WEB DESIGN

Introduction to website design

About Me

Ashish Ruhani

- Masters in Computer Science – New York University (NYU) – 2010
- Worked as a Software Engineer for 7+ years
- Started my own company WEBAPPTICS INC

Course Outline

OBJECTIVES

To understand the structure of website by learning different methods of building and designing the websites.
To build modern web applications using industry standard technologies
To help students understand the basic principles of programming languages like HTML & Javascript.

TIME FRAME

July 05 – August 27: Wednesdays 7 – 9 pm, Sundays 4:30 – 6:30 pm (16 classes x 2 hrs)

COURSE TEXT

No course texts are necessary for this course. Any additional readings will be provided.

Course Outline

STUDY AIDS

Please check the course website regularly for lecture notes and additional resources.
Students are expected to bring the following to each class:

- Lecture notes
- Pen/Pencil
- Working Laptop

CONTACT INFORMATION

Email: ashish.ruhani@gmail.com

EVALUATION METHOD

Weekly Homework Assignments (Sundays)
Pop-up Quiz (Wednesdays)

COURSE SCHEDULE

Class 1	**Intro to WEB DESIGN** • **How WEB works** • **Modern Browsers** • **HTML evolution**
Class 2	HTML Basics • Structure of HTML • Tags • Attributes
Class 3	HTML Tags – Inside Look • Images • URLs • Paths (Absolute & Relative)
Class 4	HTML Tables & Hyperlinks • Tables basic structure • Creating rows and columns • Alignments • Hyperlinks

COURSE SCHEDULE

Class 5	**HTML Forms** • **Form Structure** • **Inputs** • **Submits**
Class 6	CSS • CSS evolution • Styling HTML tags • Styling the table • Sizing and resizing
Class 7	CSS continued… • Working with CSS in Forms • Bundling the CSS styles • Creating Style Sheet
Class 8	Javascript • Basics • Javascript evolution

COURSE SCHEDULE

Class 9	**Javascript** • **Selectors** • **Events**
Class 10	Javascript Validations • Forms validations • Submission of forms
Class 11	jQuery • Basics • jQuery evolution
Class 12	jQuery • Selectors • Events

COURSE SCHEDULE

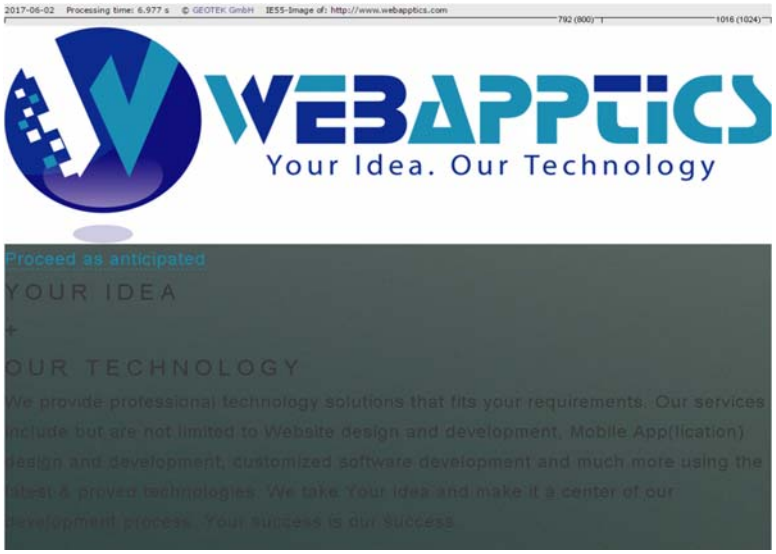
Class 13	**jQuery Validations** • **Forms Validations** • **Forms submit and data manipulations**
Class 14	jQuery & JSON • JSON formatting • Posting JSON data
Class 15,16	Designing our own website using all the above concepts

How does a website work?

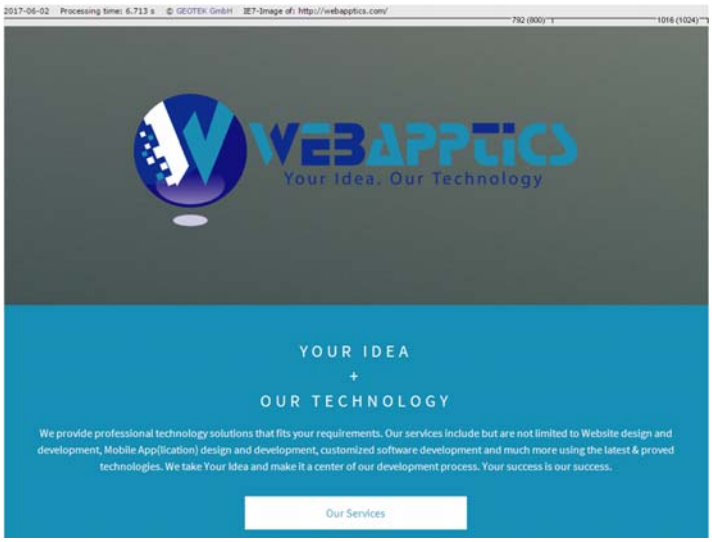
Browsers

- Our best friend
- Worst Enemy
- Compatibility Issues
- Different browser based tags and scripts
- Modern browsers - Google Chrome, Firefox, Edge & smartphones
- Apps have built in browser call WebView

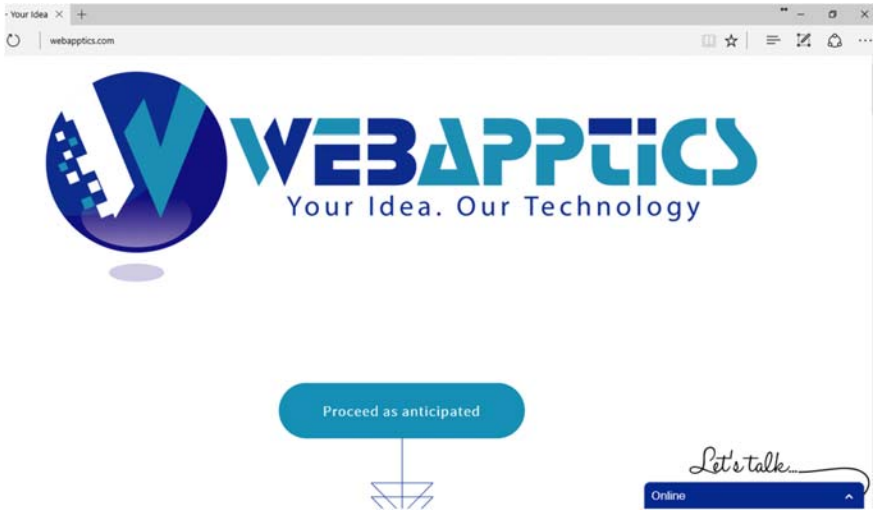
Internet Explorer - 5.5



Internet Explorer 7



Internet Explorer 11 & all other modern browsers



Google Chrome

Firefox

What constitutes a website design?

- HTML - *HpyerText Markup Language*
- CSS - *Cascading Style Sheet*
- Javascript - *programming language used to make web pages interactive*
- Images - pictures/photos
- And a much more but above are the basics

HTML

- **H**pyer**T**ext **M**arkup **L**anguage
- Why is it call a language?
- Who understands this kind of language?

* *

* Welcome to HTML introduction course *

* *

HTML STRUCTURE

- The structure of HTML element has evolved over the period of time
- HTML 1.0 ……. HTML 5
- Different browsers - Different output
- http://netrenderer.com/index.php

Birth of 2.0

HTML became fragmented and web authors soon found that their web pages looked fine in one browser but not in another. Hence it became increasingly difficult and time consuming to create a web page that would display uniformly across a number of different browsers. (This phenomenon remains to some extent to this very day.) Meanwhile, an organization known as the World Wide Web Consortium (W3C for short) was working steadily along in the background to standardize HTML. Several recommendations were published by the W3C during the late 1990s which represented the official versions of HTML and provided an ongoing comprehensive reference for web authors. Thus the birth of HTML 2.0 in September 1995.

HTML becomes more equipped

In 1996, HTML now supported tables allowing more control over the presentations of tabular infromation.

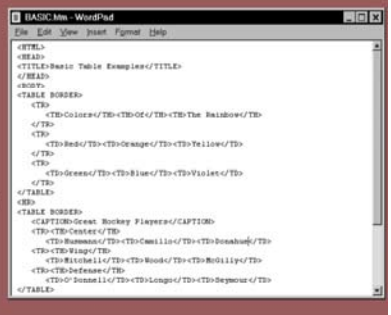
HTML also supports "Client-Side Image Maps" document elements that allows clicking different areas of an image to reference different network resources, as specified by (URIs).

The first CSS specification becomes an official WC3 recommendation and although completed, it was more than 3 years before any web browser achieved near-full implementation of the specification.

HTML 3.0

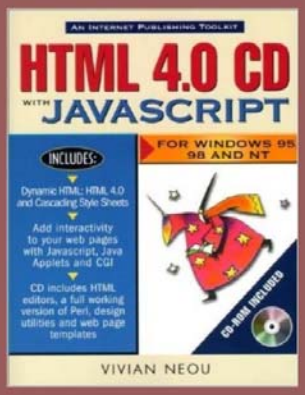
Other browsers tried to emulate Netscape's actions as to continue to compete in the browser market, but were not able to get their browsers to display things as they intended. This resulted in a lack of 'browser consensus', where a webpage looked good in one browser, but bad in another browser. Webpage developers were upset and a new more advanced version of HTML was needed.

For this reason, in 1996 the HTML 3.0 draft was introduced. This draft included several new abilities and more powerful opportunities for webpage developers to create their webpages. But surprisingly, the web browsers were slow in implementing these new abilities and opportunities. They only added a few, and left out the rest. For this reason, the HTML 3.0 draft was abandoned.



HTML 4.0

In December of 1997, HTML 4.0 was published as a recommendation by the W3C. This version of HTML was different than HTML 3.2 in a big way. HTML 3.2 contained several tags and attributes for styling things like text and links. While seemingly a good idea, it turned out to be very different. Webpage developers had to spend so much time manually coding font and color information on many different pages because of these styling tags and attributes. Besides, this is not what HTML was designed for. HTML was designed to specify the logical organization of a document. HTML 4.0 provided new tags for stylesheets, scripts, frames, embedded objects, more complex tables, more complex forms, and improved accessibility features for people with disabilities. HTML 4.0 became the official standard in April of 1998.



AJAX

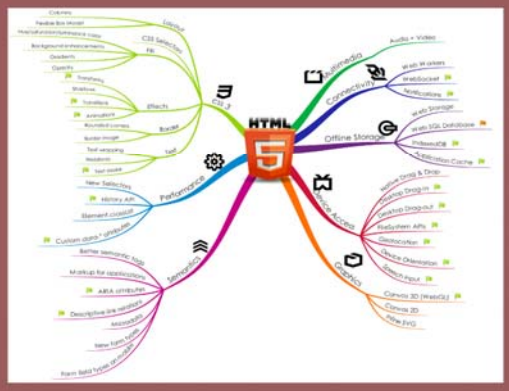
Ajax is a technique that makes it quicker for web pages to request and update dynamic content to respond to desktop applications as seen in Gmail, Twitter, Facebook, and Content Management Systems (CMS), like Wordpress.

Ajax was the name by Adaptive path in 2005 as an easier way to talk to clients about Asynchronous JavaScript + CSS + DOM + XMLHttpRequest

HTML5

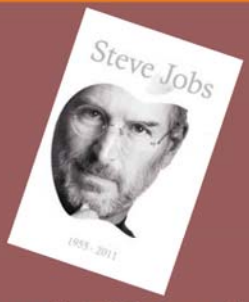
In 2009, the XHTML development team disassembles to join the HTML5 camp.

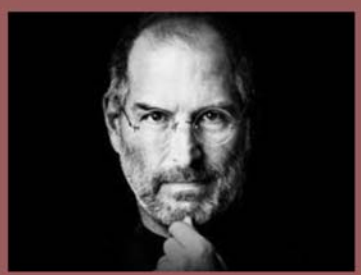
HTML5 isn't slated to bcome standard until 2022, but Firefox and IE9 are already supporting some of its features. As with most new versions of HTML, its dominance will only be as strong as its developer and browser support.



Steve Jobs States:

In 2010, ***Steve Jobs declared that Apple products will no longer support Flash*** for a range of reasons including its proprietary code and security holes and pushes the development of the audio and video playing features of HTML5 into the limelight.





Combining Flash and HTML5 to deliver a free space for people to share user-generated video, YouTube delivers about 2 billion videos each day after launching in 2005.

Check this out

http://www.evolutionoftheweb.com

Trick of the day

How to see any websites code?