

Life is Possible - 生命教育 手機程式工作坊

Lecture 02 - Introduce to HTML

Menu

- What and Why of HTML
- Concepts of HTML
- Basics HTML structure
- Reading `Tags` and `Docs`

What is HTML and Why

購物特集 **NEW** | 商店列表 | 最新優惠

常見問題 | 工作機會 | 商店加盟 **ENG**

HKTV mall

超級市場 時裝美容 家居生活 電視節目

商品分類 輸入品牌或產品名稱，搜尋全場 89,127 件商品

熱門搜尋: 嬰兒用品 Chicco Johnson 選戰珍藏set Clutch Bag

水果 蔬菜 85 >
海鮮 肉類 329 >
零食 甜品 2113 >
即食麵 麵 意粉 811 >
酒類 1411 >
米 食油 129 >
飲品 即沖飲品 2181 >
熟食 冷凍小食 280 >
早餐 果醬 401 >
罐頭 乾貨 302 >
紙品 即棄用品 174 >
調味 醬料 1217 >
家居用品 731 >
個人護理 1550 >
醫藥 健康產品 330 >
餐飲券 節慶食品 68 >
嬰兒用品 食品 418 >
貓狗用品 2138 >

煮水 · 茶鋪

送

凡買12支
Slavda初生嬰兒礦泉水(500ml)

礦物質有助嬰兒保健，減少腸胃不適
適合第一天的初生嬰兒開始飲用

1支**初生嬰兒礦泉水**(1.5L)
(價值: \$39.7)*
*兼享10%Mall Dollar現金回贈

立即選購 >

所有產品數量有限，折扣優惠先到先得
優惠期由即日起至2015年12月31日，HKTVmall保留最終決定權

1 2 即時對話 Live Chat

Search Facebook

Josephine

Josephine Williams

Watch

Events

Friends

Memories

See More

Shortcuts

Undiscovered Eats

Weekend Trips

Jasper's Market

Red Table Talk Group

Best Hidden Hiking Trails

See More

Add to Story

Tom Russo

Betty Chen

Dennis Han

Cynthia Lopez

What's on your mind, Josephine?

Photo/Video

Tag Friends

Feeling/Activity

Fiona Ozeri

5 hrs ·

This has some great healthy recipes

Sponsored

Lebo's Pizza

Experience the trendy pizza spot in Palo Alto being called the next big thing.

Birthdays

Jessica, Erica and 2 others have birthdays today

Contacts

Dennis Han

Eric Jones

Cynthia Lopez

Betty Chen

Tina Lim

Molly Carter

How to build those website?

Python? C++? Ruby? Java?

HTML

HTML



HTML (Hyper Text Markup Language)

In brief:

- HTML is the standard markup language for creating Web pages
- HTML describes the structure of a Web page
- HTML consists of a series of elements
- HTML elements tell the browser how to display the content
- HTML elements label pieces of content such as "this is a heading", "this is a paragraph", "this is a link", etc.

Advantages of HTML

- ✨ Easy to learn.
- 💻 Every browser supports HTML Language. (Cross platform)
- ⚡ HTML is light weighted and fast to load.
- And more ...

Basic structure

index.html

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta http-equiv="X-UA-Compatible" content="IE=edge">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Life is Possible ar</title>
</head>
<body>
  <!-- All stuff here -->
  <h1> Hello mate </h1>
</body>
</html>
```

Minified structure

index.html

```
<!DOCTYPE html>
<html lang="en">
  <head>
    <!-- All Style / CSS / Headerstuff here -->
    <!-- To define meta tags, css file, title is here -->
  </head>
  <body>
    <!-- All HTML / JS stuff here -->
    <!-- To define visible stuff and JS script here -->
  </body>
</html>
```

Fundamentals Tags

Those tags are important to familiar with

```
<html> </html>
```

<https://developer.mozilla.org/en-US/docs/Web/HTML/Element/html>

The `<html>` HTML element represents the root (top-level element) of an HTML document, so it is also referred to as the root element. All other elements must be descendants of this element.

AKA, to tell the computer that this file is a `HTML` file.

<head> </head>

<https://developer.mozilla.org/en-US/docs/Web/HTML/Element/head>

The **<head>** HTML element contains machine-readable information (metadata) about the document, like its title, scripts, and style sheets.

AKA, to tell the computer those items are title, scripts, and style sheets.

<body> </body>

<https://developer.mozilla.org/en-US/docs/Web/HTML/Element/body>

The **<body>** HTML element represents the content of an HTML document. There can be only one **<body>** element in a document.

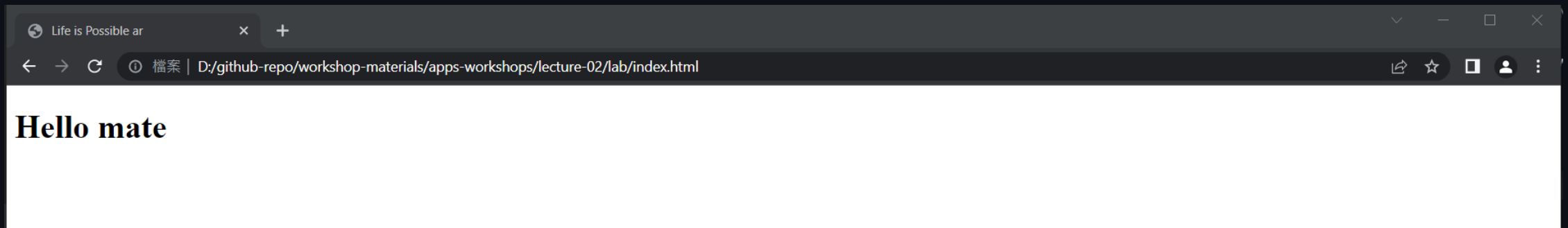
AKA, to tell the computer those represents the content are between this tag.

Combined with

index.html

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta http-equiv="X-UA-Compatible" content="IE=edge">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Life is Possible ar</title>
</head>
<body>
  <!-- All stuff here -->
  <h1> Hello mate </h1>
</body>
</html>
```

Output



Notices

1. Several tags are in pairs, but some tags are not.

e.g. (Pair: `<body>...</body>`, Single `<meta>`)

See the documents and tutorials to check the usage.

Break

Basic Tags you need to know

Basic Tags in body (Container related)

`<div>` : Basic Box tag

`<header>` : Store the web header content

`<section>` : Store content regarding each sections

`<footer>` : Store the web footer content

Rules 1

Usually html tags are in paris

Opening
`<div>`

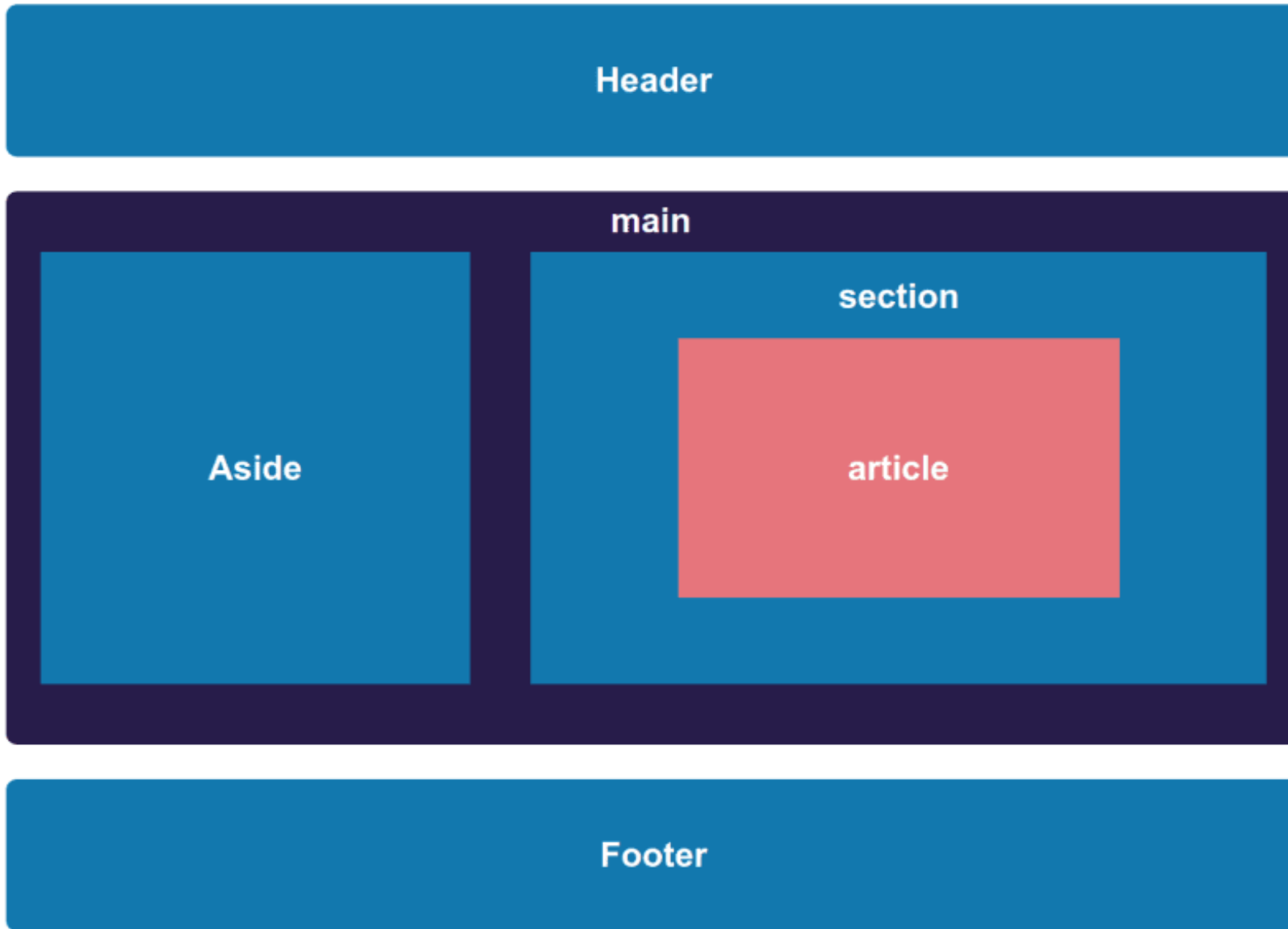
End
`</div>`

```
<div>some stuff inside the box</div>  
<header>some stuff inside the box</header>  
<footer>some stuff inside the box</footer>
```

Rules 2

Tags can nested together, as long as your syntax is correct

```
<div>  
  <div>hello</div>  
  <div>  
    <div>hello</div>  
    <div>yolo</div>  
  </div>  
</div>
```



Tree Structure

```
<!DOCTYPE html>
```

```
<html>
```

```
  <head>
```

```
    <title></title>
```

```
  </head>
```

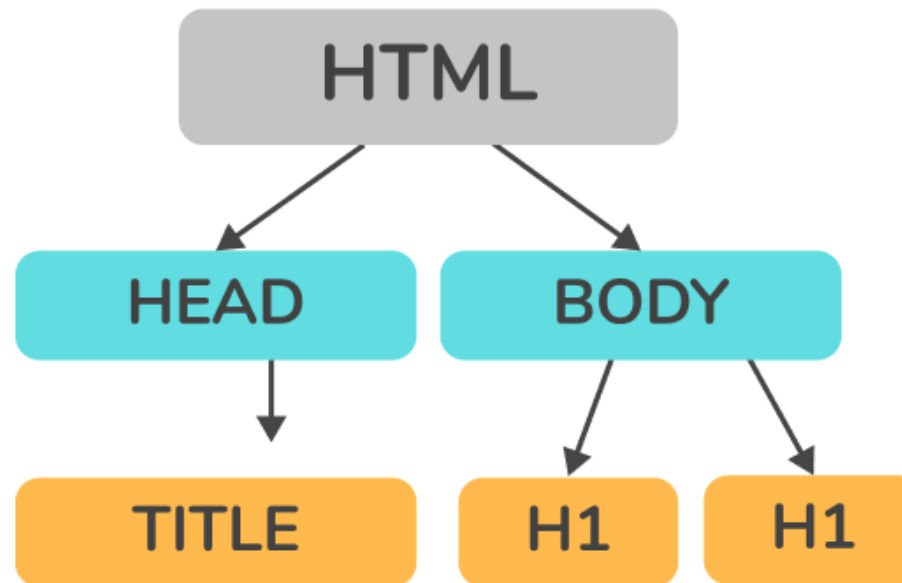
```
  <body>
```

```
    <h1></h1>
```

```
    <h1></h1>
```

```
  </body>
```

```
</html>
```




```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta http-equiv="X-UA-Compatible" content="IE=edge">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Hi all</title>
</head>
<body>

  <header>Hello all</header>

  <div>
    <h1>Hello</h1>
  </div>

  <footer>Bye</footer>

</body>
</html>
```

More common tags in body

- `<h1>-<h6>` : Header text tags to contain string.
https://developer.mozilla.org/en-US/docs/Web/HTML/Element/Heading_Elements
- `<p>` : The Paragraph element.
<https://developer.mozilla.org/en-US/docs/Web/HTML/Element/p>
- `` : Generic inline container.
<https://developer.mozilla.org/en-US/docs/Web/HTML/Element/span>
- `
` : Line Break element.
<https://developer.mozilla.org/en-US/docs/Web/HTML/Element/br>
- `` : The Bring Attention To element.
<https://developer.mozilla.org/en-US/docs/Web/HTML/Element/b>

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta http-equiv="X-UA-Compatible" content="IE=edge">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Hi all</title>
</head>
<body>

  <h1>Hello</h1>
  <h2>Hello 2</h2>
  <h3>Hello 3</h3>

  <br>

  <p>Yoooo</p>
  <span>Apple</span>
  <b>I am strong</b>

</body>
</html>
```

More common tags in body

- ``: The Image Embed element.
<https://developer.mozilla.org/en-US/docs/Web/HTML/Element/img>
- `<hr>`: The Thematic Break (Horizontal Rule) element.
<https://developer.mozilla.org/en-US/docs/Web/HTML/Element/hr>
- `<a>`: The Anchor element.
<https://developer.mozilla.org/en-US/docs/Web/HTML/Element/a>

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta http-equiv="X-UA-Compatible" content="IE=edge">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Hi all</title>
</head>
<body>

  <a href="https://youtu.be/dQw4w9WgXcQ"> Funny youtube video </a>

  <hr>

</body>
</html>
```

More common tags in body

- ``, ``, ``: unordered list, order list and list item

<https://developer.mozilla.org/en-US/docs/Web/HTML/Element/ul>

<https://developer.mozilla.org/en-US/docs/Web/HTML/Element/ol>

<https://developer.mozilla.org/en-US/docs/Web/HTML/Element/li>

More common tags in body (Functional)

Will be cover more in later JS lessons

- `<button>`
- `<form>`
- `<input>`
- `<option>`

More common tags in body

See here to know what we can use in HTML:

<https://developer.mozilla.org/en-US/docs/Web/HTML/Reference>

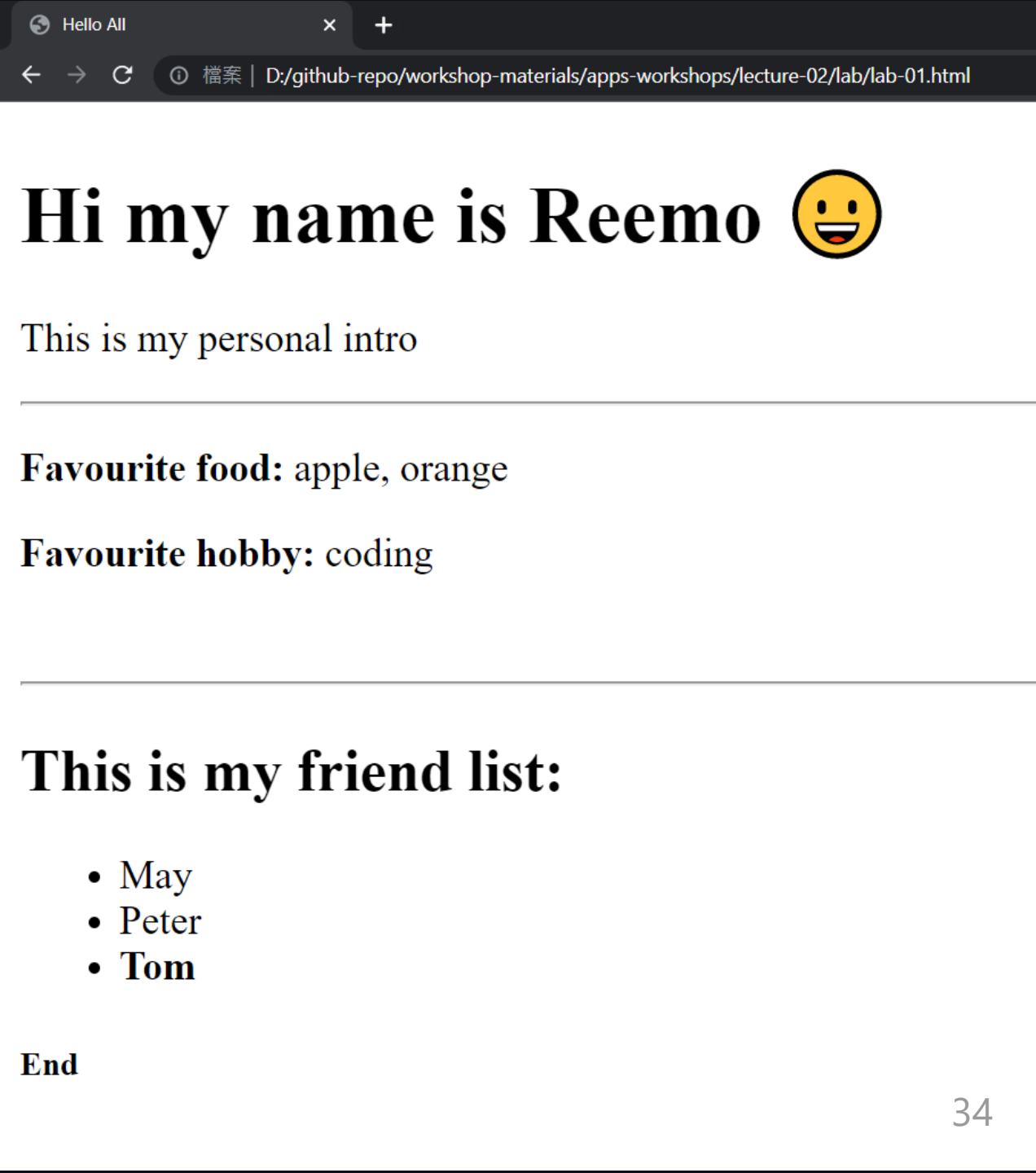
!! Remember: Searching google and documents is the key to code. !!

Break and play time

Lab 01 - Try clone me

Try to code the regarding images with `html` code.

Notes: The  is an emoji.






Lab 02 - Introduce yourself

With the following template, try to introduce yourself with an html pages.
(Either English or Chinese is ok)


```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta http-equiv="X-UA-Compatible" content="IE=edge">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Peter homepages</title>
</head>
<body>
  <!-- Your content -->
</body>
</html>
```

Lab 02 - Introduce yourself (Cont)

You **SHOULD** contain these items in your intro:

-  Name and a short intro to describe yourself
-  4 Favourite stuff to share, 3 friend name and more...
-  Proper layout and UI to design the site

You **MAY** contain these items in your intro:

-  More you can think of ...

Lab 02 - Introduce yourself (Cont)

After the works, you will have a `30 - 60 seconds` time to present the website to others. Rename the site.html to `<your-name>_101_lab02.html` e.g.

`peter_101_lab02.html`

You may submit the site to google form in here:
(Link will be share in lecture time)

End

Extra Readings

- w3school HTML Tutorial
<https://www.w3schools.com/html/>
- How to structure HTML for an actual website
<https://zellwk.com/blog/html-structure/>