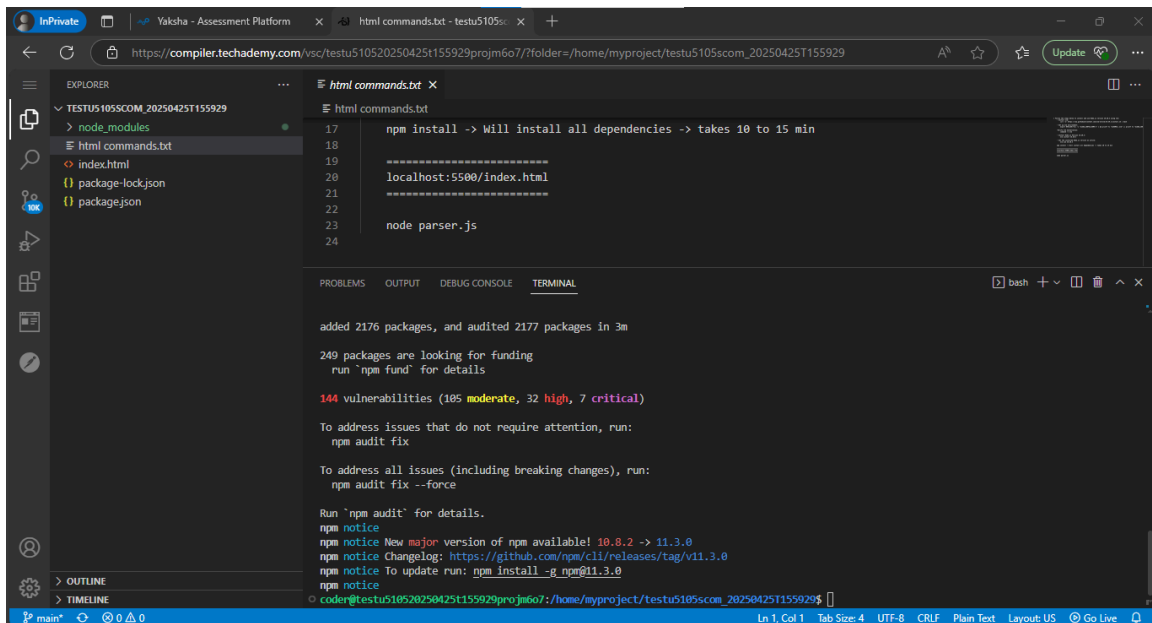
- Once the VS Code interface loads in the browser, wait until you see the workspace and left sidebar.
- To open the command terminal the test takers, need to go to Application menu (Three horizontal lines at left top) -> Terminal -> New Terminal.

Now in the terminal you need to install all dependencies using the “npm install --no-bin-links --unsafe-perm” command.



Step 2:

- Once installation completes, go to the **bottom right corner** of the VS Code screen.
- Click the **"Go Live"** button – This will start a **live server**, The server will run at port **5500** (e.g., <http://localhost:5500/>)



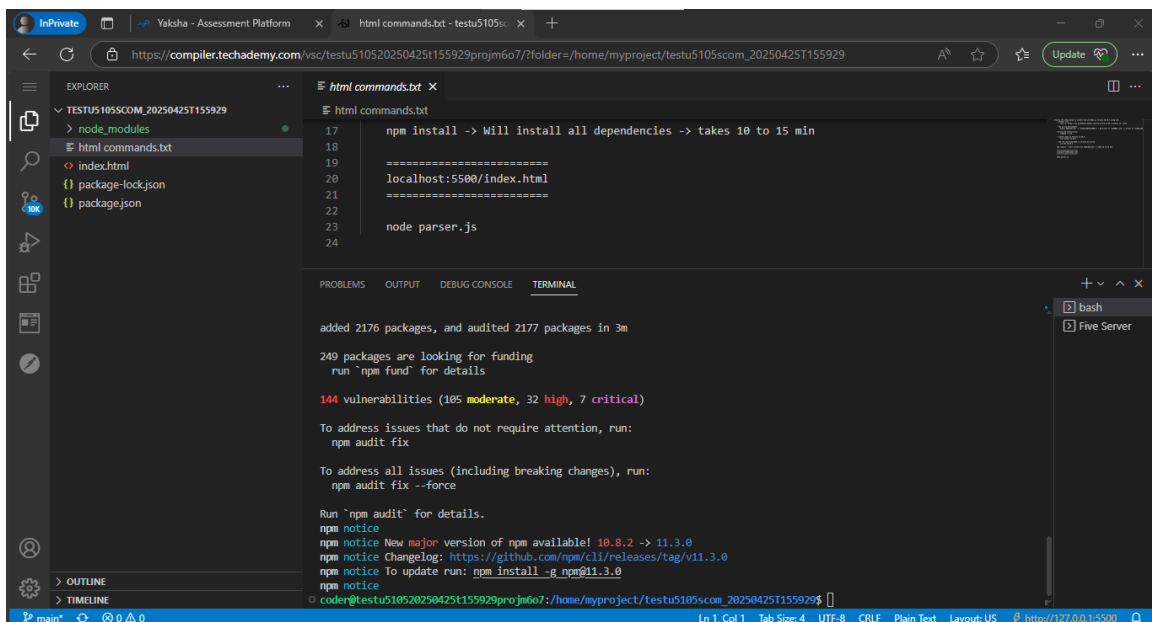
The screenshot shows the VS Code interface with the Explorer panel on the left displaying the file structure of a project named TESTUS105SCOM_20250425T155929. The Explorer panel shows the following files: node_modules, html_commands.txt, index.html, package-lock.json, and package.json. The main editor area displays the content of html_commands.txt, which includes the following code:

```
17 npm install -> Will install all dependencies -> takes 10 to 15 min
18
19 =====
20 localhost:5500/index.html
21 =====
22
23 node parser.js
24
```

The TERMINAL panel at the bottom shows the output of the npm install command, including the following text:

```
added 2176 packages, and audited 2177 packages in 3m
249 packages are looking for funding
  run `npm fund` for details
144 vulnerabilities (105 moderate, 32 high, 7 critical)
To address issues that do not require attention, run:
  npm audit fix
To address all issues (including breaking changes), run:
  npm audit fix --force
Run `npm audit` for details.
npm notice New major version of npm available! 10.8.2 -> 11.3.0
npm notice Changelog: https://github.com/npm/cli/releases/tag/v11.3.0
npm notice To update run: npm install -g npm@11.3.0
npm notice
```

The status bar at the bottom right of the VS Code window shows the "Go Live" button, which is used to start a live server.



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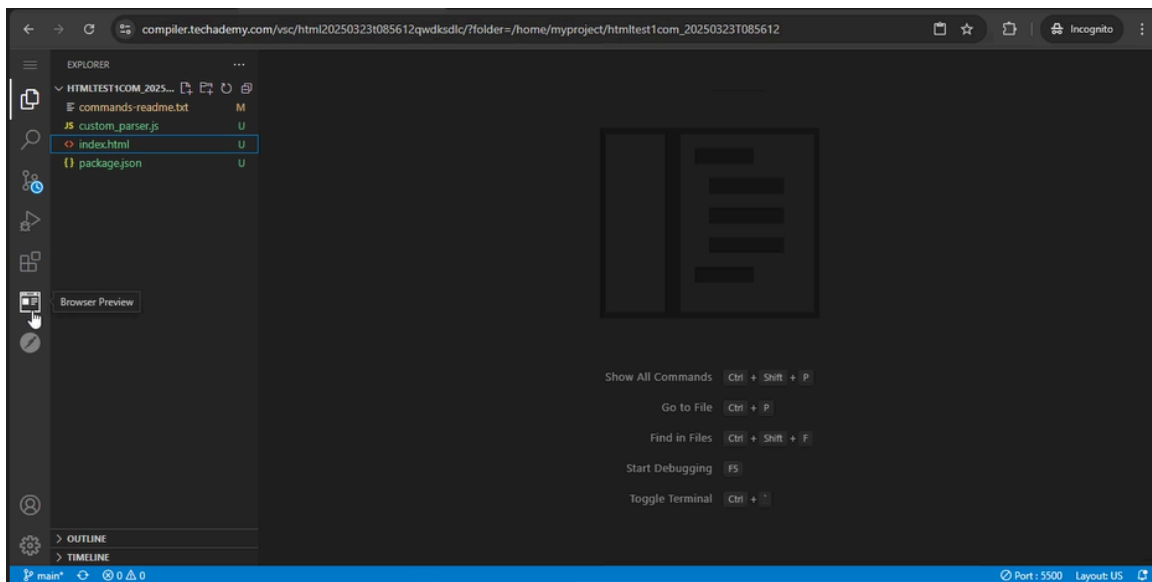
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npm notice
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Step 3: Preview Output in Browser

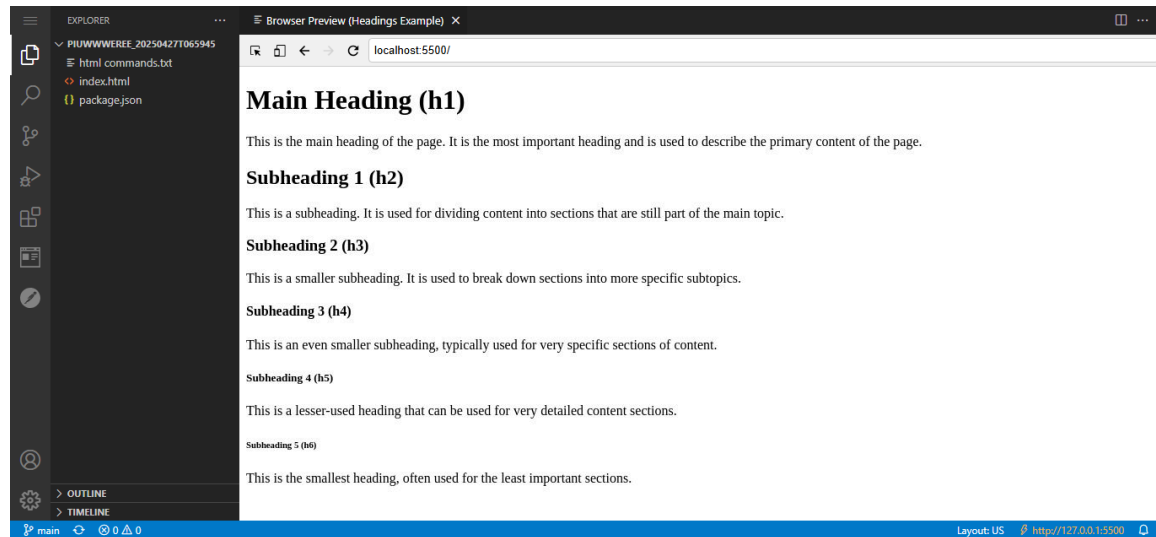
- This is a **web-based application**, so to view it in a browser, use the **internal browser inside the workspace**.
- Click on the **second last icon on the left panel** (the one labeled "**Browser Preview**"). This will open a tab within VS Code where you can **launch and view your application**.
- **Note: The application will not open in your system's local browser — it must be viewed using the internal browser.**



In the **Browser Preview tab**, type the following URL in the address bar and press **Enter**:

Your file is being served on: `localhost:5500/index.html`

This will load your HTML file and display the output of your web page **inside the internal browser**.



Step 4:

- Go back to the **terminal** and type the following command, then press **Enter**:

node parser.js

- This command will **execute the validation script** and display the test results for your HTML file in the terminal.

Mandatory Assessment Guidelines:

- All actions like build, compile, running application, running test cases will be through Command Terminal.
- To open the command terminal the test takers, need to go to Application menu (Three horizontal lines at left top) -> Terminal ->New Terminal.
- This editor Auto Saves the code.
- If you want to exit(logout) and continue the coding later anytime (using Save & Exit option on Assessment Landing Page) then you need to use CTRL+Shift+B-command compulsorily on code IDE. This will push or save the updated contents in the internal git/repository. Else the code will not be available in the next login.

5. These are time bound assessments the timer would stop if you logout and while logging in back using the same credentials the timer would resume from the same time it was stopped from the previous logout.
6. This is a web-based application, to run the application on a browser, use the internal browser in the workspace. Click on the second last option on the left panel of IDE, you can find Browser Preview, where you can launch the application.

Note: The application will not run in the local browser

7. You can follow series of command to setup HTML environment once you are in your project-name folder:
 - a. `npm install --no-bin-links --unsafe-perm ->` Will install all dependencies
-> takes 10 to 15 min.
 - b. `localhost:5500/index.html ->` This will load your HTML file and display the output of your web page inside the internal browser.
 - c. `node parser.js ->` to run all test cases. **It is mandatory to run this command before submission of workspace ->** takes 5 to 6 min.
8. Once you are done with development and ready with submission, you may navigate to the previous tab and submit the workspace. It is mandatory to click on **"Submit Assessment"** after you are done with code.
9. You need to use **CTRL+Shift+B** - command compulsorily on code IDE, before final submission as well. This will push or save the updated contents in the internal git/repository, and will be used to evaluate the code quality.
10. If **Ctrl + Shift + B** doesn't work, then manually run the following commands one by one in the terminal:
 - `git add .`
 - `git commit -m "Final commit"`
 - `git push`