

# Web Designing Overview

Nitin Garg & Raghav Kukreja

Department of Information Technology, Dronacharya College of Engineering, Gurgaon, India

Email: [nitingarg2015@gmail.com](mailto:nitingarg2015@gmail.com)

## Abstract

*As the new sites are appearing daily, so world wide web is growing exponentially. Web page layout are similar to the aspects of page layout, it contains aspects of screen design. This research paper will examine the literature available about the human hypertext navigation, interface design and multimedia design with the objective of identifying guidelines which can be used for the purpose of designing web sites. The paper contains Internet marketing guidelines, human computer interface guidelines and web design guidelines will be reviewed to identify assessments of best practice relating to the design of institution websites. This paper is delimited to identifying research-based guidelines which can be used for web sites which provide instruction or information for educational purposes.*

## INTRODUCTION

Developing internet contents involves shaping and making many choices involving technical, aesthetic, and worth concerns. With the increasing technical decisions for communication on the world Wide web, it's tempted to focus entirely on issues like machine-readable text nomenclature (HTML) syntax, page layout, or the most recent and flashiest technologies. However, there must be a broader approach thus on articulate the information content that is to be

sent. There is together want to concentrate to the characteristics and qualities of the online web site as a medium for communication so as that there do not appear to be simply duplicate practices meant for paper and different media. Thus on develop a broader perspective of websites, developers will draw on several existing ideas from technical communication & software package engineering practices. This report will shortly describe the importance of internet designing & therefore the means by which innovation can improve websites on the internet.

A web page's design is essentially its feel and its appearance. A good design need to take into consideration all the internet elements- information about audience, it's purpose, and objective statements, domain information, and internet specifications and blend them to produce a thought for implementing the online web site. Web developers then use this way and thus internet specifications to make an operational website. Net designers produce many choices regarding the method to best attain the results blended by the web-planning technique, the aim and objective statements, and audience information. Web designers together contemplate a repertoire of techniques for packaging, linking, and cueing information victimization one or further methodologies of styling. The planning technique, however, is

just one technique inside the interlocking web development processes. Turning out with an internet involves considering the user's experience and meeting the user's needs by shaping the info & knowledge.

### **HTML or HyperText Markup Language**

Hypertext Markup Language is the basic & regular markup language used to create or produce any web site.

Html is made up of the opening & closing tags, consisting of tags which are enclosed in the angle brackets (eg <html>). HTML tags generally come in pairs such as <h3> and </h3>, even though many tags represent empty elements and some are also unpaired ones, for eg. <br>, <img>. The first tag in a pair is called as the start tag, and the second tag is known as the end tag (they are also known as opening tags and closing tags).

A web browser can easily read the HTML files and convert them into audible or visible web sites. The browser does not show the HTML tags directly, but with the help of these tags web browser convert them into understandable content. Hypertext Markup Language explains the structure of a web page semantically along with indications for presentation, creating it a markup language instead of a programming language.

HTML elements are basically the building blocks of all the web pages. It allows objects and images to be embedded and can be useful for creating interactive pages. It essentially provides a means to generate structured documents by signifying structural semantics for text such as paragraphs, headings, links, lists, quotes and other items. It can embed scripts written in languages such as javascript which can be used to make the HTML web page more interactive.

We can also use the Cascading Style Sheets (CSS) for improving the layout and appearance of text and other materials. The W3C, which is responsible for maintaining both the HTML and the CSS standards, mainly encourages the use of CSS against the presentational HTML.

An example of the web page in HTML is given below, It will basically print Hello world. It is the common example used for comparing markup languages, programming languages and scripting languages. This example is given below:

```
<!DOCTYPE html>
<html>
<head>
<title>This is a title</title>
</head>
<body>
<p><h1>Hello world!</h1></p>
</body>
</html>
```

(The text between <html>&</html> explains the web page, and the text between <body>&</body> is the text which is to be shown without any changes. The markup text '<title>This is a title</title>' shows the title of the page.)

### **JavaScript**

Javascript may be a dynamic creating by mental acts language. It's most typically used as a part of net browsers, whose implementations enable client-side scripts to act with the user, management the browser, communicate asynchronously, and alter the document content that's displayed. It's conjointly employed in server-side schedule with frameworks like Node.js, game development and therefore the creation of desktop and mobile applications. Javascript is assessed as a prototype-based

scripting language with dynamic typewriting and excellent functions. This mixture of options makes it a multi-paradigm language, supporting object-oriented, imperative, and purposeful programming designs. Despite some syntactic, naming, and commonplace library similarities, Java and javascript are or else unrelated and have terribly different semantics. The syntax of javascript is really derived from C, whereas the linguistics and style are influenced by Self and Scheme programming languages.

The applications of javascript in use different of net pages—for example, in site-specific browsers, PDF documents, and desktop widgets—is conjointly important. Newer and quicker javascript virtual machines and platforms engineered upon them (notably Node.js) have conjointly exaggerated the recognition of javascript for server-side net applications. On the consumer facet, javascript was historically enforced as an interpreted language however just-in-time compilation is currently executed by current (post-2012) browsers.

Javascript was given within the ecma script language commonplace and is primarily used as a part of an online browser (client-side javascript). This allows programmatic access to things in the host environment.

An example of javascript is given below:

```
<!DOCTYPE html>
<html>
<head>
<title>This is a title</title>
</head>
<body>
<script>
Function Info() {
Document.getelementbyid("demo").innerht
ml = "Put the information here";
```

```
}
</script>
<h1>Basic Web Page</h1>
<p id="demo">A Paragraph</p>
<button type="button" onclick="info()">
Click here </button>
</body>
</html>
```

### Cascading Style Sheets (CSS)

Cascading Style Sheets (CSS) is basically used for explaining the appearance and the formatting of any document which is written in a markup language. While commonly used to change the design of web pages and user interfaces which were written in XHTML and HTML, the language can be applied to any XML document, including plain XML, XUL and SVG. Along with javascript and HTML, CSS is a the technology used by almost every website to create visually attractive webpages, user interfaces for mobile applications, and user interfaces for many web applications. CSS is intended primarily to alter the separation of document content from document presentation, together with parts like the colors, layout and fonts. This separation will improve content ease of access, offer additional flexibility and management within the specification of appearance characteristics, alter multiple markup language pages to share format by specifying the related CSS in a very separate .css file, and cut back quality and repetition within the structural content, like semantically unimportant tables that were greatly used for formatting pages before consistent CSS rendering was obtainable altogether major browsers. Because of CSS it becomes possible to separate presentation directions from

the markup language content in a very separate file or design section of the markup language file. For every matching markup language component, it provides a listing of format directions. As an example, a CSS rule may specify that "all heading 2 part ought to be Italic," departure pure linguistics markup language markup that asserts "this text could be a level 2 heading" while the code without formatting like a `<italic>` tag indicating in which way such text ought to be displayed.

## Selector

In CSS, selectors are used to declare which part of the markup a style applies to by matching tags and attributes in the markup itself. Selectors may apply to:

- All elements of a specific type, e.g. The second level headers h2
- Elements specified by attribute, in particular:
  - *Id*: an identifier unique to the document
  - *Class*: an identifier that groups multiple elements in a document
- Elements depending on how they are placed relative to others in the document tree.

Classes and ids are case-sensitive, start with letters, and can include underscores and alphanumeric characters. Any number of instances of any number of elements may have the same class. Basically, ids only apply to one instance of an element.

Selectors may be combined in many ways to achieve great specificity and flexibility. Multiple selectors may be joined in a spaced list to specify elements by element type, class, location, id or any combination of these all. The order of the

selectors is significant. For example, `div.basicclass {color:blue;}` applies to all elements of class `basicclass` that are inside `div` elements, whereas `div{color:blue;}` applies to all `div` elements that are in elements of class `myclass`.

## Declaration block

A declaration block consists of a number of declarations in brackets. Each declaration itself made up of a property, a colon (:), and a value. If there are more than one declarations in a block, a semi-colon (;) must be used to separate each declaration.

Properties are defined in the CSS standard. Each property has a different set of possible values. Some can affect any type of element, and others may apply only to particular groups of elements.

Values may be keywords, such as "inherit" or "center" or numerical values, such as 300px (300 pixels) or 60%. Color values could be specified with keywords (e.g. "blue"), hexadecimal values (e.g. #0000FF, also abbreviated as #00F), RGB values on a 0 to 255 scale (e.g. Rgb(255, 0, 0)), RGBA values that specify both color and opacity (e.g. Rgba(255, 0, 0, 0.7)), or HSLA or HSL values (e.g. Hsl(000, 80%, 60%), hsla(000, 100%, 70%, 90%)).

## Use

Before CSS, almost all of the attributes of HTML documents were represented within the HTML markup; all background styles, borders, element alignments, font colors and sizes had to be explicitly described, often repeatedly, within the HTML. CSS allows authors to create a separate file, the style sheet, resulting in considerably simpler HTML.

Headings (h2 elements), sub-headings (h4), sub-sub-headings (h5), etc., are defined

structurally using HTML. In print and on the screen, choice of color, size, font and emphasis for these elements is presentational.

As an example, under pre-CSS HTML, a header element defined with blue text would be written as:

```
<h2><font color="blue"> Hi </font></h2>
```

Using CSS, the same element can be showed using style properties instead of HTML attributes:

```
<h2 style="color:blue"> Hi</h2>
```

An "external" CSS file, as shown below, can be linked with an HTML document using the given syntax:

```
<link href="path/to/file.css" rel="stylesheet">
```

An internal CSS code can be typed in the head section of the code. The coding is started with the style tag. For example,

```
<style>
```

### Example of Specificity

Consider this HTML fragment:

```
<!DOCTYPE html>
<html>
<head>
<title>This is a title</title>
<meta charset="utf-8">
<style>
  #xyz { color: blue }
</style>
</head>
<body>
<p id="xyz" style="color: green"> For displaying the difference specifically</p>
</body>
</html>
```

In the above example, the declaration in the "style" attribute will override the one in the style element as it has higher specificity.

### Conclusion :

In this time of technology & competition the online publicity of any product, service, promises is very essential to establish yourself in the market. The competition in the market is so high that just showing yourself online is not sufficient but your site must appear awesome & different from others. To make your site attractive, web designing can be used in an effective way. Web designing can be done with the help of HTML, CSS and javascript. The basic syntax of HTML, CSS and javascript is discussed above and also basic program for each is discussed above. So, in this way web designing can be used to make your site attractive.

### References :

- <http://www.tutorialrepublic.com/css-tutorial/css-introduction.php>
- <http://blogger-skin-resources.blogspot.com/2007/06/use-of-css.html>
- <https://answers.yahoo.com/question/index?qid=20081124220054AAesY1e>
- [http://www.shersonmedia.com/grant/cv/items/papers/Principles\\_of\\_Web\\_Design.pdf](http://www.shersonmedia.com/grant/cv/items/papers/Principles_of_Web_Design.pdf)
- <http://en.wikipedia.org/wiki/HTML>
- [http://en.wikipedia.org/wiki/Cascading\\_Style\\_Sheets](http://en.wikipedia.org/wiki/Cascading_Style_Sheets)
- <http://en.wikipedia.org/wiki/JavaScript>