Web Applications

Front-End : HTML & CSS

Overview

	Web Applications
Front-End	Part 1a : Basic HTML Part 1b : Basic CSS Part 2 : HTML - Forms
Back-End	Part 3 : Form with Flask Part 4 : SQLite with Flask

Part 1a : Basic HTML

Hyper Text Markup Language

Part 1a : Basic HTML

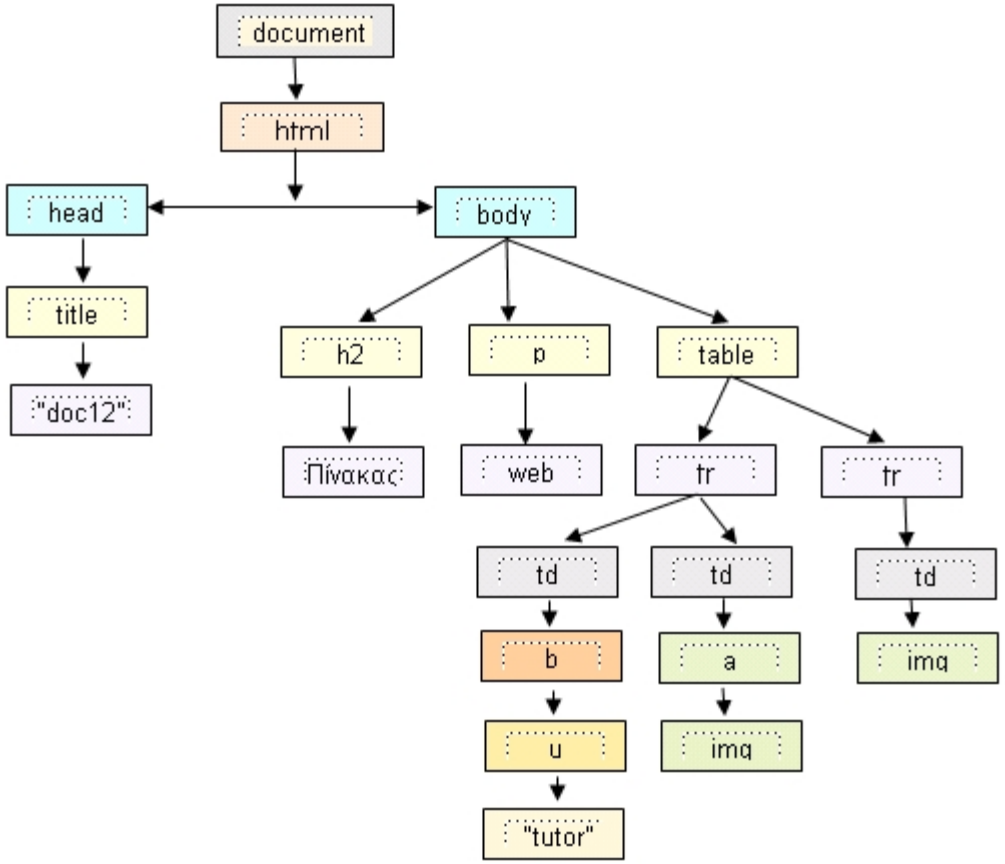
HTML	○ Basic structural tags ○ Attributes, links, and images ○ Selecting in HTML ○ **Exercise**: Make a profile page

Video : “Hamburger Markup”

www.dontfeartheinternet.com/02-html/

HTML is full of tags

Tags can contain other tags!




```
<html>
  <head>
    <title>doc12</title>
  </head>
  <body>
    <h2>Something in Russian??</h2>
    <p>web</p>
    <table>
      <tr>
        <td><b><u>tutor</u></b></td>
        <td><a><img></a></td>
      <tr>
        <td><img></td>
      </tr>
    </table>
  </body>
</html>
```

Tag Rules

- Start tags by using the name of the tag, in angle brackets, e.g.
- End tags by using a forward slash, then the name of the tag, all in angle brackets, e.g.
- Everything in between the start and end is considered the "inner HTML" of the tag—where there can be text, or more tags
- Many tags need to be closed, e.g.
- Some tags, sometimes called void elements, don't need closing, e.g. <hr>, <img>, and <input>. You may see these with an extra forward slash at the end, e.g. <hr />.

Starter HTML !

index.html

```
1   <!DOCTYPE html>
2   <html lang="en">
3   <head>
4       <meta charset="UTF-8">
5       <meta name="viewport" content="width=device-width,
        initial-scale=1.0">
6       <meta http-equiv="X-UA-Compatible" content="ie=edge">
7       <title>Document</title>
8   </head>
9   <body>
10
11  </body>
12  </html>
13
```

HTML – Head & Body

<html> ... </html>

This surrounds all tags in the document.

<head> ... </head>

This is for setup and administration—things you do to set up the webpage so everything looks right.

<body> ... </body>

Where all your main tags go.

Headers

- Headers!
- Big headers!
- Slightly less big headers!
- Slightly less big header than that last slightly less big header!
- You get the idea.

```
<h1>Heading 1</h1>
<h2>Heading 2</h2>
<h3>Heading 3</h3>
<h4>Heading 4</h4>
<h5>Heading 5</h5>
<h6>Heading 6</h6>
```

Paragraphs

Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Aenean commodo ligula eget dolor. Aenean massa.

Puts the text on a new line.

What happens if you try including a “return” (pressing enter) in some text surrounded by a tag?

HTML is *whitespace-insensitive*—extraneous spaces, tabs, and line breaks are all ignored.

Unordered Lists

```
<h1>A list of fruit</h1>
<ul>
   <li>Bananas</li>
   <li>Strawberries</li>
   <li>Papayas</li>
 </ul>
```

A list of fruit

- Bananas
- Strawberries
- Papayas

Ordered Lists

```
<h1>My favourite school courses</h1>
<ol>
    <li>Web Development</li>
    <li>That's all</li>
    <li>Yeah</li>
</ol>
```

My favourite school courses

1. Web Development
2. That's all
3. Yeah

Links

```
<a href="http://google.com">Go google it yourself, silly!</a>
```

becomes

Go google it yourself, silly!

The **href** *attribute*: That's the link to go to. You *need* http:// in front for an external website, i.e. href="http://www.moe.gov.sg", not href="www.moe.gov.sg".

Inner HTML: That's the text to show.

Attributes in tags

- Some tags don't just have their names and inner HTML, they also have *attributes*
- Here's how an attribute looks:

```
<img src="cat.png">
```

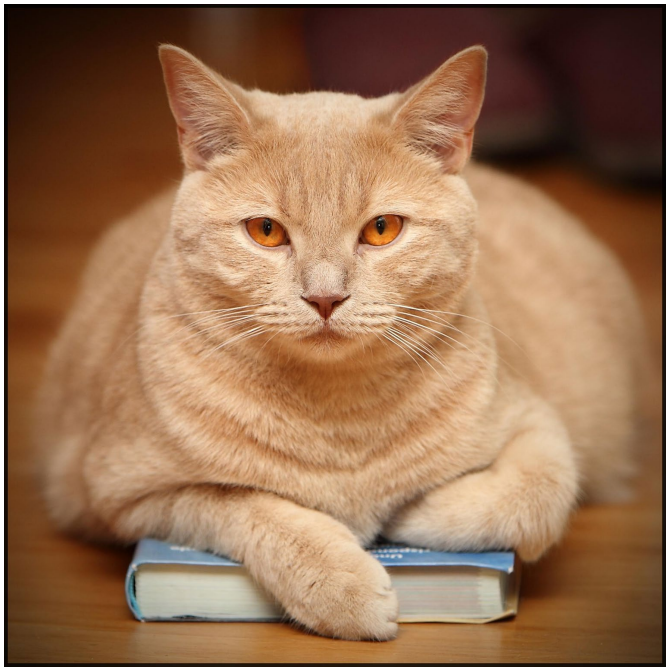
- In this case, the image has an attribute whose *name* is src, and src's *value* is cat.png.
- Attribute values tend to be surrounded in quotes (single or double are fine, as long as they match)
- … but if you leave them out for attribute values without spaces, that's OK (but perhaps somewhat frowned upon by web developers)

Images

```
<img src="cat.png">
```

(No closing tag needed!)

On Apache or nginx, this will load an image called **cat.png**, provided it's in the same folder as the HTML File, and show it on the webpage. On Flask, this requires a bit more configuration…



Exercise

Do up a profile page for yourself.
Show off all the HTML
skills / techniques.

Sample : My Profile Webpage

Hello I am a potato

Skills

- Being brown
- Being starchy

Education

- Potato Primary School
- Potato Institution
- Potato Junior College
- Potato University of Potato

Goals in life

I just want to end up in a gourmet restaurant like KFC.

Summary

- HTML
  - Basic structural tags
  - Attributes, links, and images
  - **Exercise**: Make a profile page