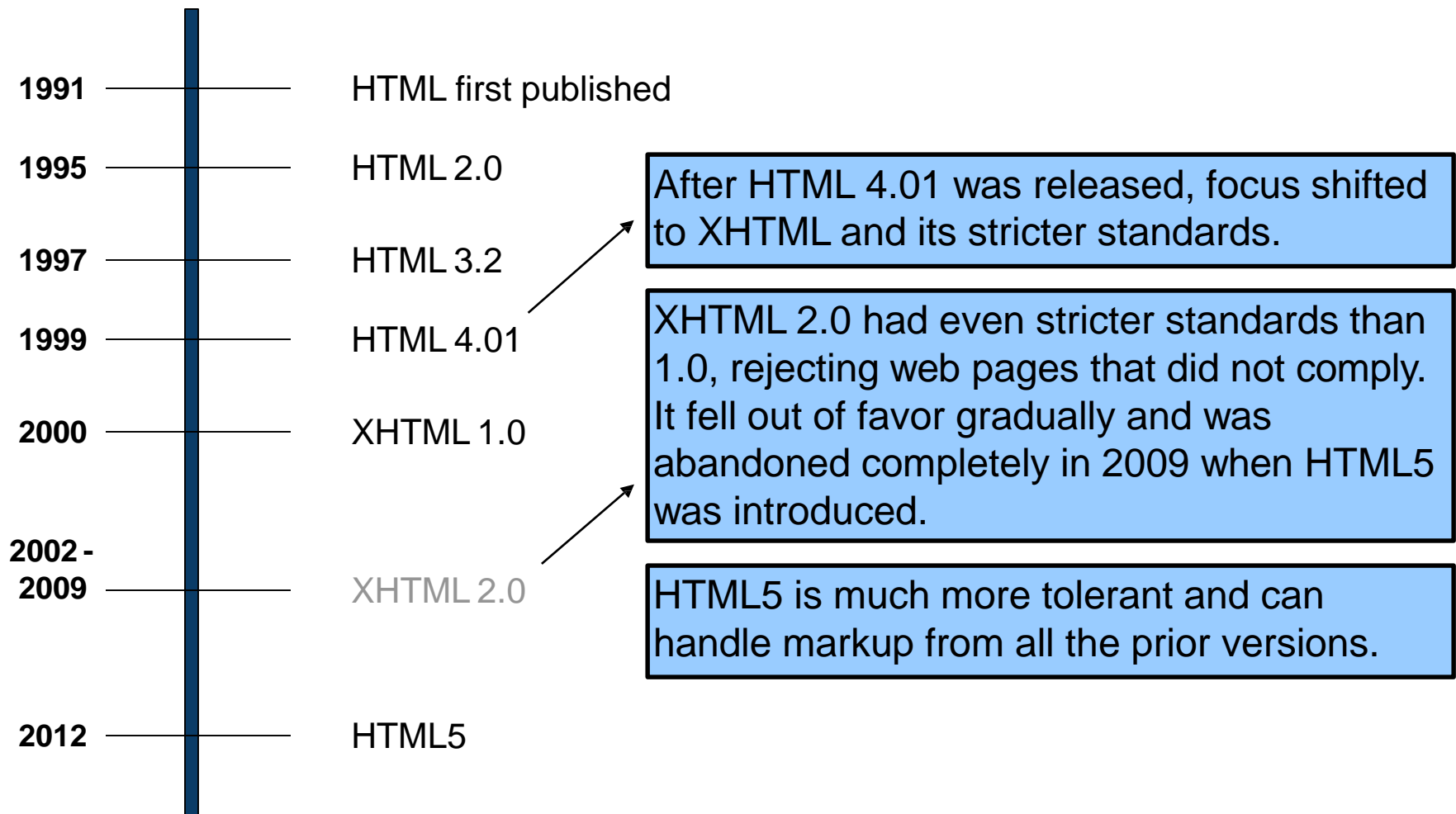


Introduction to HTML5 and CSS3



History of HTML





What is HTML5?

- HTML5 is the newest version of HTML, only recently gaining partial support by the makers of web browsers.
- Improve the semantic definition (i.e. meaning and purpose) of elements. For example: `<div>` or `` are non-semantic and `<form>`, `<table>` are semantic elements.
- HTML5 semantic elements are supported in all modern browsers. It made it possible for search engines to identify the correct web page content unlike customized ids and names.

HTML Basic Structure

Below is a visualization of an HTML page structure:

```
<html>
```

```
<head>
```

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

```
</head>
```

```
<body>
```

```
<h1>This is a heading</h1>
```

```
<p>This is a paragraph.</p>
```

```
<p>This is another paragraph.</p>
```

```
</body>
```

```
</html>
```

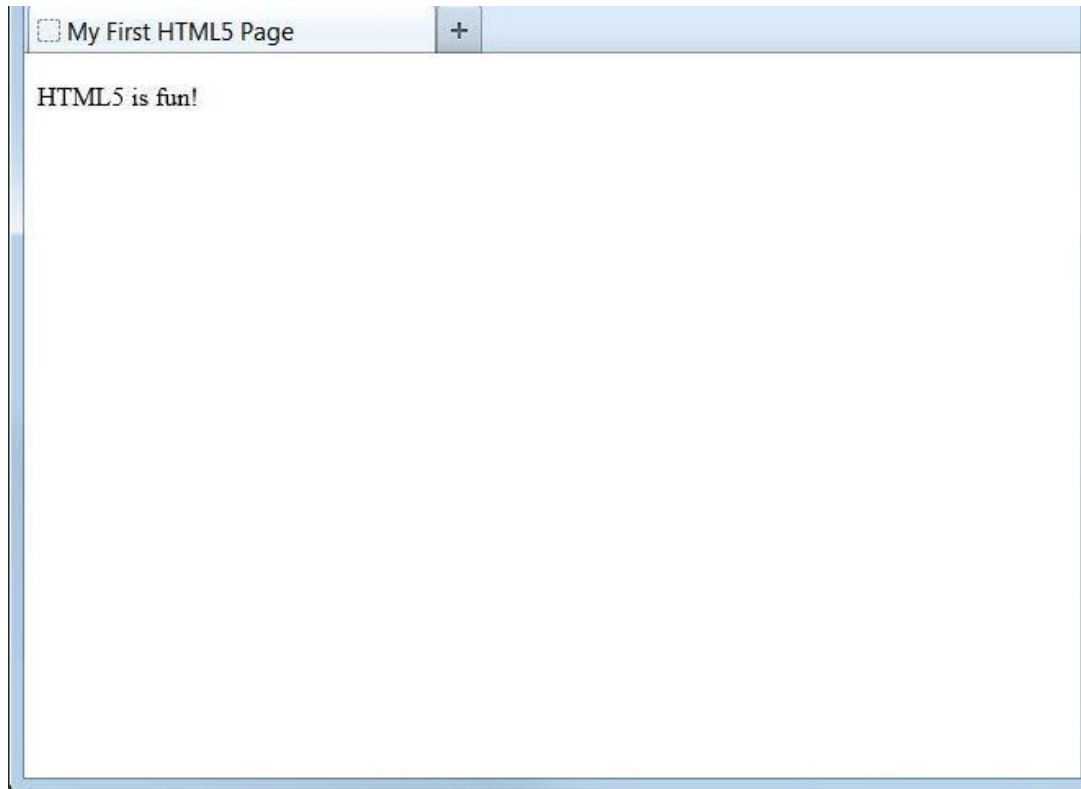
Basic HTML5 Web Page

Putting the prior sections together, and now adding the <body> section and closing tags, we have our first complete web page in HTML5:

```
<!DOCTYPE html>
<head>
  <meta charset="utf-8">
  <title>My First HTML5 Page</title>
  <link rel="stylesheet" href="style.css">
</head>
<body>
  <p>HTML5 is fun!</p>
</body>
</html>
```

Let's open this page in a web browser to see how it looks...

Viewing the HTML5 Web Page



Frequently used Html Tags

1. Heading Tag: To give heading to your webpage

```
<!DOCTYPE html>
<html>
<body>

<h1>This is heading 1</h1>
<h2>This is heading 2</h2>
<h3>This is heading 3</h3>
<h4>This is heading 4</h4>
<h5>This is heading 5</h5>
<h6>This is heading 6</h6>

</body>
</html>
```

This is heading 1

This is heading 2

This is heading 3

This is heading 4

This is heading 5

This is heading 6

2. Paragraph Tag: To defines a paragraph:

```
<!DOCTYPE html>
<html>
<body>

<p>This is a paragraph</p>

<p>Lorem Ipsum is simply dummy text of the printing and typesetting industry. Lorem Ipsum has been the industry's standard dummy text ever since the 1500s, when an unknown printer took a galley of type and scrambled it to make a type specimen book.</p>

<p>This is a paragraph</p>

</body>
</html>
|
```

This is a paragraph

Lorem Ipsum is simply dummy text of the printing and typesetting industry. Lorem Ipsum has been the industry's standard dummy text ever since the 1500s, when an unknown printer took a galley of type and scrambled it to make a type specimen book.

This is a paragraph

3. Anchor Tag: To direct from current page to another page

```
<!DOCTYPE html>
<html>
<body>

<a href="http://www.w3schools.com">Visit W3Schools.com!</a>

</body>
</html>
```

[Visit W3Schools.com!](http://www.w3schools.com)

4. Figure Tag: To include image and a figure caption

```
<!DOCTYPE html>
<html>
<body>
<figure>
  
  <figcaption>Fig.1 - A view of the pulpit rock in Norway.
</figcaption>
</figure>
</body>
</html>
```



Fig.1 - A view of the pulpit rock in Norway.

5. Table Tag: To make table

```
<!DOCTYPE html>
<html>
<head>
</head>
<body>
<table>
  <tr>
    <th>Student</th>
    <th>ID</th>
  </tr>
  <tr>
    <td>Marc</td>
    <td>100</td>
  </tr>
  <tr>
    <td>John</td>
    <td>200</td>
  </tr>
</table>
</body>
</html>
```

| Student | ID |
|---------|-----|
| Marc | 100 |
| John | 200 |

6. Figure Tag: To include footer

```
<!DOCTYPE html>
<html>
<body>
<p>Footer Example </p>
</body>
<footer>
  <p>Posted by: Hege Refsnes</p>
  <p>Contact information: <a
href="mailto:someone@example.com">someone@example.com</a>.</p>
</footer>
</html>
```

Footer Example

Posted by: Hege Refsnes

Contact information: someone@example.com.



New Elements in HTML5

`<article>` : It specifies independent, self-contained content. An article should make sense on its own, and it should be possible to read it independently from the rest of the web site. Nesting `<article>` in `<section>` or Vice Versa is not defined. It depends on the developer.

`<section>` : It defines a section in a document

`<aside>` : It defines some content aside from the content it is placed in.

`<figure>` and `<figcaption>` : The purpose of a figure caption is to add a visual explanation to an image.

`<footer>`: a footer for a document or section. `<header>`: specifies a header for a document or section.

`<nav>` : It defines a set of navigation links.



Other New Elements in HTML5

<progress>

<audio>

<canvas>

<datalist>

<source>

<svg>

<time>

<video>

<hgroup>

<mark>



Use of CSS in the HTML page

To make our website presentable, we use CSS. There are 3 ways to include CSS file in your website page.

1. External style sheet -- Recommended

```
<link rel="stylesheet" type="text/css" href="mystyle.css" />
```

2. Internal style sheet

```
<style type="text/css">  
    body {background-image:url("images/back40. gif ") ; }  
</style>
```

3. Inline style

```
<p style="color:blue;margin-left:20px;">This is a paragraph.</p>
```



Practice Question: Make your resume !

Header Tag: My Resume

Figure tag: Your Picture and caption

P tag: About Me

Table tag: Education (find it on your own!)

Hobbies: Your choice of presentation

Footer: Last updated date