



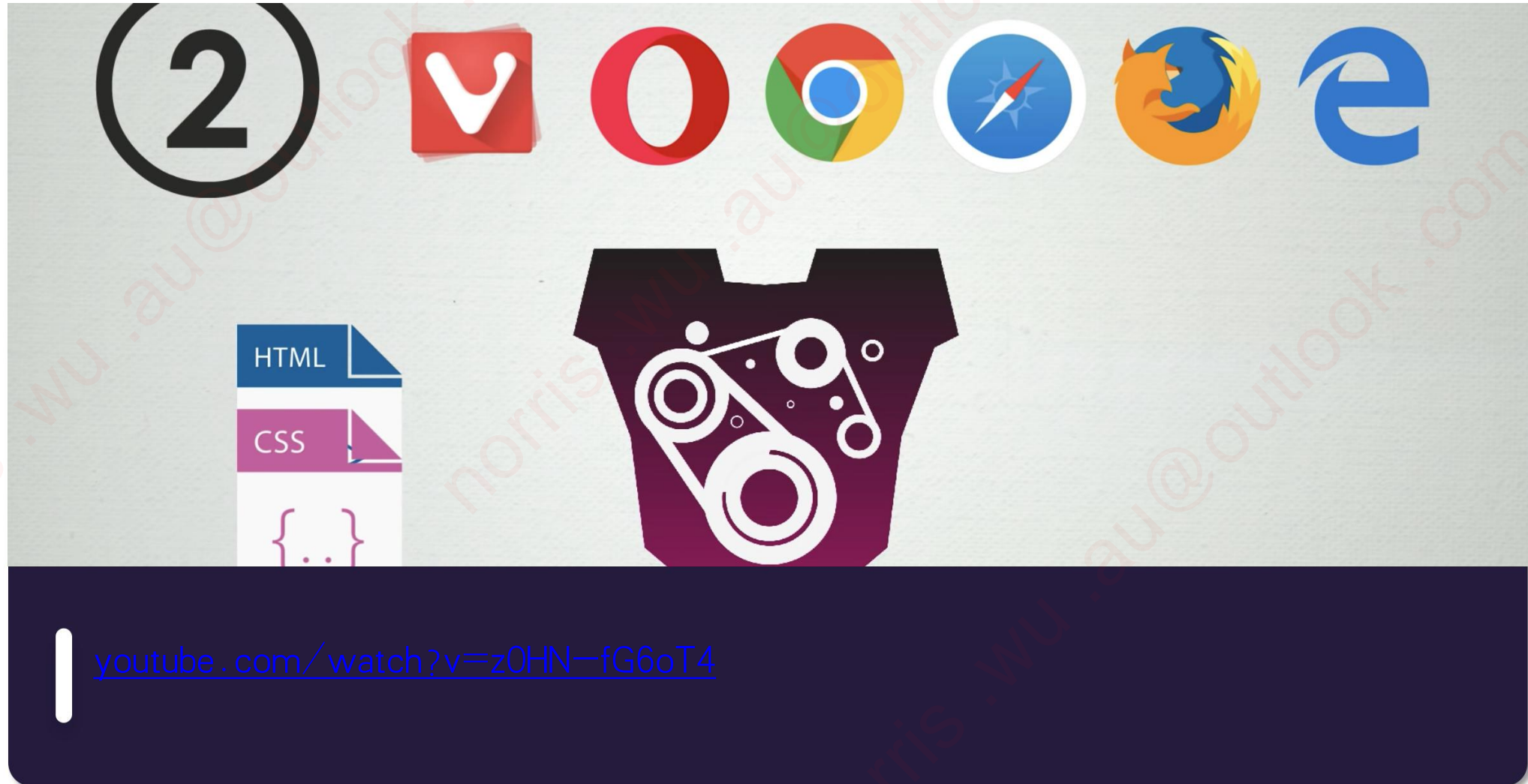
匠人学院

jiangren.com.au

HTML 1

www.jiangren.com.au

What Really Happens When You Visit a Website?



HTML

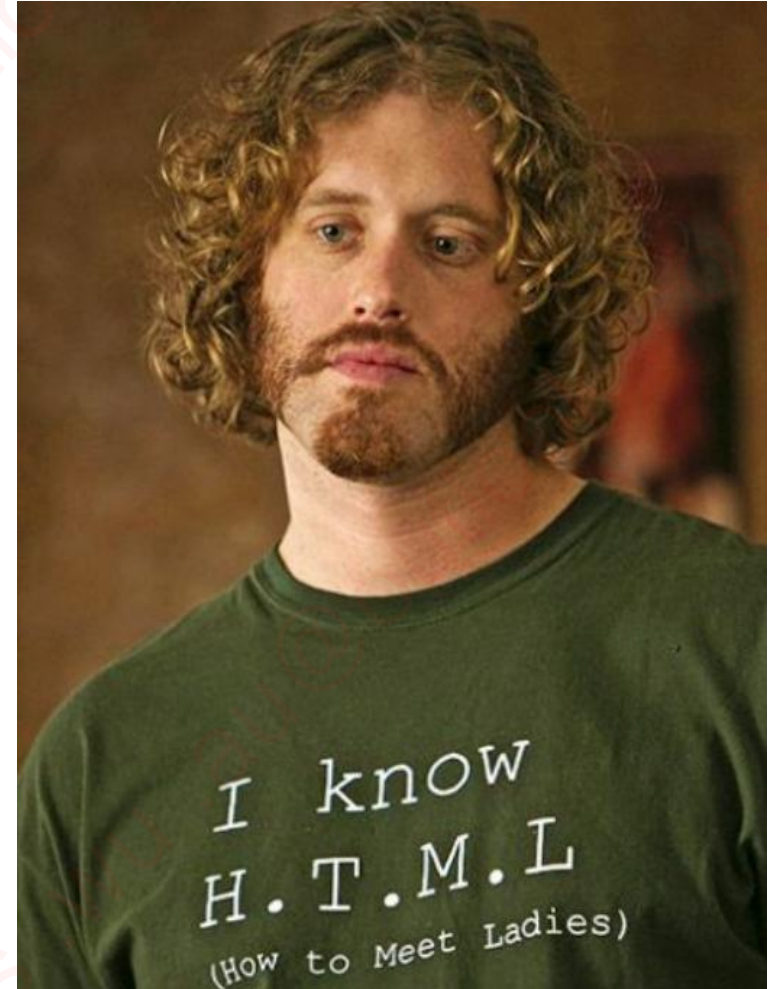
What is HTML (NOT How to Meet Ladies)

HyperText Markup Language

Key word Markup

Interview Tips: HTML is Not a programming language. Remove it from programming language

Tips : silicon valley s01e05 Scrum / Agile
Other for ice breaking



HTML, CSS and JavaScript Explained



<https://www.youtube.com/watch?v=gTOLh1eYk78>

Your Best Friend



W3Schools: [w3schools.com/html/](https://www.w3schools.com/html/)

MDN: <https://developer.mozilla.org/en-US/>



HTML + CSS + JS

HTML : Content Structure

CSS : Content Presentation

JS : Content Behaviour?

JS : Everything!

HTML



HTML structure and define content *semantically*.

Tag Name

Element

```
<a href="http://jiangren.com.au">澳洲IT匠人圈</a>
```

Attribute

Closing Tag

Open Tag

HTML



HTML structure and define content *semantically*.

Element

`<h1> This is header </h1>`

Opening Tag

Content

Closing Tag

Element with attribute

`<h1 style="color:blue;"> This is header </h1>`

Opening Tag

Attribute

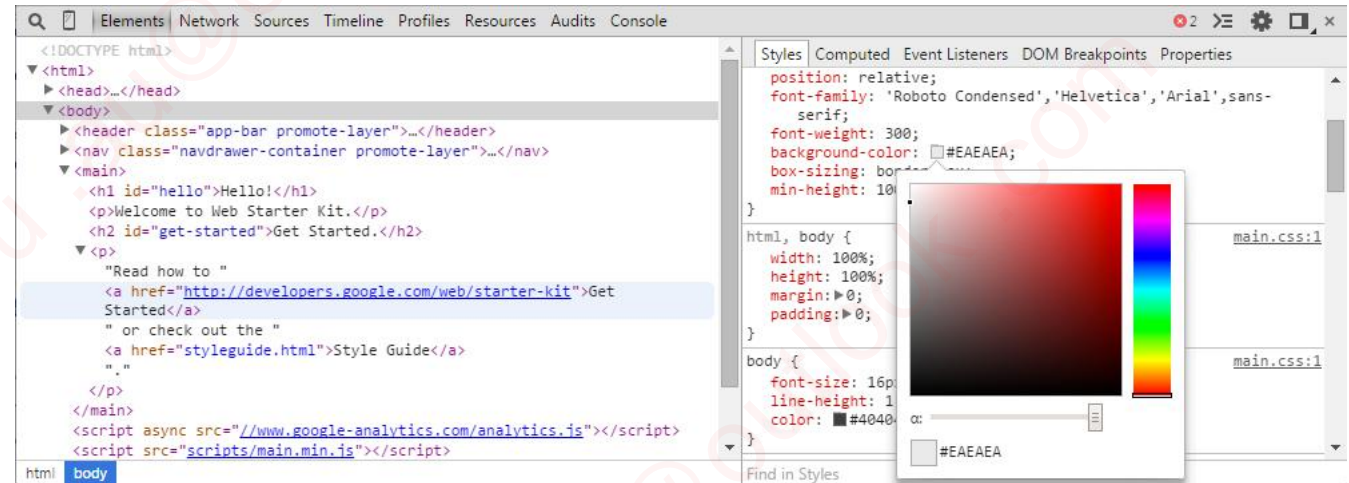
Content


Closing Tag

Chrome Dev Tool



How to Access DevTools



- Select the **Chrome menu**  at the top-right of your browser window, then select **Tools > Developer Tools**.
- Right-click on any page element and select **Inspect Element**.

Npm install live-server -g



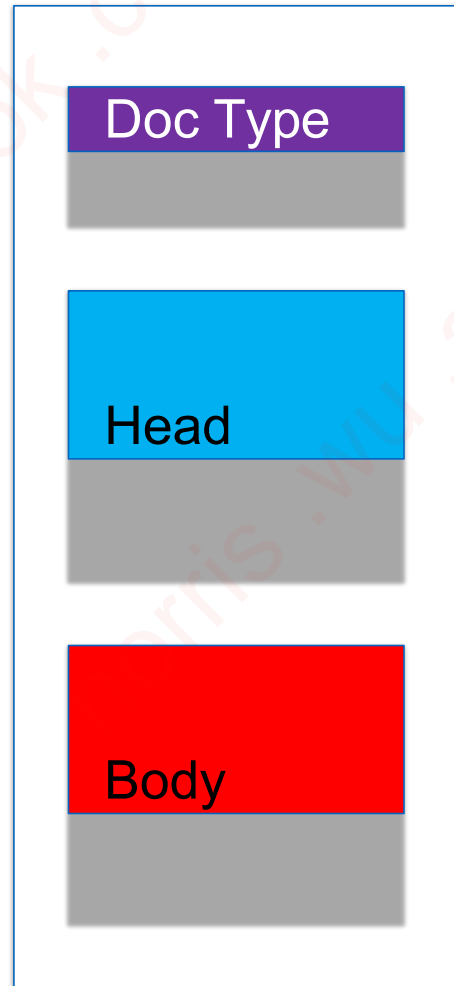
Personal Website



<https://australiaitgroup.github.io/jrprofile/#home>
<https://github.com/australiaitgroup/jrprofile>



Structure



```
<!DOCTYPE html>

<html>

  <head>
    <title>Title</
title>
  </head>

  <body>
    <div>Content</div>
  </body>

</html>
```

HTML Basics



```
<!DOCTYPE html>

<html>

  <head>
    <title>Title</
title>
  </head>

  <body>
    <div>Content</div>
  </body>

</html>
```

Document Type Declaration

An instruction to the web browser about what version of HTML the page is written in.

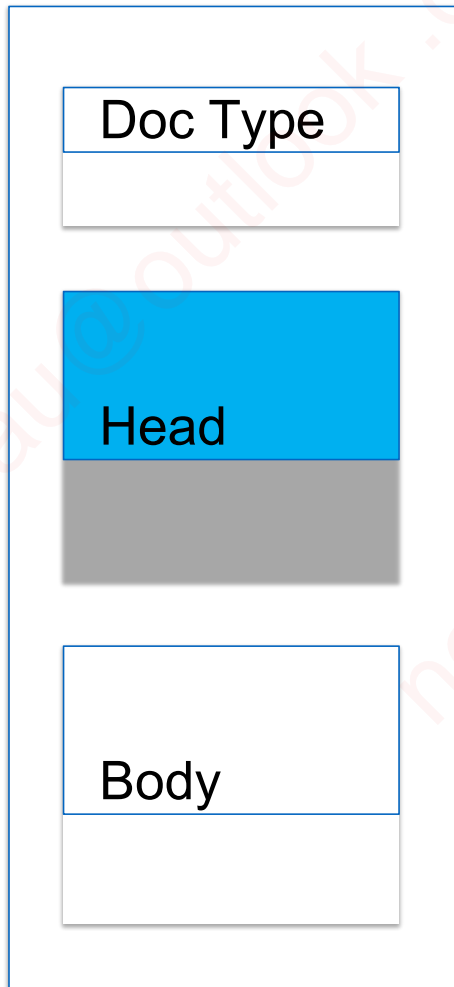
Tips: Always on Top HTML5

```
<!DOCTYPE html>
```

HTML4

```
<!DOCTYPE HTML PUBLIC "-//
W3C//DTD HTML 4.01//EN"
"http://www.w3.org/TR/
html4/strict.dtd">
```

HEAD



```
<!DOCTYPE html>

<html>

  <head>
    <title>Title</title>
  </head>

  <body>
    <div>Content</div>
  </body>

</html>
```

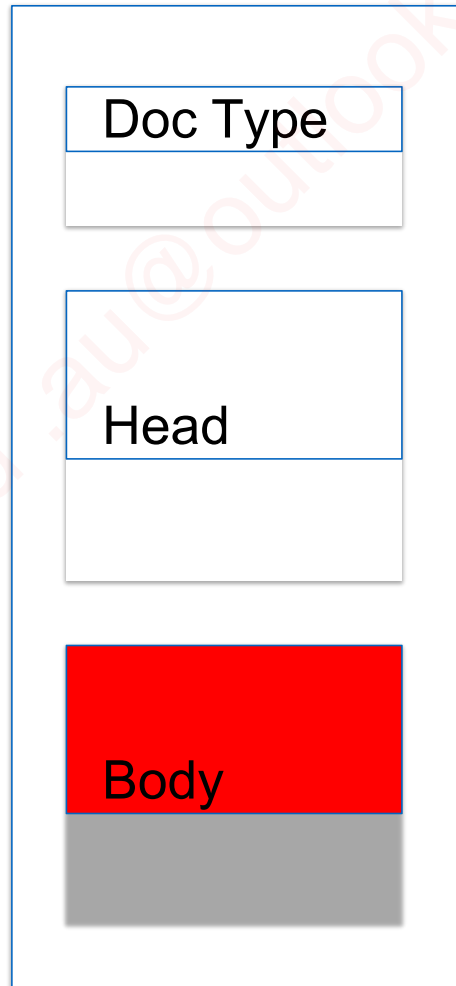
Head is used for the information about the document but **NOT** showing to user in the content area.

Title , Language, Viewport , Favicon CSS and Javascript etc.

e.g.
<title>title on Browser</title>
<meta charset="utf-8">

For SEO
Meta title
Meta Keywords
Meta Description

BODY



```
<!DOCTYPE html>

<html>

<head>
    <title>Title</
title>
</head>

<body>
    <div>Content</div>
</body>

</html>
```

Body is the content of the all the elements to show.

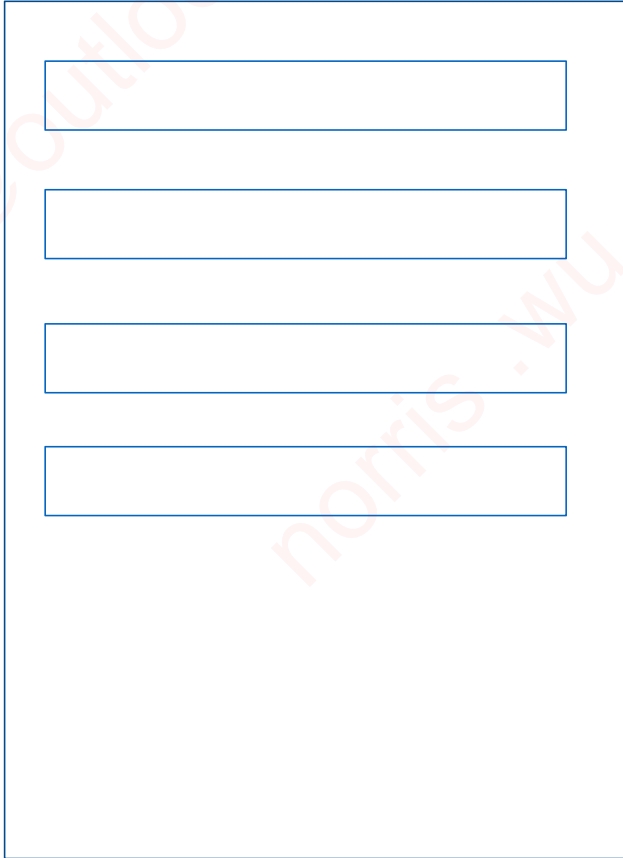
```
<h1> This is Header </h1>
<a href="http://
jiangren.com.au">匠人圈</a>
```

```
<button type="button">Click Me!
</button>
```

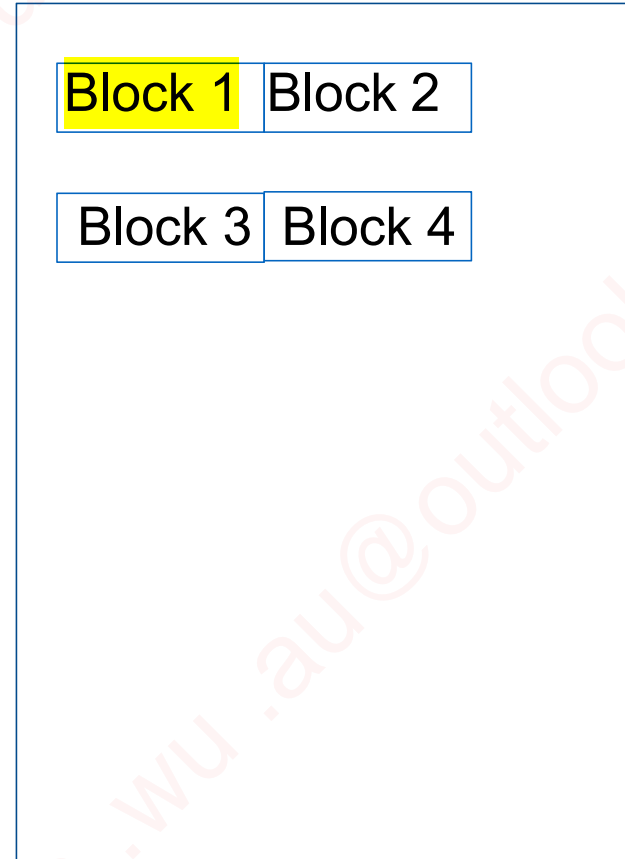


Block vs Inline

Block Elements



Inline Elements





Block Elements

<div> <header> <main> <nav> <section>
<footer> <h1-6> <p>
<table> <form> <hr>

<canvas> <video> <output> <pre> <dd>
<dl> <dt> <address> <article> <aside>
<blockquote> <figure> <figcaption>
<noscript> <fieldset>

Inline Elements

<a>
 <button> <input>
<label> <script> <select>
<textarea> <i>

<abbr> <acronym> <bdo> <big> <cite>
<code> <dfn> <kbd> <map> <object>
<q> <samp> <small> <sub> <sup>

<time> <tt> <var>



Text — Header

Header is define structure the hierarchy of the content

This is h1 Header

This is h2 Header

This is h3 Header

This is h4 Header

This is h5 Header

This is h6 Header

```
1  <!DOCTYPE html>
2  <html>
3  <head>
4  |<!-- MetaData Here-->
5  <title> </title>
6  </head>
7
8  <body>
9
10 <h1> This is h1 Header </h1>
11 <h2> This is h2 Header </h2>
12 <h3> This is h3 Header </h3>
13 <h4> This is h4 Header </h4>
14 <h5> This is h5 Header </h5>
15 <h6> This is h6 Header </h6>
16
17 </body>
18
19 </html>
```

Semantic for Search Engine Optimisation and Friendly for disabled

SEO

- Only one H1 for one page
- Page Structure
 - H1
 - H2
 - H2
 - H3
 - H3
 - H4
 - H4
 - H4
 - H5
 - H5
 - H5
 - H6
 - H6
 - H6



Text — Header



History

Development

HTML

h3 870px x 35px Role heading

Tim Berners-Lee, a contractor at CERN, proposed and prototyped ENQUIRE, a system for CERN researchers to use and share documents. In 1989, Berners-Lee wrote a memo proposing an Internet-based hypertext system.^[3] Berners-Lee specified HTML and wrote the browser and server software in late 1990. That year, Berners-Lee and CERN data systems engineer Robert Cailliau collaborated on a joint request for funding, but the project was not formally adopted by CERN. In his personal notes^[4] from 1990 he listed^[5] "some of the many areas in which hypertext is used" and put an encyclopedia first.

The first publicly available description of HTML was a document called "HTML Tags", first mentioned on the Internet by Tim Berners-Lee in late 1991.^{[6][7]} It describes 18 elements comprising the initial, relatively simple design of HTML. Except for the hyperlink tag, these were strongly influenced by SGMLguid, an in-house Standard Generalized Markup Language (SGML)-based documentation format at CERN. Eleven of these elements still exist in HTML 4.^[8]

HTML is a markup language that web browsers use to interpret and compose text, images, and other material into visual or audible web pages. Default characteristics for every item of HTML markup are defined in the browser, and these characteristics can be altered.

```
<!DOCTYPE html>
<html>
<!--
Created 16-10-2014
-->
<head>
<title>Sample</title>
</head>
<body>
<p>Sample text</p>
</body>
```

elements | Network | Resources | Timelines | Debugger | Storage | Console | Search

y.mediawiki.ltr.sitedir-ltr.mw-hide-empty-elt.ns-... > div#content.mw-body > div#bodyContent.mw-body-content > div#mw-content-text.mw-content-ltr > div.mw-parser-output > h3 > >

```
<p>...</p>
<p>...</p>
<p>...</p>
<p>...</p>
<div id="toc" class="toc">...</div>
<p>...</p>
<h2>...</h2>
<div class="thumb tright">...</div>
<div class="thumb tright">...</div>
<h3>...</h3> = $0
<div class="thumb tright">...</div>
```

Paragraph



History

Development

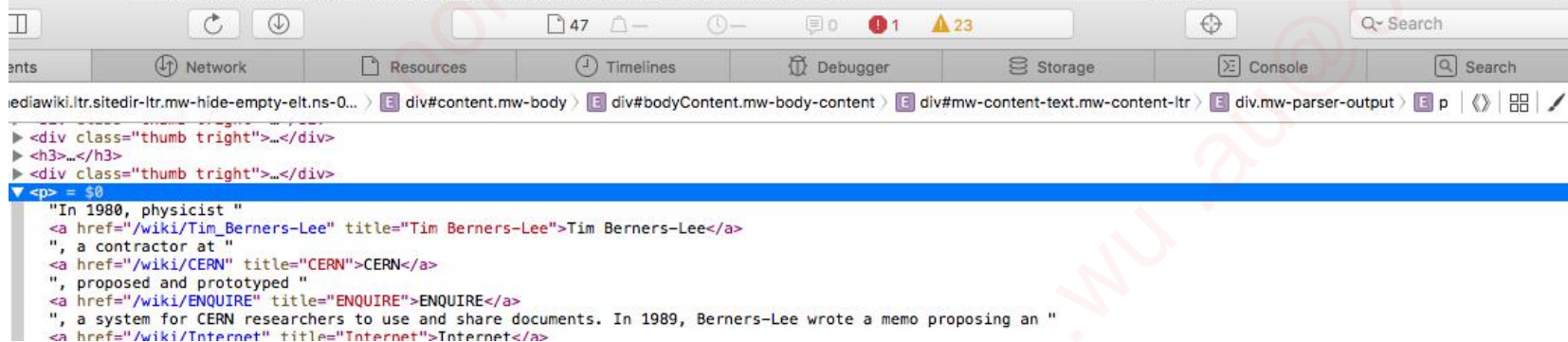
In 1980, physicist [Tim Berners-Lee](#), a contractor at [CERN](#), proposed and prototyped [ENQUIRE](#), a system for CERN researchers to use and share documents. In 1989, Berners-Lee wrote a memo proposing an [Internet](#)-based [hypertext](#) system.^[3] Berners-Lee specified HTML and wrote the browser and server software in late 1990. That year, Berners-Lee and CERN data systems engineer [Robert Cailliau](#) collaborated on a joint request for funding, but the project was not formally adopted by CERN. In his personal notes^[4] from 1990 he listed^[5] "some of the many areas in which hypertext is used" and put an encyclopedia first.

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HTML is a [markup language](#) that [web browsers](#) use to interpret and [compose](#) text, images, and other material into visual or audible web pages. Default characteristics for every item of HTML markup are defined in the browser, and these characteristics can be altered.



```
<!DOCTYPE html>
<html>
<!--
Created 16-10-2014
-->
<head>
<title>Sample</title>
</head>
<body>
<p>Sample text</p>
</body>
```





Text — Format element

```
<b> Bold text </b> <br>  
<strong> Important text </strong> <br>  
<i> Italic text </i> <br>  
<em> Emphasized text </em> <br>  
<mark> Marked text </mark> <br>  
<small> Small text </small> <br>  
<del> Deleted text </del> <br>  
<ins> Inserted text </ins> <br>
```

Bold text

Important text

Italic text

Emphasized text

Marked text

Small text

~~Deleted text~~

Inserted text

Paragraph



```
<p>  
眼前不是我熟悉的双眼  
  
陌生的感觉一点点  
  
但是他的故事 我怀念  
</p>
```

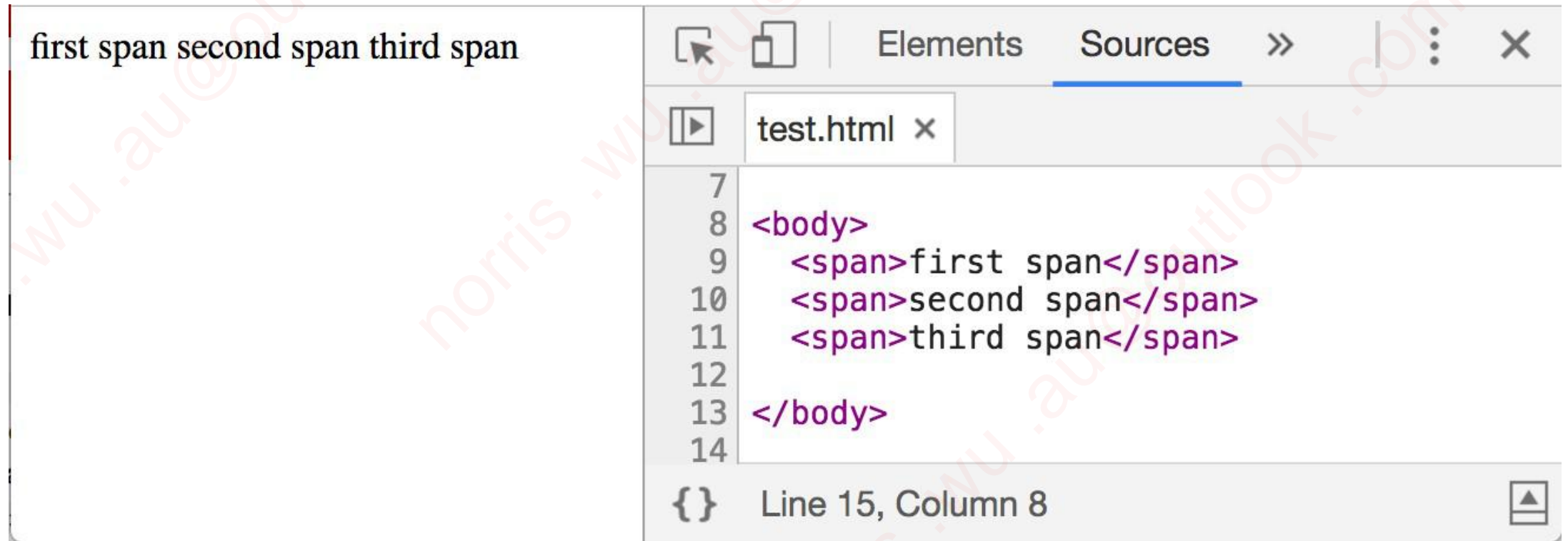
眼前不是我熟悉的双眼 陌生的感觉一点点 但是他的故事 我怀念

```
<p>  
眼前不是我熟悉的双眼<br>  
陌生的感觉一点点<br>  
但是他的故事 我怀念<br>  
</p>
```

眼前不是我熟悉的双眼
陌生的感觉一点点
但是他的故事 我怀念

Span

span is a inline element by default.



```
first span second span third span
```

```
<body>  
  <span>first span</span>  
  <span>second span</span>  
  <span>third span</span>  
</body>
```

{ } Line 15, Column 8

List

UL = Unsorted List

OL = Ordered List

```
<ul>  
  <li> test 1</li>  
  <li> test 2</li>  
  <li> test 3</li>  
</ul>  
<ol>  
  <li> test 1</li>  
  <li> test 2</li>  
  <li> test 3</li>  
</ol>
```

- test 1
- test 2
- test 3

1. test 1
2. test 2
3. test 3



Table



```
<table>
  <tr>
    <th>Firstname</th>
    <th>Lastname</th>
    <th>Age</th>
  </tr>
  <tr>
    <td>Nicole</td>
    <td>Kidman</td>
    <td>50</td>
  </tr>
  <tr>
    <td>Hugh</td>
    <td>Jackman</td>
    <td>48</td>
  </tr>
</table>
```

| Firstname | Lastname | Age |
|-----------|----------|-----|
| Nicole | Kidman | 50 |
| Hugh | Jackman | 48 |

<https://web.archive.org/>



Block — <div>

div is a block element by default.

first div
second div
third div

ElementsSources»⋮×

test.html ×

7

8

9

10

11

12

13

14

<body>

<div>first div</div>

<div>second div</div>

<div>third div</div>

</body>

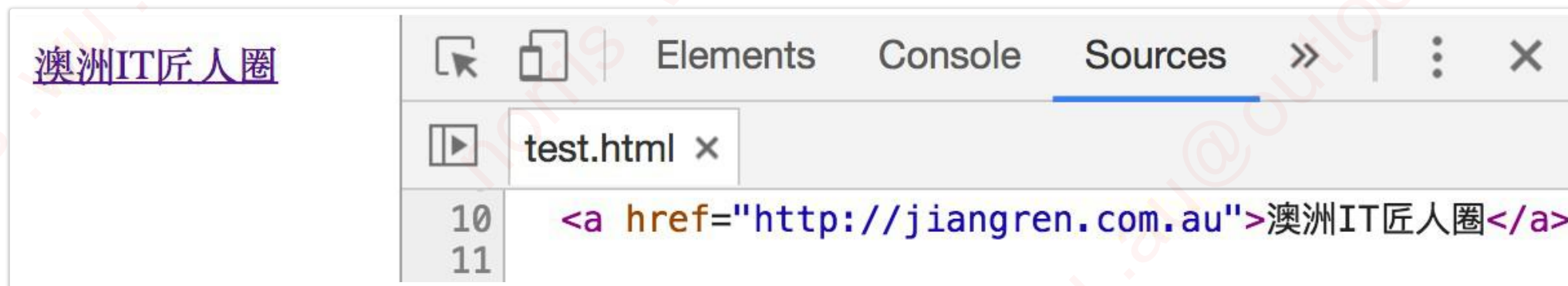
</html>

{ } Line 14, Column 8

Link

Link is a inline element by default

```
<a href="http://jiangren.com.au">澳洲IT匠人圈</a>
```



Link



```
<a href="http://jiangren.com.au" target="_blank" >澳洲IT匠人  
卷</a>
```

| Value | Description |
|-----------|---|
| _blank | Opens the linked document in a new window or tab |
| _self | Opens the linked document in the same frame as it was clicked (this is default) |
| _parent | Opens the linked document in the parent frame |
| _top | Opens the linked document in the full body of the window |
| framename | Opens the linked document in a named frame |

Img



```
128
129
130
131
132
133
134
135 
136 
137
138
139
140
141
```

```
<img src="" alt="" />
```

```
./ vs ../ vs /
```

File Path



| Path | Description |
|--|--|
| <code></code> | picture.jpg is located in the same folder as the current page |
| <code></code> | picture.jpg is located in the images folder in the current folder |
| <code></code> | picture.jpg is located in the images folder at the root of the current web |
| <code></code> | picture.jpg is located in the folder one level up from the current folder |

Form & Input



First name:

Last name:

Lightman ▾

Click me to Submit

```
102
103 <form action=""> <!--Ignore now-->
104   First name:<br>
105   <input type="text" name="firstname" placeholder="placeholder">
106   <br>
107   Last name:<br>
108   <input type="text" name="lastname" value="Default Value" >
109   <br><br>
110
111   <br/>
112
113   <select name="Tutor">
114     <option value="Lightman">Lightman</option>
115     <option value="Capsen">Capsen</option>
116     <option value="Billy">Billy</option>
117     <option value="Ding">Ding</option>
118   </select>
119 <br/>
120   <textarea name="message" rows="10" cols="30" >
121 </textarea>
122 <br/>
123   <input type="submit" value="Click me to Submit">
124 </form>
125
```


HTML5 Semantic



```
<section>
  <article>
    <header>
      <h1> Frist Section Title</h1>
    </header>
    <detail>
      <p> This is frist paragraph</p>
      <p> This is second paragraph</p>    </detail>
    </article>
  </section>
```


HTML5 Semantic — img



澳洲IT匠人圈
A logo for Jiangren

```
141  
142  
143  
144  
145  
146 <figure>  
147     
148   <figcaption> A logo for Jiangren</figcaption>  
149 </figure>  
150  
151  
152  
153  
154  
155  
156
```

HTML5 Media



```
ff<audio controls="controls">
  <source src="audio.mp3" type="audio/mp3" />
  <source src="audio.ogg" type="audio/ogg" />
  Your browser does not support the <audio> tag.
</audio>

<video controls="controls" width="400" height="300">
  <source src="movie.mp4" type="audio/mp4" />
  <source src="media.ogg" type="audio/ogg" />
  Your browser does not support the <video> tag.
</audio>
```

<svg> & <canvas> & WebGL

HTML5 Input



Name:

Email:

URL:

Age:

Description:

```
173 <form>
174   Name: <input name="name" required placeholder="Your name" />
175   <br/>
176   Email: <input type="email" name="email" required placeholder="billy.lei@jiangren.com.au"/>
177   <br/>
178   URL: <input type="url" name="url" placeholder="Homepage URL"/>
179   <br/>
180   Age: <input type="number" name="age" min="18" max="99" />
181   <br/>
182   Description: <textarea name="desc" placeholder="Describe yourself here..."></textarea>
183   <br/>
184   <input type="submit" value="Submit" />
185 </form>
```

Comment



<!-- comment -->

Frist Section Title

This is frist paragraph

This is second paragraph

Second Section Title

This is frist paragraph

This is second paragraph

```
82 <!-- No BdoY Can see me?-->
83 <!-- User Can see you -->
84 <div>
85   <div>
86     <!-- This is Frist Section -->
87     <h4>Frist Section Title</h4>
88     <p> This is frist paragraph</p>
89     <p> This is second paragraph</p>
90   </div>
91
92   <div>
93     <h4>Second Section Title</h4>
94     <p> This is frist paragraph</p>
95     <p> This is second paragraph</p>
96   </div>
```

Can I Just Use html5 Elements?

Browser Compatibility

caniuse.com





HTML Best Practices

- HTML has a lot of similar elements. For example, p and div are very similar. But keep all the contents inside a meaningful tag.
- Indentation makes HTML more easy to read.
- Remembering some useful short-cut of few editors speeds up development.
- Syntax highlighted editor helps you to find the errors.



HTML Best Practices — Bad example

Free Style HTML

This is frist paragraph and I love freeStyle

This is second paragraph and I still love freeStyle

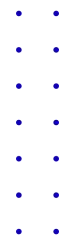


```
98     <p>
99     <p>
100         <p style="font-weight:bold;">Free Style HTML</p>
101         <p> This is frist paragraph and I love freeStyle</p>
102         <p> This is second paragraph and Do you freestyle</p>
103     </p>
104 </p>
105
106 </div>
```



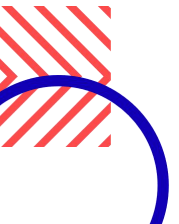
Lab Time: Build My Landing Page

html5up.net



HTML Interview Questions

[goskills.com/Development/Articles/HTML-interview-questions-answers](https://www.goskills.com/Development/Articles/HTML-interview-questions-answers)





Further Readings

- Code Academy: Introduction to HTML
codecademy.com/learn/learn-html
- Interactive tutorials:
learn-html.org
- BLACK VOODOO MAGIC:
codepen.io