8**Web Page** - One document of information of a web site. Usually in HTML. May have CSS, JavaScript, Images and other...

**Web Site** - Collection of web pages having web resources. It has navigation between pages. Hosted on at least one server.

**World Wide Web** - Collection of all sites.

**Web App** - Next level. High interactivity. AJAX, Silverlight, Flash... Broken into tiers. Each tier has a role.

**WEB 1.0** - Ptoffessional autors who put content. Expensive. Users = consumers.

**WEB 2.0** - Users generate content. Anyone can publish. It has rich Internet applications. Social web. High content variaty. Users are autors too.

**WEB 3.0** - Computer generated information. Semantic web. AI. Personalization. Mobility.

**Semantic Web** - Can be read an categorized by computers. Search engines are faster. Hard to be implemented.

**AI** - Google Suggest, Google Translate

**Personalizations** - Sites show different content for different users.

**Trident-Based Web Browsers** - Internet Explorer, Netscape, Maxton

**Gecko-Based Web Browsers** - Firefox, Netscape, Sea Monkey

**Webkit-Based Web Browsers** - Chrome, Safari, Maxton

**Presto-Based Web Browsers** - Opera

**User Agent String** - Identify browser version, layout engine, OS

Windows NT 6.2 = Windows 8
Windows NT 6.1 = Windows 7
Windows NT 6.0 = Windows Vista and Server 2008
Windows NT 5.2 = Windows 2003 Server ans XP x64
Windows NT 5.1 = Windows XP
Windows NT 5.0 = Windows 2000

Windows NT 4.0 = Windows NT

WOW64 = Win32 on Windows 64
x64 - 64 bit application on Windows 64

**Servers** - Database Server, File Server, Mail Server, Print Server, VPS Server

**Hardware Server** - Controlled by OS. Handles web requests. Redircted to APS.NET, PHP and other server-side programming languages.

Apache - 60.31% Of all servers
IIS - 19,34% (MS)
nginx - 7,65% (Igor Syslov)
GWS - 5,09% (Google)
lighttpd - 0,60%

**Client-Server Architecture:**
-server - machine(s) providing web apps or services to client. Cloud, PHP, ASP.NET
-client - software with UI to access services. Web Browsers, HTML5

**3-Tier Architecture:**
- Front End - client (UI)
- Middle Tier (Business Layer) - server software core system logic
- Backend - database, cloud

**ORM** - Object Relational Database. Virtually maps tables in database.

**SOA** - Service-oriented architecture - Create service - Register service - Secure service - Manage service - Virtualize service - Integrate service

**IDE Coding Tools** - Visual Studio, Web Develeper, Web Matrix, Eclipse, Aptana, Webstorm, Dream Weaver

**Lite Coding Tools** - Gedit, Notepad++

**Browser Tools** - Firebug, Webinspector, F12, Inspect, Console

**Drawing Tools** - Photoshop, Fireworks, Gimp, Paint.NET

**Source Control** - TFS, GIT, SVN

**DOM** - Document Object Model - defines logical structure of documents

**OSI Model** - Application Layer, Presentation Layer, Session Layer, Transport Layer, Network Layer, Datalink Layer, Physical Layer

**<pre> tag** - preformatted text

**<dl>** - definition list
**<dt>** - data title
**<dd>** - data description

**<caption>** with <table> - description of the table

**HTML** - Hypertext Markup Language

**tag** - smallest peice in HTML

**attribute** - property of a tag

**ellement** - combination of opening, closing tag and attributes

**<head>** - markup is not visibel for the userin the head

**<b>** - bold
**<i>** - italic
**<sup>** - superscript
**<sub>** - subscript
**<strong>** - stronger text
**<em>** - emphasized text
**<blockquote>** - quoted text
**<del>** - deleted text
**<br />** - new line
**<a href="...">  </a>** - hyperlink
**<img src="..." alt="..." />** - image
**<h1> - <h6>** - headings
**<p>** - paragraph
**<div>** - rectangular block element. Used with styles
**<span>** - inline element. Used with styles
**<ol>** - ordered list(1, A, a, I, i)
**<ul>** - unordered list (circle, disc, square)

**Block elements** - <div> <p> <h1> <ul> <dl> <ol>
**Inline elements** - <span> <a> <em> <img>

**HTML 5 tags:**

**&lt;nav&gt;** - navigation. Used with links, lists...
**&lt;header&gt;** - header of a section, site
**&lt;footer&gt;** - footer of a section, site
**&lt;section&gt;** - section of a website
**&lt;article&gt;** - part of a section
**&lt;aside&gt;** - content not directly with the site. Ads for example

**&lt;hgroup&gt;** - header of a section
**&lt;figure&gt;** - self-contained flow content
**&lt;figcaption&gt;** - optional caption for figure

**&lt;video&gt; &lt;audio&gt;** - media
**&lt;track&gt;** - subtitles for video
**&lt;mark&gt;** - highlighted text
**&lt;progress&gt;** - progress bar
**&lt;meter&gt;** - measurement
**&lt;time&gt;** - date or time
**&lt;bdi&gt;** - isolated text
**&lt;wbr&gt;** - line-break opportunity
**&lt;canvas&gt;** - dynamic content
**&lt;datalist&gt;** - set of predefined options (can be hided or shown)
**&lt;keygen&gt;** - key generator
**&lt;output&gt;** - output of a calculation
**&lt;meta&gt;** - meta tag

**&** - to insert symbol. For example &amp shows ampersant

**&lt;!-- ... --&gt;** - comment

**&lt;div title="..."&gt;** - gives tooltip on the div
**&lt;code&gt;** - gives you code
**&lt;cite&gt;** - citedd text
**&lt;big&gt;** - bigger font
**&lt;small&gt;** - smaller font

**&lt;table&gt;** - table start
**&lt;tr&gt;** - table row
**&lt;td&gt;** - table data
**&lt;colgroup&gt;** - groups columns
**&lt;col&gt;** - used for &lt;colgroup&gt;

**cellspacing** - space between cells
**cellpadding** - margins of cells

**colspan** - merges columns
**rowspan** - merges rows

**<hr>** - horizontal line

**taborder, tabindex** - for TAB key

**External CSS file** - <link rel=stylesheet type="text/css" href = "..."></link>

**<form method="...">** - how to send data
**<form action="...">** - where to send data

**<input type="text" />** - textbox
**<input type="reset" />** - reset button for the form
**<textarea>** - multiline textbox
**<input type="password" />** - *-textbox
**<input type="submit" />** - submit button
**<input type="image" />** - gets coordinates from image
**<input type="button" />** - with javasctipt
**<input type="checkbox" />** - checkbox
**<input type="radio" name="..." />** - radio buttons group by "name"
**<select><option value="..." selected="selected"></option></selected>** - dropdown menu
**<select multiple="multiple"></select>** - multiple choice menu
**<input type="hidden" />** - hidden data not seen by user

**<label for="example">** - gives shortcut for "example"

**<fieldset>** - groups data in form
**<legend>** - caption for the fieldset

**<input type="range">** - spinbox (does not work in Firefox)
**<input type="number">** - slider (does not work in Firefox)

**<input type="email" />** - email pattern
**<input type="url" />** - URL pattern
**<input type="tel" />** - brings telephone keypad

**<iframe>** - shows one web site in another

**HTML is used for content, not layout. Presents information in a meaningful manner. Defines headers paragraphs, textboxes. Does not define colors, size, positions.**

**Semantic HTML is easier to read by developers. Easier to render by browsers. Easier for search engines.**

**<details> + <summary>** - accordion like widget

**To show new content on older browsers - HTML5Shiv and Modernizr.**

**<dfn>** - definition
**<kbd>** - user input
**<menu>** - list of commands
**<object>** - external resource
**<optgroup>** - list of option elements with a common label
**<param>** - parameters for plugins. Invoked by object element.
**<s>** - no longer acurate element
**<samp>** - sample output
**<source>** - to show alternative media