**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.

Не са версии на технология а абстрактни понятия за отделните етапи в еволюцията и развитието на web

**AI** - Artificial intelligence (Изкуствен интелект) - the intelligence exhibited (показва) by machines or software. It is an academic field of study which studies how to create computers and computer software that are capable of intelligent behavior. example- Google Suggest, Google Translate

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

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

**UI** - user interface

**RIA** - rich Internet applications

**SDK -** software development kit

**API -** application programming interface

**DeskTop App -** пише се за WEB защото е по лесно. Има web арр които можем да пишем за desktop. Web арр са desktop арр които могат да работят в wed browser

**Tor (the Onion Router) Project** – е маршрутизираща система, чрез която потребители могат да комуникират анонимно в интернет. Разработката и първоначално е спонсорирана от US Naval Research Laboratory. Към края на 2004 г. проектът се продължава от Electronic Frontier Foundation (EFF), която го финансира до ноември 2005 г. и хоства проекта. Понастоящем се подържа и разработва от организация с идеална цел „Тор Проджект“.[1]

Затворена мрежа която не е публично видима

**Ajax (**also AJAX; /ˈeɪdʒæks/; short for asynchronous JavaScript and XML) is a group of interrelated Web development techniques used on the client-side to create asynchronous Web applications.

**HTML5 player –** Google replaced default player Flash with HTML5 v You Tube

**Silverlight – a** Microsoft application framework for writing and running rich Internet applications, similar to Adobe Flash. Silverlight focused on streaming media, current versions support multimedia, graphics, and animation

**Adobe Flash** (formerly called Macromedia Flash and Shockwave Flash) is a multimedia and software platform used for creating vector graphics, animation, games and rich Internet applications (RIAs) that can be viewed, played and executed in Adobe Flash Player. Flash is frequently used to serve streaming media, advertisement and interactive multimedia content on web pages and Flash-enabled software. However, in recent years, the usage of Flash on websites has declined.[1]

**Apache Flex**, formerly Adobe Flex, is a software development kit (SDK) for the development and deployment of cross-platform rich Internet applications based on the Adobe Flash platform.

***Rendering Engine***- **web browser engine** (sometimes called **layout engine** or **rendering engine**) is a software [component](http://en.wikipedia.org/wiki/Component-based_software_engineering) that takes [marked up](http://en.wikipedia.org/wiki/Markup_language) content (such as [HTML](http://en.wikipedia.org/wiki/HTML), [XML](http://en.wikipedia.org/wiki/XML), [image](http://en.wikipedia.org/wiki/Digital_image" \o "Digital image)files, etc.) and formatting information (such as [CSS](http://en.wikipedia.org/wiki/Cascading_Style_Sheets), [XSL](http://en.wikipedia.org/wiki/Extensible_Stylesheet_Language), etc.) and displays the formatted content on the screen. A layout engine is typically embedded in web browsers, e-mail clients, e-book readers, on-line help systems or other applications that require the displaying (and editing) of web content.

**Trident-based** Internet Explorer, Netscape, Maxthon, etc**. trade mark for MS**

**EdgeHTML (**fork of Trident)

**Spartan (the new IE)** forWindows 10 and Windows 10 (Mobile)

**Gecko-based** Firefox, Netscape, SeaMonkey, etc. запазена марка на Firefox – те си го разработват и обновяват. Firefox е наследник на Netscape

Firedox – search engine is Yacho sinse January 2015 before was google

**Blink-based** Chrome, Opera - fork of WebKit developed and supported by google April 2013 Open sourse

**WebKit-based** Safari, iOS, Maxthon, Chrome (up to v27), etc. бил е най-популярен. Google and Apple са го подържали но нещо не са се разбрали - остана си само за Apple за iPhone

**Maxthon** (originally known as MyIE2) is a freeware web browser for Windows, OS X and Linux that is developed in China by the company Maxthon Ltd. It is also available on Windows Phone 8,[9] iOS[10] and Android[11] platforms as Maxthon Mobile. Since the release of version 3, Maxthon supports both the Trident and the WebKit rendering engines.[12]

**API -** application programming interface

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

*Mozilla/5.0 (Windows NT 6.3; WOW64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/41.0.2272.118 Safari/537.36*

**Mozilla/5.0** – a generic term which most modern browsers use (originally indicated Netscape) standard = false

Windows NT 6.3 = Windows 8.1

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 browser on Windows 64

x64 - 64 bit application on Windows 64

AppleWebKit/537.36 – Blink is a fork of WebKit

KHTML is the previous name of WebKit

Chrome/41.0.2272.118 – real browser version

Safari/537.36 – artifact against scripts sniffin

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

**VPS - a virtual private server** is a virtual machine sold as a service by an Internet hosting service. A VPS runs its own copy of an operating system, and customers have superuser-level access to that operating system instance, so they can install almost any software that runs on that OS. For many purposes they are functionally equivalent to a dedicated physical server, and being software-defined, are able to be much more easily created and configured. They are priced much lower than an equivalent physical server, but as they share the underlying physical hardware with other VPSs, performance may be lower, and may depend on the workload of other instances on the same hardware node.

**Hardware Server** - Controlled by OS. Web servers are software products that use the operating system to handle web requests. Web servers serve Web content. Redircted it to APS.NET, PHP and other server-side programming languages.

**WEB Servers:**

**Apache** - 49.35% Of all servers , писан на PHP, bugs

**Nginx(engine ex**) – 21.22,65% (Igor Syslov) олекотена версия на Apachе

**IIS** Internet Information **Services - 12,21%** (MS) финансови софт. Wed hazard hostwat se po debeli prilojenia

**GWS** Google Web Server, the custom Linux-based Web server that Google uses for its online services **-** 5,09% - Google - you tube

**Client-Server Architecture:**

-server - a single machine or cluster of machines that provides web applications (or services) to multiple clients. Cloud, PHP, ASP.NET

**Web server running PHP** scripts or ASP.NET pages

**IIS b**ased Web server

**WCF** - (Windows Communication Foundation) is a framework for building service-oriented applications. Using **WCF**, you can send data as asynchronous messages from one **service** endpoint to another

-client - software with UI to access services at the server.

* Web browsers
* WPF applications

Windows Presentation Foundation (WPF) is a next-generation presentation system for building Windows client applications with visually stunning user experiences.

* HTML5 applications
* Silverlight applications
* ASP.NET consuming services is a free web framework for building great Web sites and Web applications using HTML, CSS and JavaScript.

Web server (Apache, IIS) – Web browser

FTP server (ftpd) – FTP client (FileZilla)

EMail server (qmail) – email client (Outlook)

SQL Server – SQL Server Management Studio

BitTorrent Tracker – Torrent client (μTorrent)

DNS server (bind) – DNS client (resolver)

DHCP server (wireless router firmware) – DHCP client (mobile phone /Android DHCP client/)

SMB server (Windows) – SMB client (Windows)

**3-Tier Architecture:**

- Front End - client (UI) client layer

* Structure – HTML
* Style – CSS
* Client - JS

- Middle Tier (Business Layer) - server software core system logic

* Rabota s potrebil - prezentacionna logika –HTML SilverLight WPF
* Ligika na prilojenieto – koda – if….
* Rabota s bazata

- Backend (data layer) - database, cloud - гъвкавата връзка между нашето приложение и базата данни -usually ORM framework

**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

**HTTP бисквитката** (HTTP cookie), обикновено наричана просто „бисквитка“, е пакет информация, изпратен от уеб сървър към Интернет браузър, а след това връщан от браузъра всеки път, когато той получи достъп до този сървър.

is a small piece of data sent from a website and stored in a user's [web browser](http://en.wikipedia.org/wiki/Web_browser) while the user is browsing that website. Every time the user loads the website, the browser sends the cookie back to the server to notify the website of the user's previous activity.[[1]](http://en.wikipedia.org/wiki/HTTP_cookie#cite_note-1) Cookies were designed to be a reliable mechanism for websites to remember [stateful](http://en.wikipedia.org/wiki/Program_state" \o "Program state) information (such as items in a shopping cart) or to record the user's browsing activity (including clicking particular buttons, [logging in](http://en.wikipedia.org/wiki/Authentication), or recording which pages were visited by the user as far back as months or years ago).

**<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:**

**<nav>** - navigation. Used with links, lists...

**<header>**- header of a section, site

**<footer>** - footer of a section, site

**<section>** - section of a website

**<article>** - part of a section

**<aside>** - content not directly with the site. Ads for example

**<hgroup>**- header of a section

**<figure>**- self-contained flow content

**<figcaption>** - optional caption for figure

**<video> <audio>** - media

**<track>** - subtitles for video

**<mark>** - highlighted text

**<progress>** - progress bar

**<meter>** - measurement

**<time>**- date or time

**<bdi>** - isolated text

**<wbr>** - line-break opportunity

**<canvas>** - dynamic content

**<datalist>** - set of predefined options (can be hided or shown)

**<keygen>** - key generator

**<output>**- output of a calculation

**<meta>**- meta tag

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

**<!-- ... -->** - comment

**<div title="...">** - gives tooltip on the div

**<code>** - gives you code

**<cite>**- citedd text

**<big>** - bigger font

**<small>** - smaller font

**<table>** - table start

**<tr>**- table row

**<td>** - table data

**<colgroup>** - groups columns

**<col>** - used for <colgroup>

**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