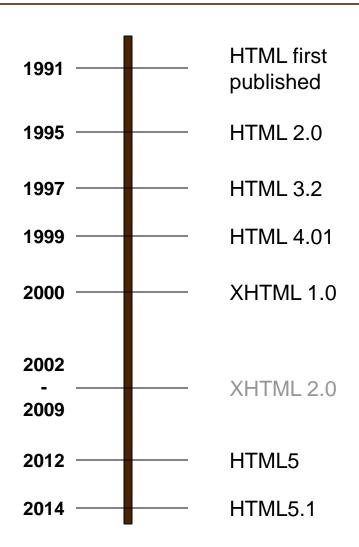
Introduction to HTML5



History of HTML



After HTML 4.01 was released, focus shifted to XHTML and its stricter standards.

XHTML 2.0 had very strict standards but was abandoned in 2009 in favor of HTML5.

HTML5 is much more tolerant and can handle markup from all the prior versions. A working draft was released in 2012 and it is scheduled to be finalized by the end of 2014.

HTML5.1 is currently under development and expected to be finalized in late 2016.

What is HTML5?

- HTML5 is the newest version of HTML, only recently gaining partial support by the makers of web browsers.
- It incorporates all features from earlier versions of HTML, including the stricter XHTML.
- It adds a diverse set of new tools for the web developer to use.

Goals of HTML5

- Support all existing web pages. With HTML5, there is no requirement to go back and revise older websites.
- Reduce the need for external plugins
- Improve the semantic definition (i.e. meaning and purpose) of page elements.
- Handle web documents errors in a better and more consistent fashion.

Features in HTML5

- Built-in audio and video support (without plugins)
- Enhanced form controls and attributes
- The Canvas (a way to draw directly on a web page)
- Drag and Drop functionality
- Support for CSS3 (the newer and more powerful version of CSS)
- More advanced features for web developers, such as data storage and offline applications.

First Look at HTML5

In HTML5, there is just one possible DOCTYPE declaration and it is simpler:



The DOCTYPE tells the browser which type and version of document to expect. This should be the last time the DOCTYPE is ever changed.

From now on, all future versions of HTML will use this same simplified declaration.

The <html> Element

<html lang="en">

Each of the world's major languages has a two-character code, e.g. Spanish = "es", French = "fr", German = "de", Chinese = "zh", Arabic = "ar".

The <head> Section

HTML5 version:

```
<head>
  <meta charset="utf-8">
    <title>My First HTML5 Page</title>
  </head>
```

Notice the simplified character set declaration,

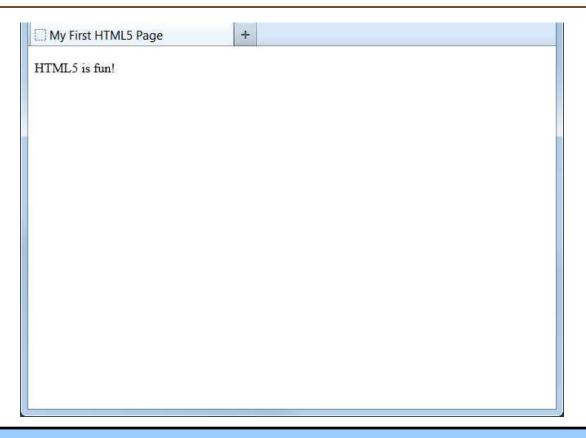
Basic HTML5 Web Page

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>
<html lang="en">
 <head>
   <meta charset="utf-8">
   <title>My First HTML5 Page</title>
</head>
 <body>
   HTML5 is fun!
 </body>
</html>
```

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

Viewing the HTML5 Web Page



Even though we used HTML5, the page looks exactly the same in a web browser as it would in XHTML. Without looking at the source code, web visitors will not know which version of HTML the page is in.



New Elements in HTML5

```
<article>
               <figcaption>
                              cprogress>
<aside>
               <footer>
                              <section>
<audio>
               <header>
                              <source>
               <hgroup>
                              <SVG>
<canvas>
               <mark>
<datalist>
                              <time>
                              <video>
<figure>
               <nav>
```

These are just some of the new elements introduced in HTML5. We will be exploring each of these during this course.