TEST 1.

The first website that I test is: www.findxiao.com, which is my blog.

I used Web Validation Service. Retrieved from https://validator.w3.org/

	/alidation Service up (HTML, XHTML,) of Web documents	
Validate by URI Validate by	r File Upload Validate by Direct Input	
Validate by URI		
Validate a document online:		
Address:		
► More Options		
	Check	

After I search for that website, I got the analysis as follows:

Nu Html Ched	cker	
Γhis tool is an ongoing ε	experiment in better HTML checking, and its behavior remains subject to change	
Showing results for ht	ttp://findxiao.com/	
Checker Input		
Show source o	outline Dimage report Options	
Check by address v	v ·	
http://findxiao.co	om/	
Check		
Use the Message Filter	ering button below to hide/show particular messages, and to see total counts of errors and warnings.	
Use the Message Filter Message Filtering	ering button below to hide/show particular messages, and to see total counts of errors and warnings.	
Message Filtering	ering button below to hide/show particular messages, and to see total counts of errors and warnings.	
Message Filtering 1. Warning The		
Message Filtering 1. Warning The	type attribute is unnecessary for JavaScript resources.	
Message Filtering 1. Warning The From line 14, columed/" />= 2. Warning The	type attribute is unnecessary for JavaScript resources. mn 3; to line 14, column 33	

There are in all 23 Warnings and 2 Errors.

• Errors:

Stray end tag a: 2

• Warnings:

- 1) The type attribute is unnecessary for JavaScript resources: 18
- 2) The type attribute for the style element is not needed and should be omitted: 4
- 3) Empty heading: 1

Here is the illustration:



What works well on this site? What could be improved?

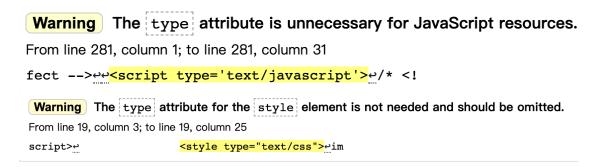
• Errors:

We got two errors in the same type which is $Stray\ end\ tag\ a$: And from the validation tool, we can find that the problem is from:

We should remove the , as it's not needed for the <a> tag. Because just that an end tag is not allowed in the context [1].

Warnings:

For the 1), 2) warning, however they are in the same category: The type attribute is unnecessary.



This is because the "type" attribute for the "style" element is not needed and should be omitted in the new release of grammar rules.

Although previously it is an optional attribute and it can work now, but currently we need to get rid of this old behavior and delete "type" as well.

Another 3) problem is the Empty heading:

```
Warning Empty heading.

From line 100, column 6; to line 100, column 28

ng">

<a href="mailto:class="site-title"><a href="mailto:href="site-title"><a href="mailto:href="site-title"><a href="mailto:href="site-title"><a href="mailto:href="site-title"><a href="mailto:href="href="href="href="href="site-title"><a href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="href="
```

After investigation, we can find that: this is because we have a heading tag (<hN>) that doesn't have any content associated with it. Heading tags are intended to mean "this is what this bit of content is about"[2]. Here, we need to stop using heading tag.

TEST 2.

The second website that I test is: www.robertzhangxiao.com, which is my portfolio website.

Nu Html Checker	
This tool is an ongoing experiment in better HTML checking, and its behavior remains subject to change	
Showing results for http://robertzhangxiao.com/	
Checker Input	
Show source outline image report Options	
Check by address v	
http://robertzhangxiao.com/	
Check	
Message Filtering	
Warning The type attribute is unnecessary for JavaScript resources.	
From line 14, column 3; to line 14, column 33	
ed/" />-	
2. Warning The type attribute for the style element is not needed and should be omitted.	
From line 19, column 3; to line 19, column 25	
script>↔ <style type="text/css">↔img.w</td><td></td></tr></tbody></table></style>	

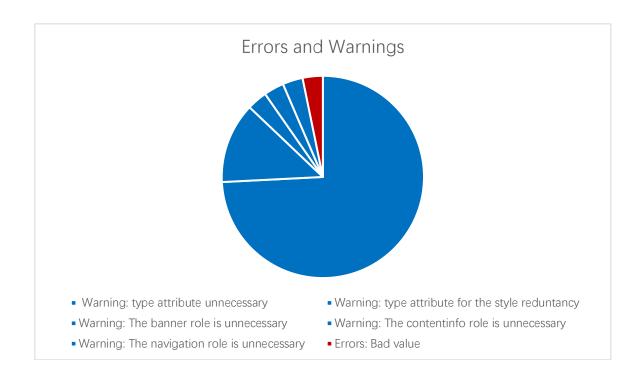
There are in all 30 Warnings and 1 Error.

• Error:

Bad value: 1

- Warnings:
 - 1) The type attribute is unnecessary for JavaScript resources: 23
 - 2) The type attribute for the style element is not needed and should be omitted: 4
 - 3) The banner role is unnecessary: 1
 - 4) The navigation role is unnecessary: 1
 - 5) The contentinfo role is unnecessary: 1

Here is the illustration:



What works well on this site? What could be improved?

Error:

```
Error Bad value //fonts.geekzu.org/css?

family=Montserrat%3Aregular%2C600%2C700|Open+Sans%3Aregular%2Citalic%2C300%2C600%2C700%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C800%2C80
```

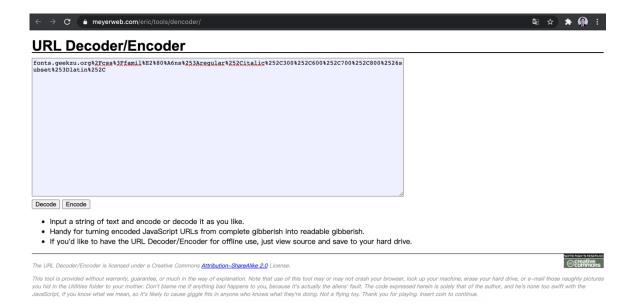
We got one bad value in our error: since

//fonts.geekzu.org/css?famil...ns%3Aregular%2Citalic%2C300%2C600%2C700%2C800%26subset%3Dlatin%2C is not follow valid URL standard after we tested.

In order to solve this problem, we need to run this URL through a <u>URL encoder</u> [3].

Here we can get the output here:

fonts.geekzu.org%2Fcss%3Ffamil%E2%80%A6ns%253Aregular%252Citalic%252C300%252C600%252C700%252C800%2526subset%253Dlatin%252C



• Warnings:

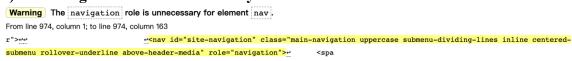
The 1), 2) problems are highly overlapped with previous test problems, so we can skip that procession to review the former solutions.

3) The banner role is unnecessary



Since our header is scoped to the page, rather than a section within a page, role=banner is unnecessary and should be omitted [4].

4) The navigation role is unnecessary



<nav role="navigation"> is optional and redundant, so it should be omitted [5].

5) The contentinfo role is unnecessary

```
Warning The contentinfo role is unnecessary for element footer.

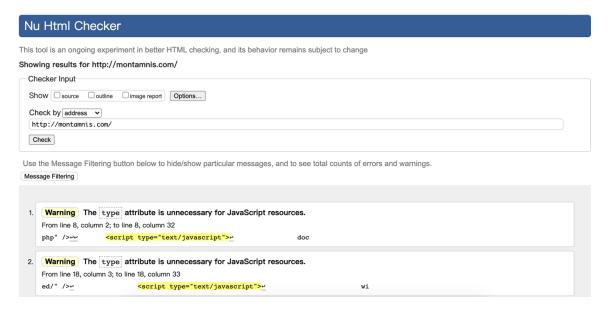
From line 1114, column 1; to line 1114, column 61

ner -->eee <footer id="colophon" class="site-footer" role="contentinfo">e < d
```

Still just like the 4) problem, another redundant information through the HTML5 [6], and we need to delete that.

TEST 3.

The second website that I test is: www.montamnis.com, which is my company's website.



There are in all 13 Warnings and 6 Errors.

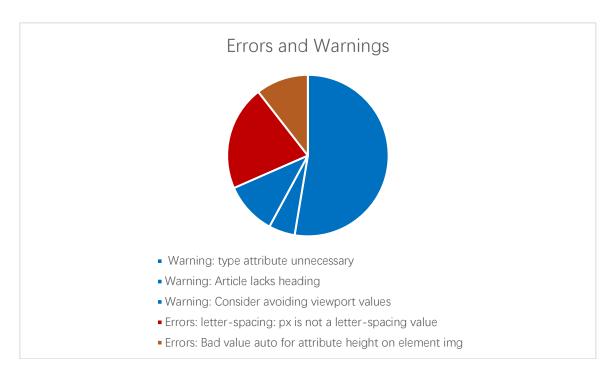
• Error:

- 1) CSS: letter-spacing: px is not a letter-spacing value : 4
- 2) Bad value auto for attribute height on element img: Expected a digit but saw a instead: 2

Warnings:

- 1) The type attribute is unnecessary for JavaScript resources: 10
- 2) Consider avoiding viewport values that prevent users from resizing documents: 2
- 3) Article lacks heading. Consider using h2-h6 elements to add identifying headings to all articles: 1

Here is the illustration:



What works well on this site? What could be improved?

The warning 1) is covered in the previous tests.

2) Consider avoiding viewport values that prevent users from resizing documents

Warning Consider avoiding viewport values that prevent users from resizing documents.

From line 55, column 1; to line 55, column 108

t=xml" />=/cmeta name="viewport" content="width=device-width, initial-scale=1.0, maximum-scale=1.0, user-scalable=0" />link

We need to remove "user-scalable=no" [7].

3) Article lacks heading.

Warning Article lacks heading. Consider using [h2]—[h6] elements to add identifying headings to all articles.

From line 108, column 5; to line 108, column 79

Article id="post-85" class="post-85 page type-page status-publish heatry">

Marticle id="post-85" class="post-85 page type-page status-publish heatry">

Marticle id="post-85" class="post-85" page type-page status-publish heatry">

Marticle id="post-85" class="post-85" page type-page status-publish page st

Since in our article, it is not the nested section, we need to add <h1>Some heading</h1> here [8].

Reference:

- [1] Retrieved from: https://stackoverflow.com/questions/24116546/stray-end-tag-img
- [2] Retrieved from: https://stackoverflow.com/questions/23739224/empty-heading-warning-on-html5-validation
- [3] Retrieved from: https://stackoverflow.com/questions/32790918/w3c-validation-error-bad-value
- [4] Retrieved from: https://stackoverflow.com/questions/59720091/remove-role-banner-from-html-of-react-component
- [5] Retrieved from: https://stackoverflow.com/questions/37215883/why-i-cant-use-role-navigation-attribute-in-html-nav-tag
- [6]Retrievedfrom: https://stackoverflow.com/questions/11191746/should-role-contentinfo-be-always-added-on-footer-element
- [7] Retrieved from: https://stackoverflow.com/questions/49859228/w3c-dont-validate-viewport
- [8] Retrieved from: https://stackoverflow.com/questions/35925867/warning-article-lacks-heading-consider-using-h2-h6-elements-to-add-identifying