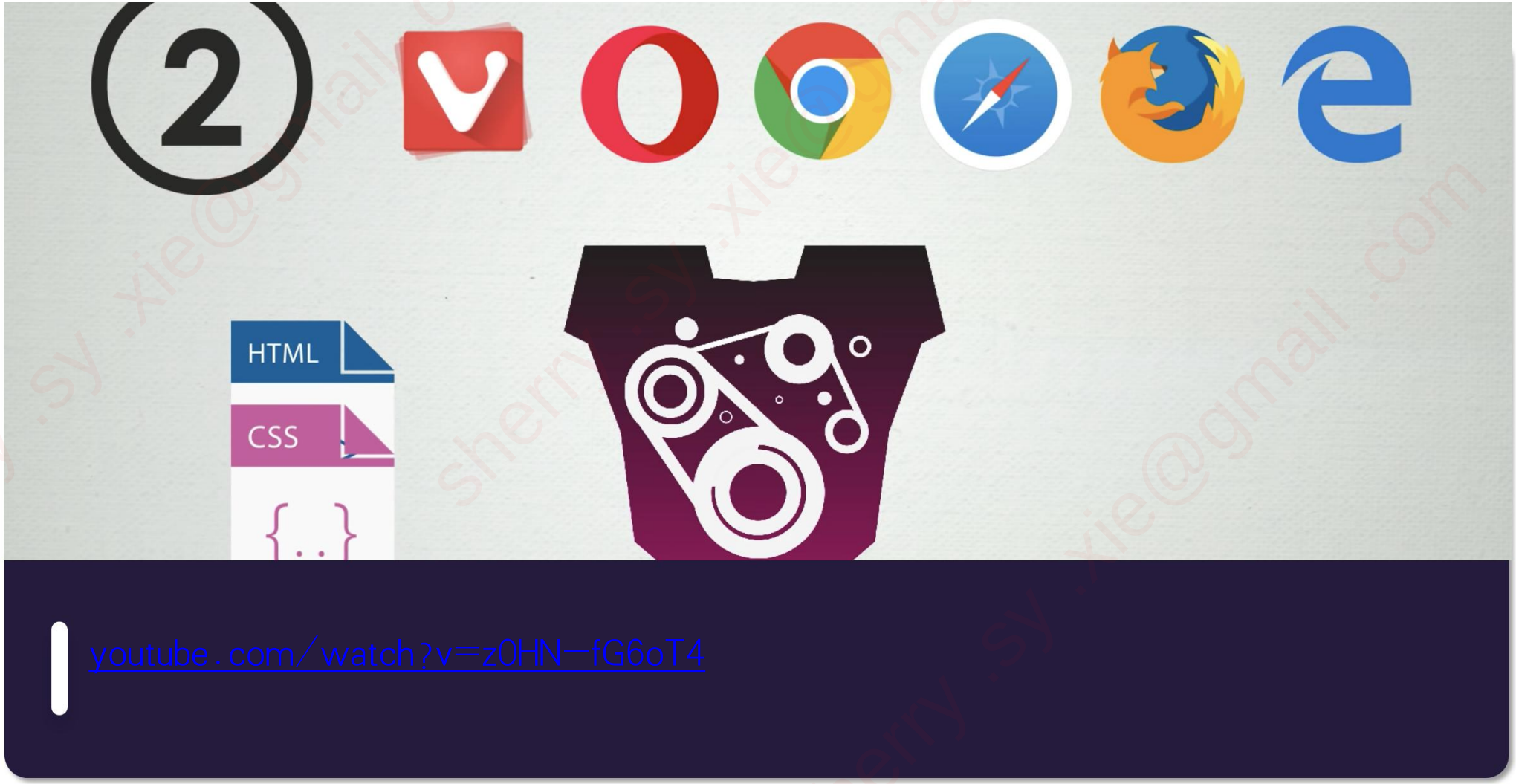
匠人学院
jiangren.com.au

HTML 1

sherry .sy .xie@gmail .com

What Really Happens When You Visit a Website?



youtube.com/watch?v=z0HN-fG6oT4

sherry.sy.xie@gmail.com

HTML

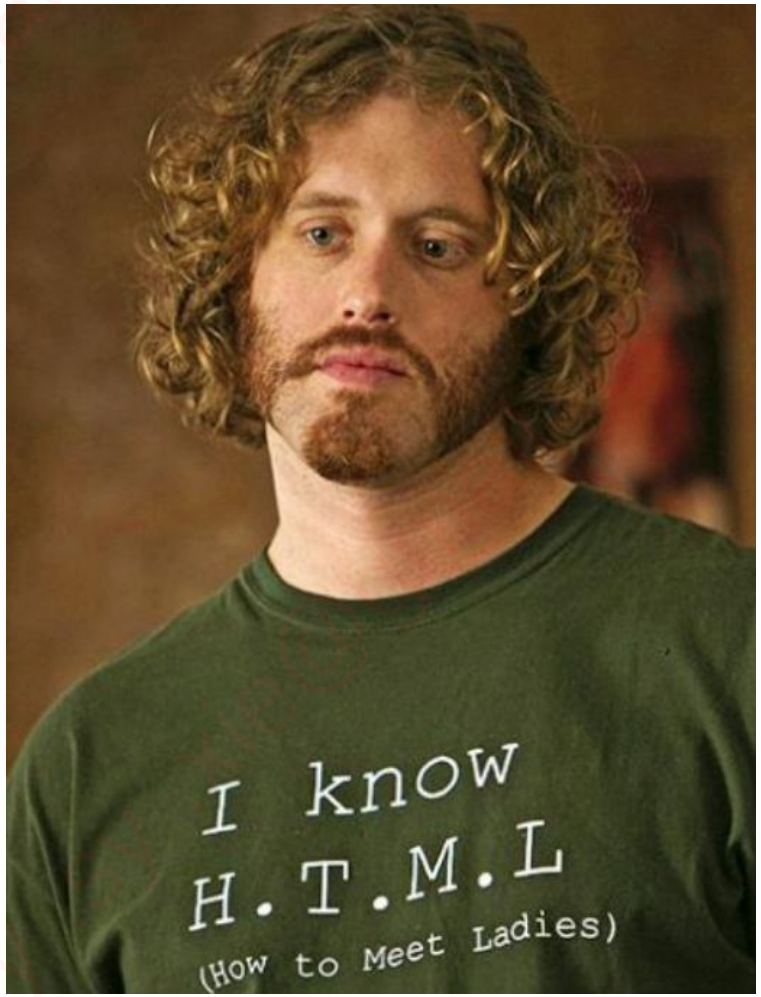
What is HTML (NOT How to Meet Ladies)

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



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HTML, CSS and JavaScript Explained

https://www.youtube.com/watch?v=gT0Lh1eYk78

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Your Best Friend

W3Schools: w3schools.com/html/

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

sherry.sy.xie@gmail.com

HTML + CSS + JS

HTML : Content Structure

CSS : Content Presentation

JS : Content Behaviour?

JS : Everything!

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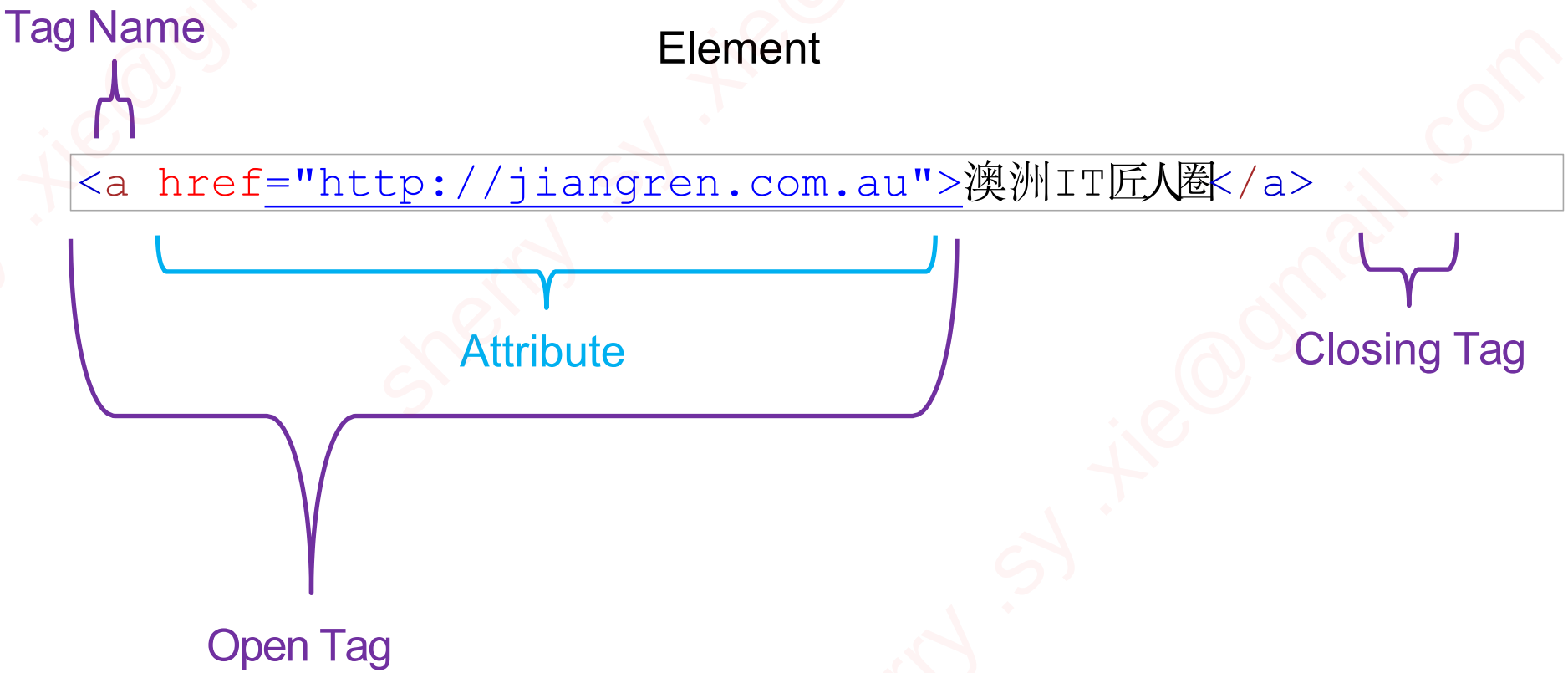
HTML

HTML **structure** and **define content *semantically***.



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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

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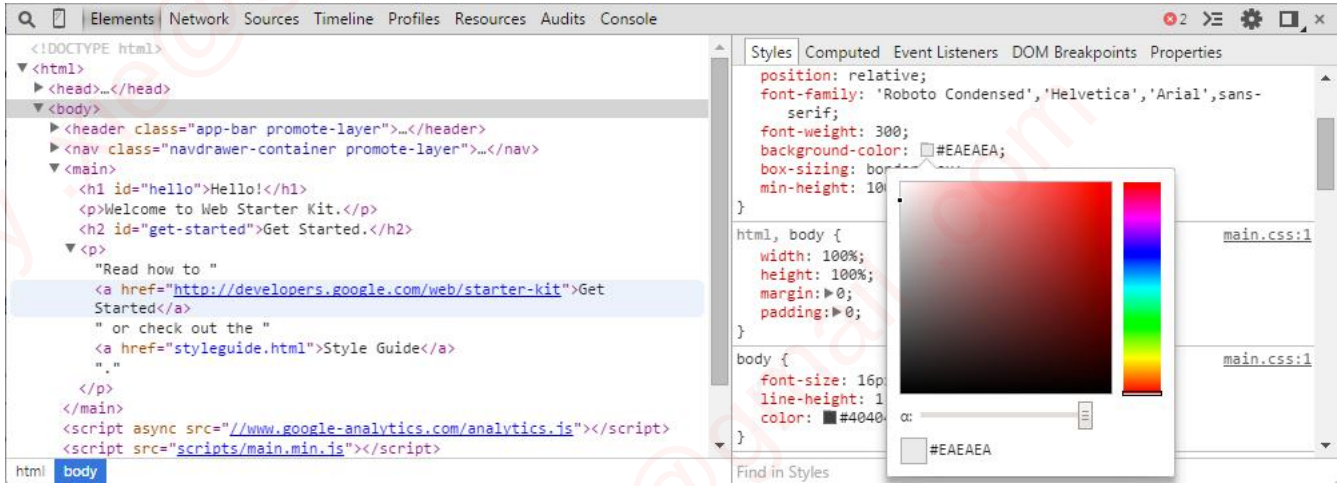
Chrome Dev Tool

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

sherry .sy .xie@gmail .com

Personal Website

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

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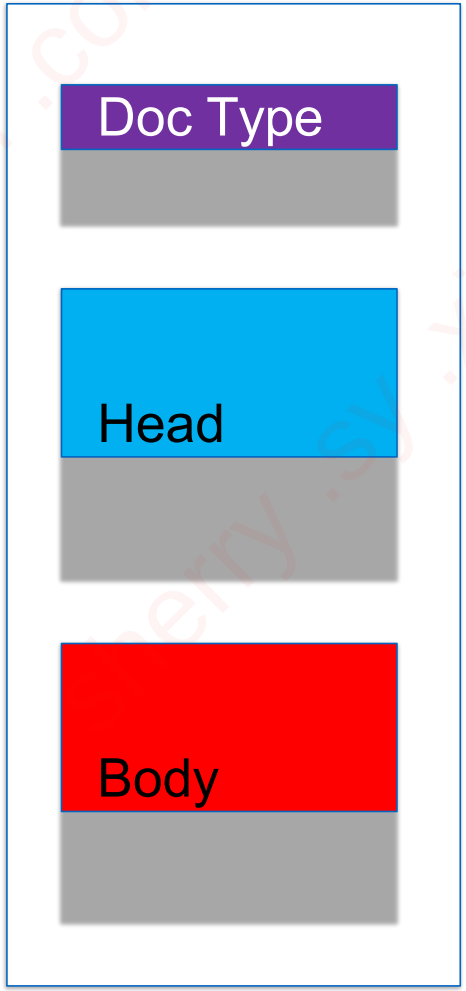
Structure




```
<!DOCTYPE html>

<html>

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


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

</html>
```

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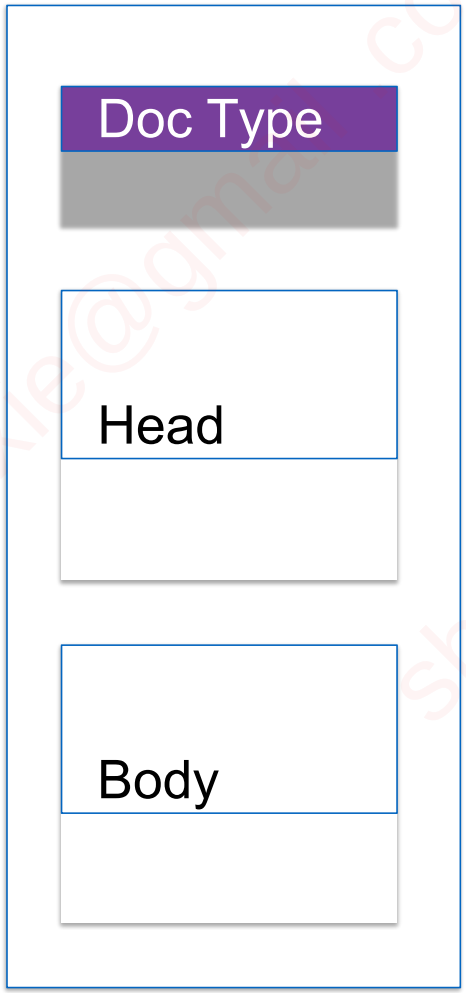
HTML Basics




```
<!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">
```

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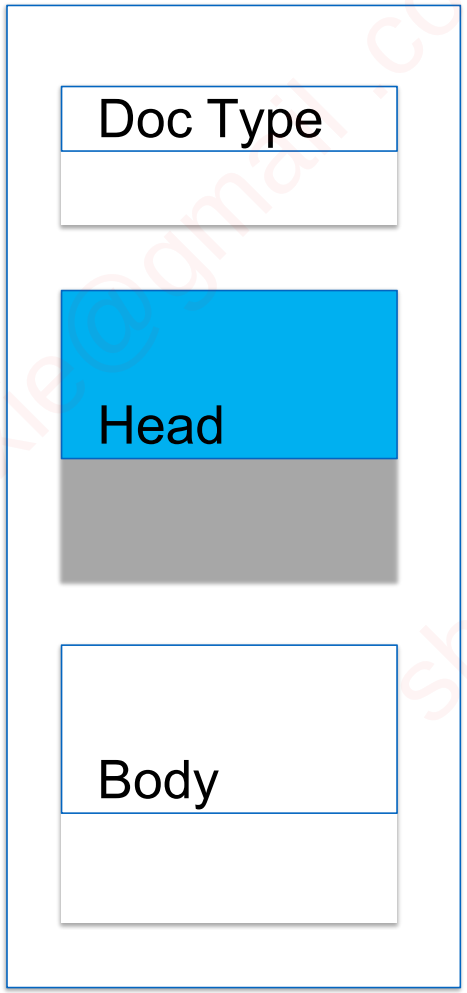
HEAD




```
<!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

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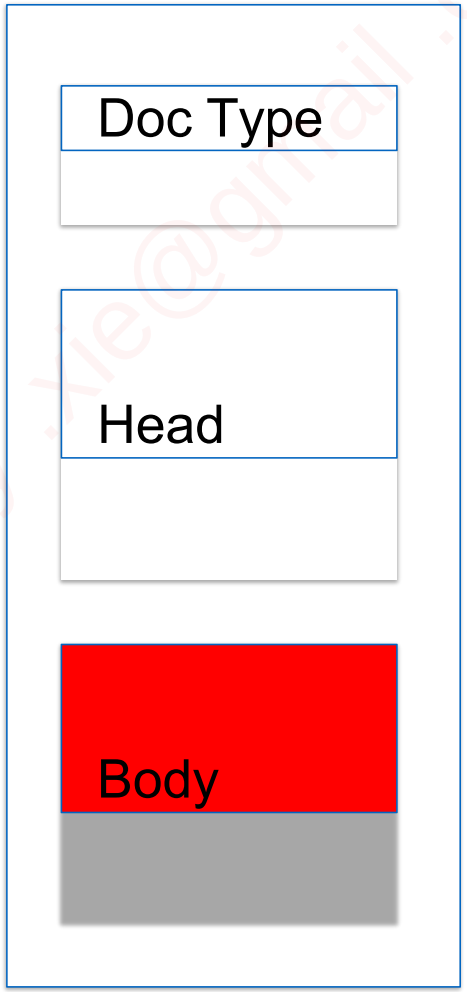
BODY




```
<!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>
```

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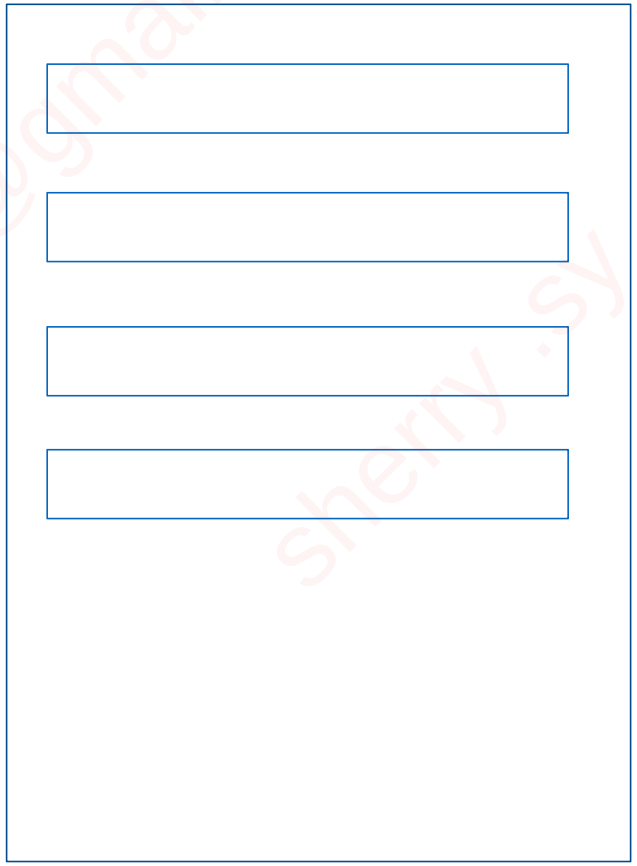
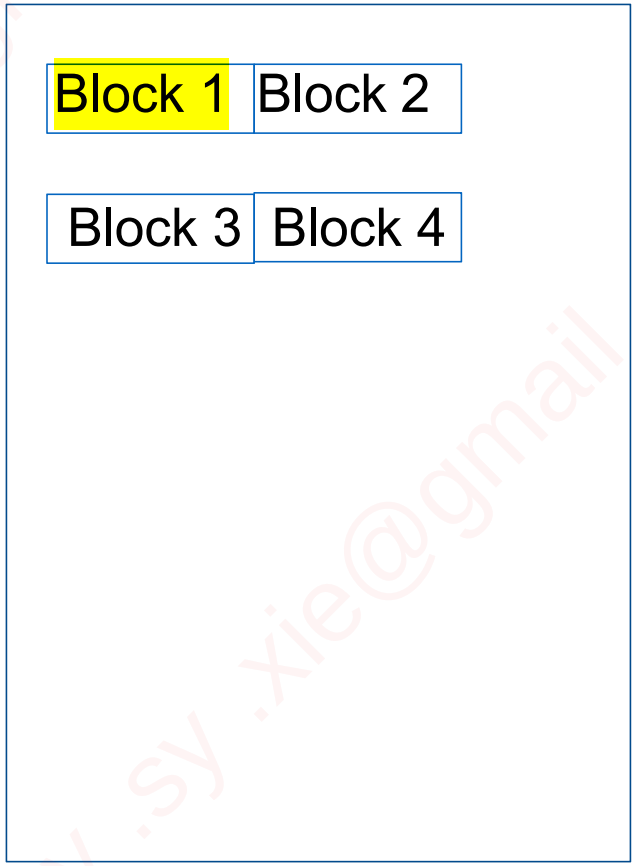
Block vs Inline

Block Elements



Inline Elements



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Block Elements

 <header> <main> <nav> <section>

<footer> <h1-6> <p> <ul> <ol> <li>

<table> <form> <hr>

<canvas> <video> <output> <pre> <dd>

<dl> <dt> <address> <article> <aside>

<blockquote> <figure> <figcaption>

<noscript> <fieldset>

Inline Elements

<a>
 <button> <img> <input>

<label> <script> <select>

<textarea> <b>   <i>

<abbr> <acronym> <bdo> <big> <cite>

<code> <dfn> <kbd> <map> <object>

<q> <samp> <small> <sub> <sup>

<time> <tt> <var>

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Text — Header

Header is define structure the hierarchy of the content

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

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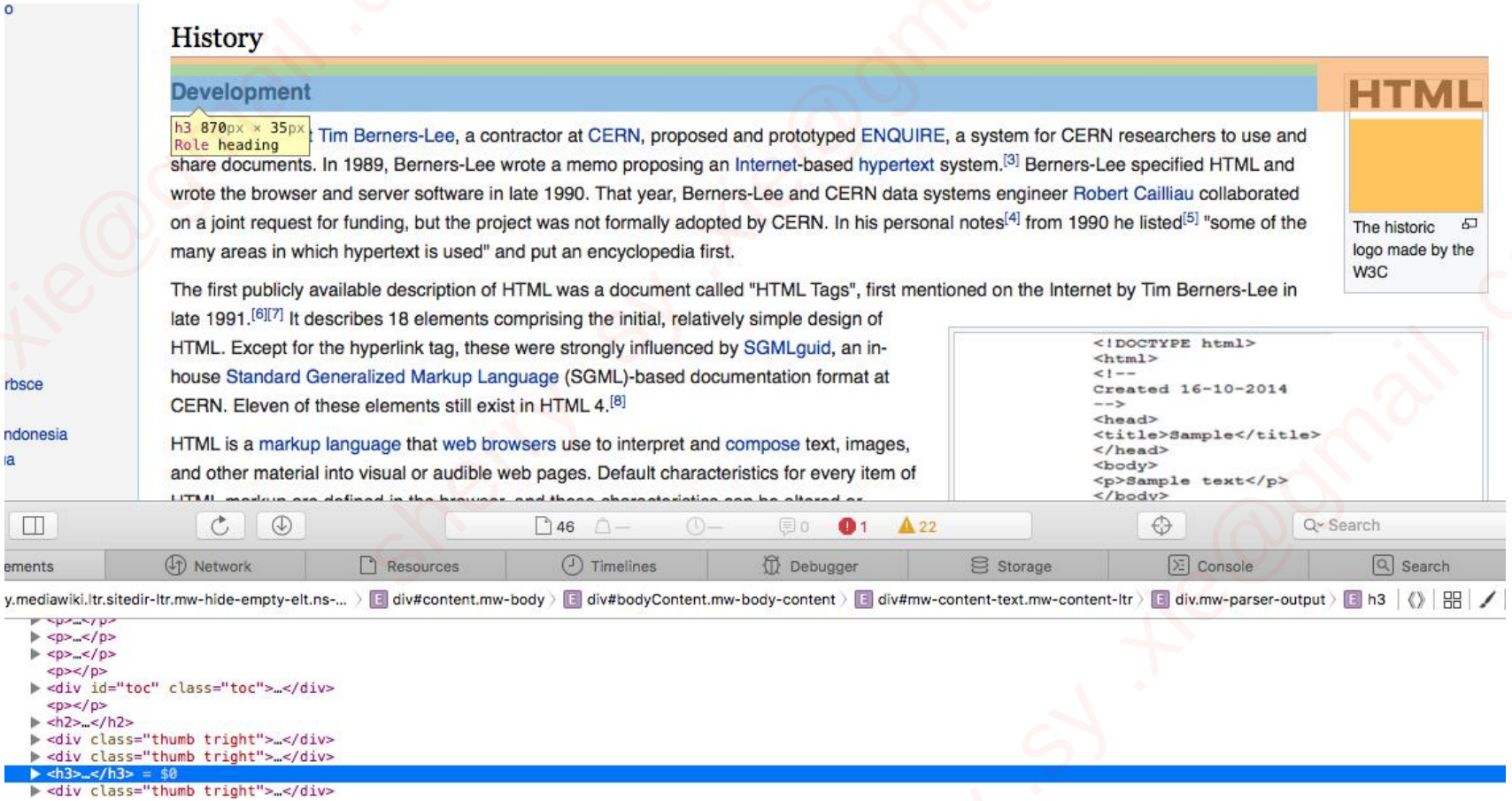
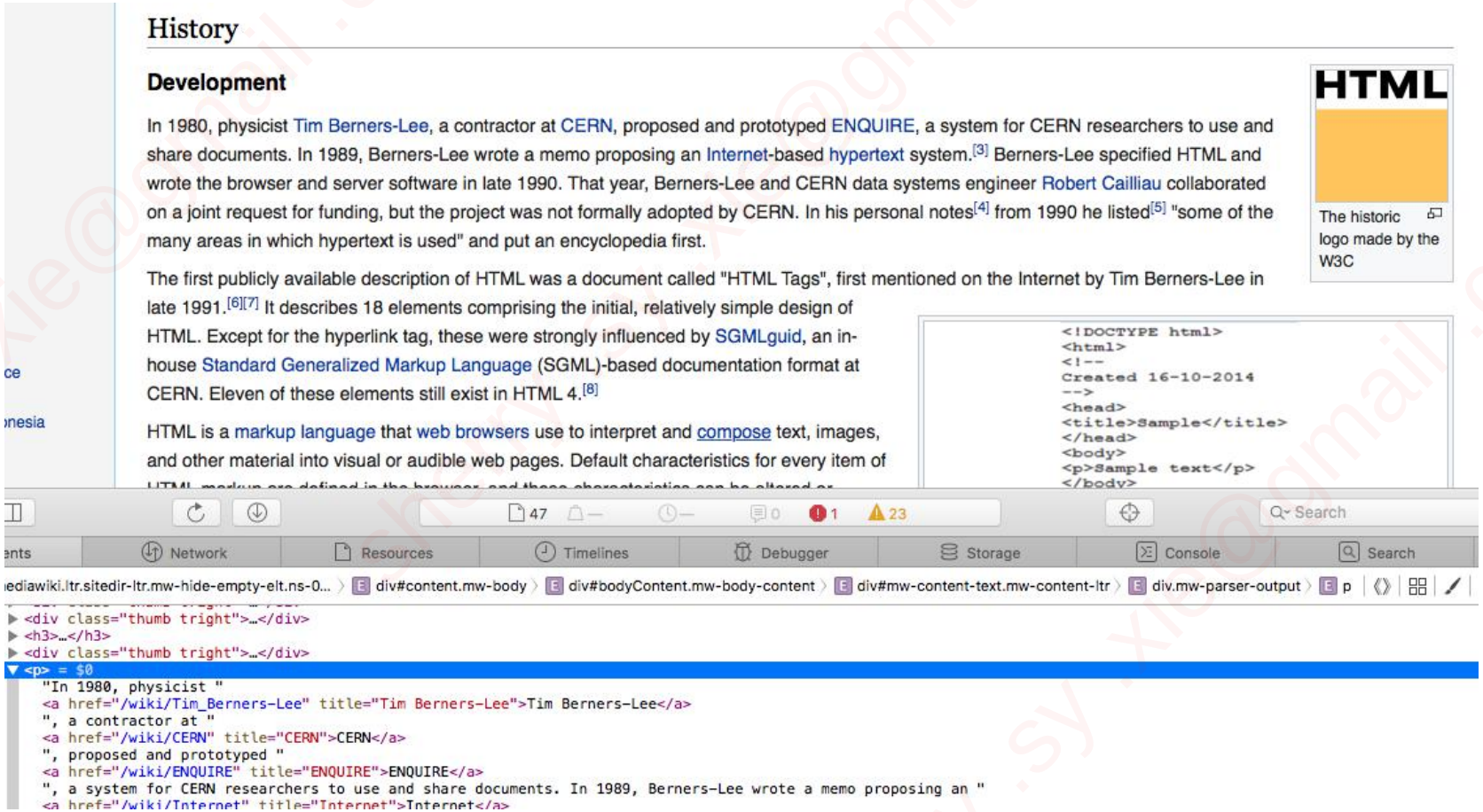
Text — Header


History
Development
h3 870px × 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
The historic logo made by the W3C
<!DOCTYPE html>
<html>
<!--
Created 16-10-2014
-->
<head>
<title>Sample</title>
</head>
<body>
Sample text
</body>
Search
Network
Resources
Timelines
Debugger
Storage
Console
Search
div#content.mw-body
div#bodyContent.mw-body-content
div#mw-content-text.mw-content-ltr
div.mw-parser-output
h3
…
…

…

<h2>…</h2>
…
…
<h3>…</h3> = $0
…

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
The historic logo made by the W3C
<!DOCTYPE html>
<html>
<!--
Created 16-10-2014
-->
<head>
<title>Sample</title>
</head>
<body>
Sample text
</body>
Network
Resources
Timelines
Debugger
Storage
Console
Search
div#content.mw-body
div#bodyContent.mw-body-content
div#mw-content-text.mw-content-ltr
div.mw-parser-output
p
…
<h3>…</h3>
…
 = $0
"In 1980, physicist "
<a href="/wiki/Tim_Berners-Lee" title="Tim Berners-Lee">Tim Berners-Lee</a>
", a contractor at "
<a href="/wiki/CERN" title="CERN">CERN</a>
", proposed and prototyped "
<a href="/wiki/ENQUIRE" title="ENQUIRE">ENQUIRE</a>
", a system for CERN researchers to use and share documents. In 1989, Berners-Lee wrote a memo proposing an "

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

sherry .sy .xie@gmail .com

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

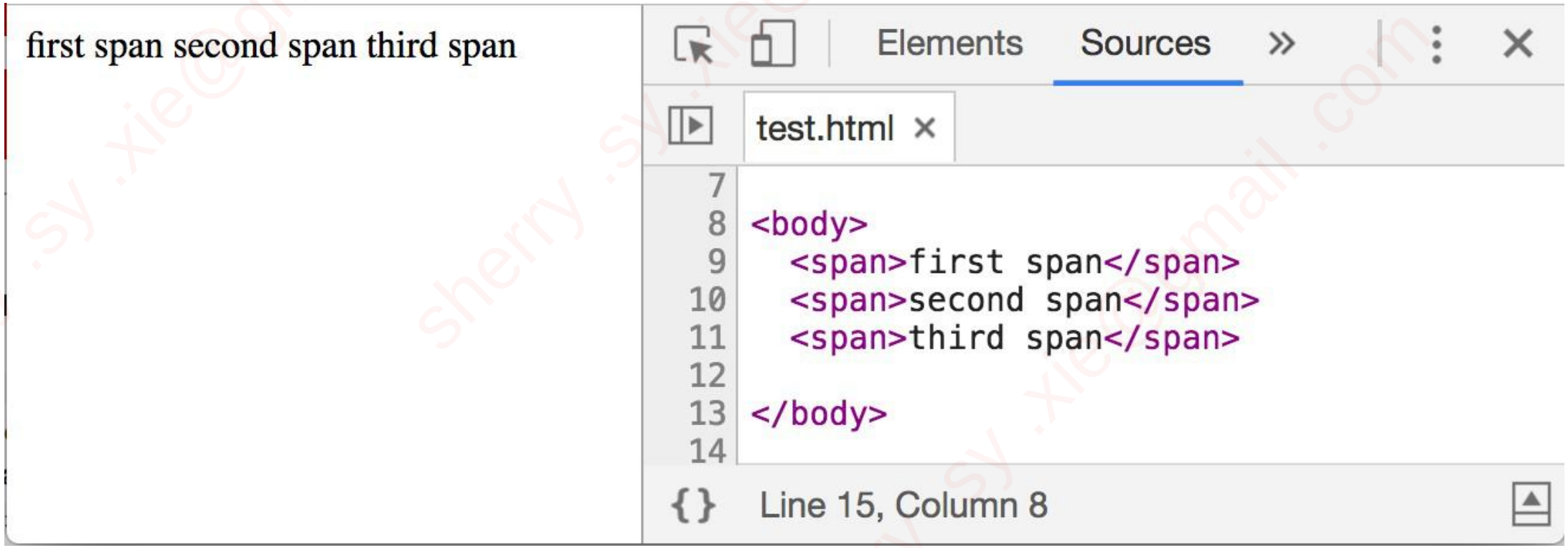
```
<p>
眼前不是我熟悉的双眼<br>
陌生的感觉一点点<br>
但是他的故事 我怀念<br>
</p>
```

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

sherry.sy.xie@gmail.com

Span

span is a **inline** element by default.



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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

sherry .sy .xie@gmail .com

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/

sherry .sy .xie@gmail .com

Block –

div is a **block** element by default.

first div
second div
third div

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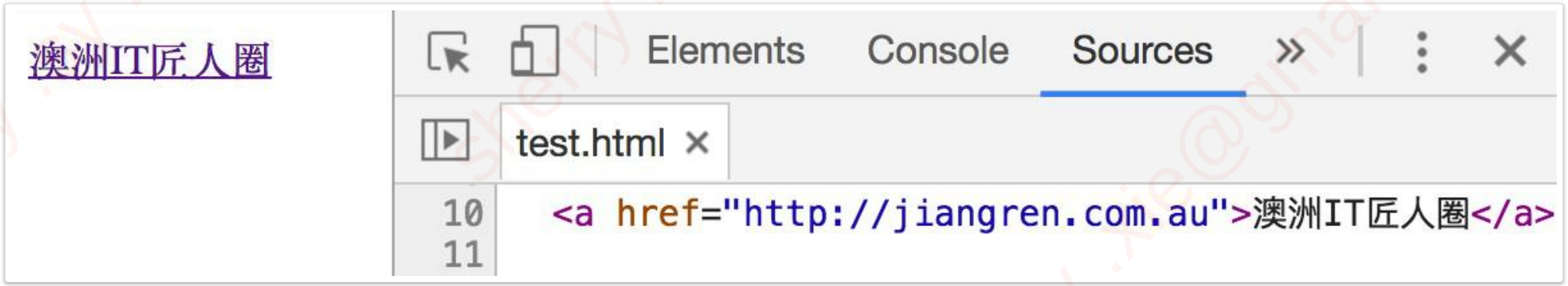
Link

Link is a **inline** element by default

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



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Link

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

https://www.w3schools.com/tags/tag_a.asp

sherry sy .xie@gmail .com

Img

```
128
129
130
131
132
133
134
135   <img src="./logo_samefolder.png">
136   <img src="./img/logo_imgfolder.png" >
137
138
139
140
141
```

```
<img  src=“”  alt=“” />
```

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

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File Path

Path	Description
<img src="picture.jpg">	picture.jpg is located in the same folder as the current page
<img src="images/picture.jpg">	picture.jpg is located in the images folder in the current folder
<img src="/images/picture.jpg">	picture.jpg is located in the images folder at the root of the current web
<img src="../picture.jpg">	picture.jpg is located in the folder one level up from the current folder

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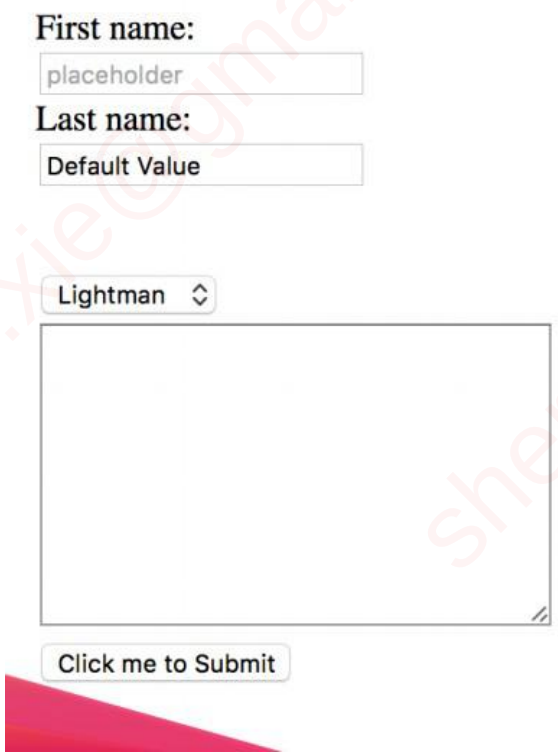
Form & Input




```
<form action=""> <!--Ignore now-->
  First name:<br>
  <input type="text" name="firstname" placeholder="placeholder">
  <br>
  Last name:<br>
  <input type="text" name="lastname" value="Default Value" >
  <br><br>

  <br/>

  <select name="Tutor">
    <option value="Lightman">Lightman</option>
    <option value="Capsen">Capsen</option>
    <option value="Billy">Billy</option>
    <option value="Ding">Ding</option>
  </select>
<br/>
 <textarea name="message" rows="10" cols="30" >
</textarea>
<br/>
  <input type="submit" value="Click me to Submit">
</form>
```

sherry .sy .xie@gmail .com

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>
```

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HTML5 Semantic — img

```
142
143
144
145
146  <figure>
147    <img src="./img/logo_imgfolder.png" \>
148    <figcaption> A logo for Jiangren</figcaption>
149  </figure>
150
151
152
153
154
155
156
```

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HTML5 Media

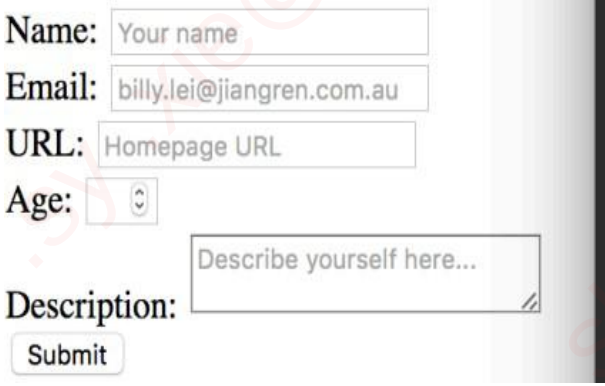
```
<audio controls="controls">
    <source src="audio.mp3" type="audio/mp3" />
    <source src="audio.ogg" type="audio/ogg" />
    Your browser does not support the <audio> tag.
</audio>

<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

sherry.sy.xie@gmail.com

HTML5 Input




```
<form>
    Name: <input name="name" required placeholder="Your name" />
    <br/>
    Email: <input type="email" name="email" required placeholder="billy.lei@jiangren.com.au"/>
    <br/>
    URL: <input type="url" name="url" placeholder="Homepage URL"/>
    <br/>
    Age: <input type="number" name="age" min="18" max="99" />
    <br/>
    Description: <textarea name="desc" placeholder="Describe yourself here..."></textarea>
    <br/>
    <input type="submit" value="Submit" />
</form>
```

sherry.sy.xie@gmail.com

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>
```

sherry.sy.xie@gmail.com

Can I Just Use html5 Elements?

Browser Compatibility

caniuse.com

sherry .sy .xie@gmail .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.

sherry.sy.xie@gmail.com

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>
```

sherry .sy .xie@gmail .com

Lab Time: Build My Landing Page

html5up.net

sherry.sy.xie@gmail.com

HTML Interview Questions

goskills.com/Development/Articles/HTML-interview-questions-answers

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Further Readings

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

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