

CSE 310 Online C1

Time: 40 minutes

HTML Tag Matching

You will create a new .1 file (Not in your offline) to validate proper nesting of HTML-style tags. Your task is to ensure that each opening tag has a corresponding closing tag in the correct order.

You will only support the following tags:

<html>, <head>, <body>, <p>

Any mismatch or improper nesting should be reported as an error.

Requirements

- Only tags listed above are valid. Any other tag should be treated as invalid input.
- Use a stack to manage the nesting of tags. This has been provided for you, no need to implement it from scratch. **Download this from [here](#) before the internet is turned off.**
- Ignore text content between tags. For example: Given <p>abcde</p> you would ignore abcde.
- Output proper messages on tag match and mismatch.

Sample I/O:

Input: <html><body>123<p>abcd</p></body></html>

Output: Valid HTML structure

Input: <html><body>123<p>abcd</body></p></html>

Output: Invalid HTML: tag mismatch </body>

[You should stop parsing on the first mismatch]

Input: <html><body></body>

Output: Invalid HTML: missing closing tag for <html>

Marks Distribution

- Matching and nesting for supported tags with proper states: 4
- Ignores text content between tags: 3
- Correct error reporting for mismatched tags: 3

Submit only your 2105ABC.1 file, nothing else.