

Introduction to HTML(5)

Valerie Moyo



Overview

- History of the web and HTML
- HTML Standard
- Structure of an HTML Document

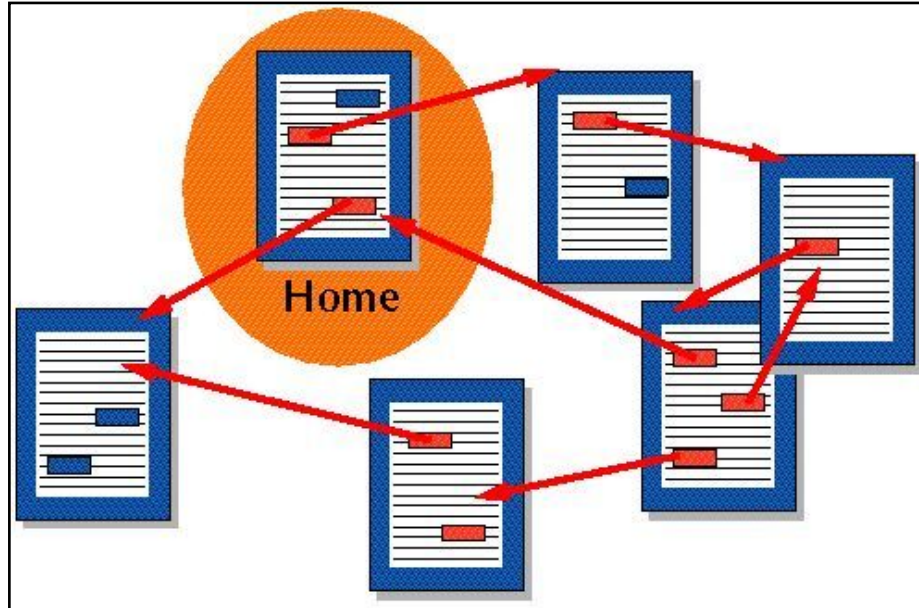
History of the web and HTML

The history of the web and HTML

- HTML stands for HyperText Markup Language.
- It is the programming language that essentially makes up the world wide web.
- It is used to create HTML documents which are simply web pages that display content in different formats such as text, audio, video etc.
- Originally, web pages could only display text on a computer screen, usually accessed by web browsers.
- These text-based web pages included links to other text-based web pages that the reader could also immediately access.
- These references to other pages are referred to as hyperlinks - hence the term hypertext.

HyperText

- The system of linking text-based documents that are connected by hyperlinks and implemented over the web



Markup

- The text in these web documents are structured and formatted using **markup**
 - A text-encoding system which controls how the document is displayed and consumed by the web browser.
- More formally, a markup language is a set of rules governing what markup may be included in a document and how it is structured and formatted to make it easy for the reader to understand.

Markup

- Example of a markup language for creating recipes

```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE recipe PUBLIC "-//Happy-Monkey//DTD RecipeBook//EN"
"http://www.happy-monkey.net/recipebook/recipebook.dtd">

<recipe>

  <title>Peanut-butter On A Spoon</title>

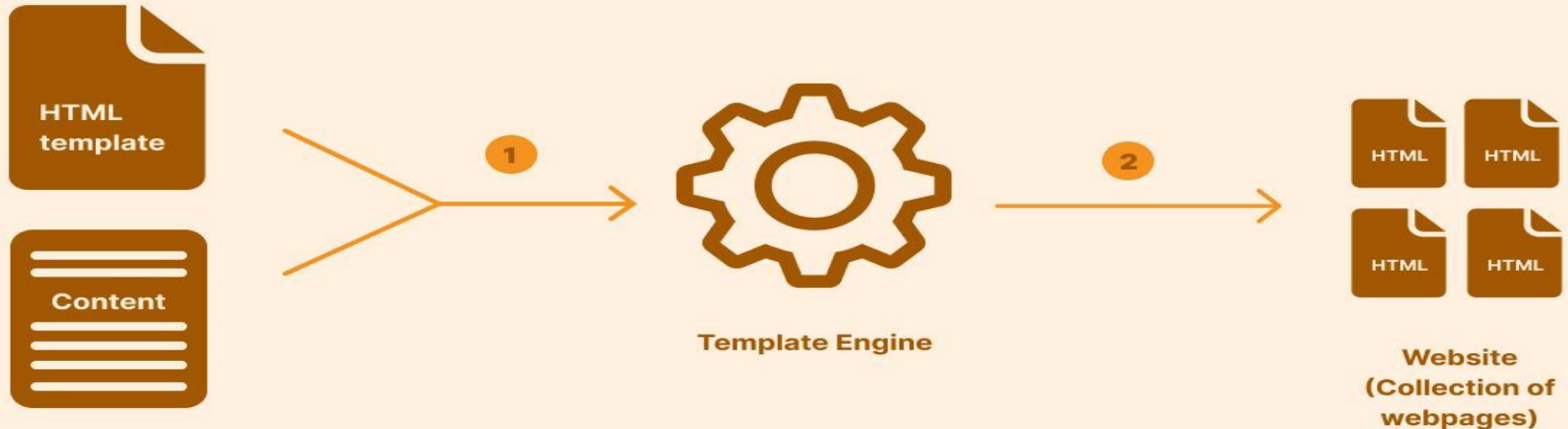
  <ingredientlist>
    <ingredient>Peanut-butter</ingredient>
  </ingredientlist>

  <preparation>
    Stick a spoon in a jar of peanut-butter,
    scoop and pull out a big glob of peanut-butter.
  </preparation>

</recipe>
```

Markup - HTML

- In the context of HTML, the markup for describing web documents would use different rules to determine how the web page is consumed by the browser engine
- Browser engine - the core software component of a web browser that transforms HTML documents into visual representation for use by humans and computer programs



Markup - HTML

- Snapshot of HTML

```
<!DOCTYPE html>
<html>
  <head>
    <meta charset="utf-8">
    <title>My test page</title>
  </head>
  <body>
    <h1>Mozilla is cool</h1>
    

    <p>At Mozilla, we're a global community of</p>

    <ul> <!-- changed to list in the tutorial -->
      <li>technologists</li>
      <li>thinkers</li>
      <li>builders</li>
    </ul>

    <p>working together to keep the Internet alive and
    is essential to individual growth and our collective fu

    <p>Read the <a href="https://www.mozilla.org/en-US/
  </body>
</html>
```

HTML

- Historically, web browsers could only display text; however, with the advent of technology and an increased demand for the consumption of different media formats over the web, the HTML document now supports other content such as audio, video and others.
- This wide range of multimedia content results in dynamic web pages as opposed to static (text-based) web pages.

HTML, CSS and JavaScript

- The dynamic nature of modern web documents results in increased interactivity where users can perform a wide range of functions on a web page.
- For instance,
 - Entering data onto forms,
 - Playing video, sound,
 - Displaying images and so on.
- This increased interactivity has led to the need for HTML to be assisted by other technologies such as CSS and JavaScript, to control the way content is displayed in a web browser - with CSS controlling styling and layout, and JavaScript controlling the behavior of and content of web pages.

HTML5

- The evolution of the web has also led to the revision of the HTML standard, with different versions being developed, the most notable one being HTML5.
- HTML5 includes functionality to handle complex web applications that can be implemented over a wide range of devices such as laptops, desktops, mobile phones etc.
- As such, it introduces markups with cross-platform capabilities in addition to multimedia, graphics, mathematical formulas and elements that can enrich the semantic content of documents.

**Questions and
comments**



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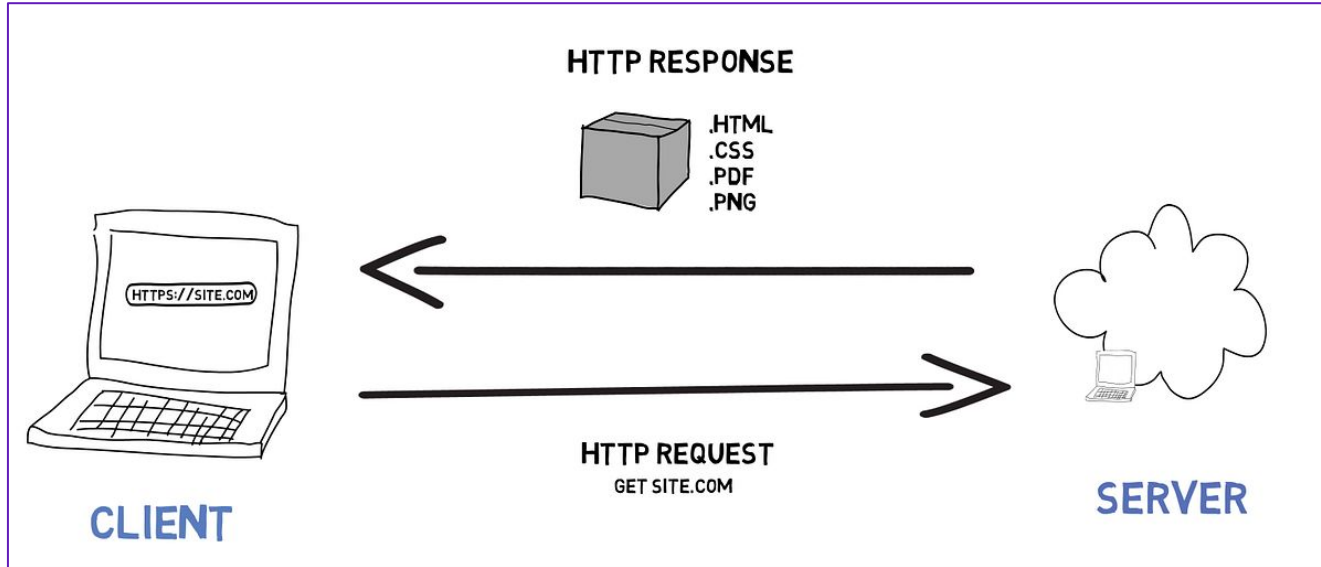


Overview

- Overview of the Internet works
- The HTML Standard
- Structure of an HTML Document

How the Internet works

- The Internet is a worldwide computer network that transmits a variety of data and media across interconnected devices.
- The connections are made possible by packets and protocols - which enable Internet devices to communicate with each other.

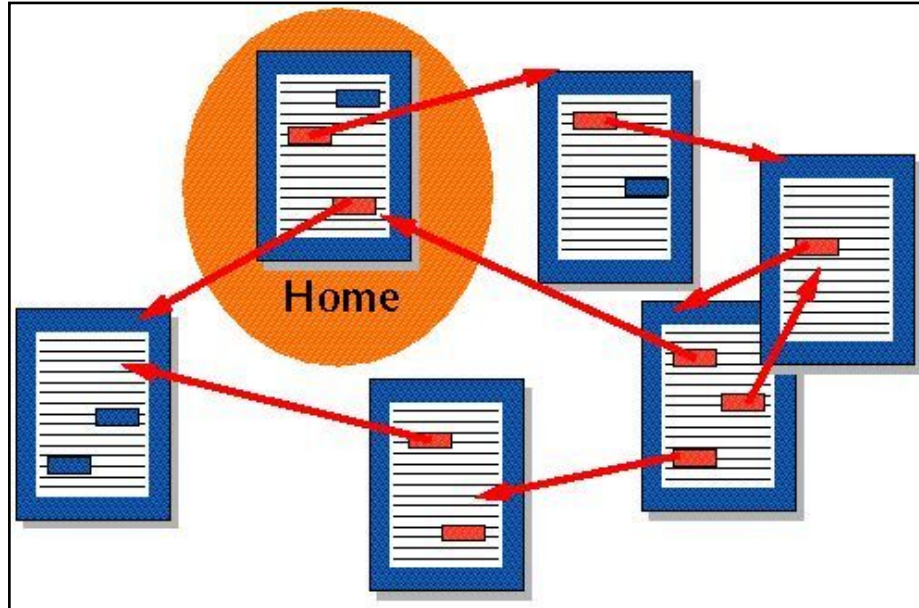


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**BLINK
ENGINE**



**WEBKIT
ENGINE**



**TRIDENT
ENGINE**



**GECKO
ENGINE**

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HTML template

Starting point for your web page

```
<> index.html > ...  
1    <!DOCTYPE html>  
2    <html lang="en">  
3    <head>  
4    |    <meta charset="utf-8">  
5    </head>  
6    <body>  
7    |    <!-- Content goes here. -->  
8    </body>  
9    </html>  
10
```

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Next time

- A closer look at HTML
 - Different elements and tags
 - How to use each one
 - Good coding practices

**Questions and
comments**

