**Desain Web IF-1P03**

# INTRODUCTION WEB

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# OBJECTIVE

- Introduction
- Golden Rules
- Structure document web
- Basic Syntax

# WORLD WIDE WEB

- The **World Wide Web** (commonly shortened to the **Web**) is a system of interlinked, hypertext documents accessed via the Internet.

- It is created to share files/documents and overcome the barrier of different file formats

- **Hypertext** refers to text on a computer that will lead the user to other, related information on demand.

# FUNDAMENTALS OF WEB DESIGN

Purpose of Web Design

- Inform/Educate

- Persuade

Influences on Web Design

- Technology Used by Both Target Audience and Designer

- Nature of the Content

- Economy (Budget, Time, and Scale of the Project)

- Amount and Type of Visuals Included

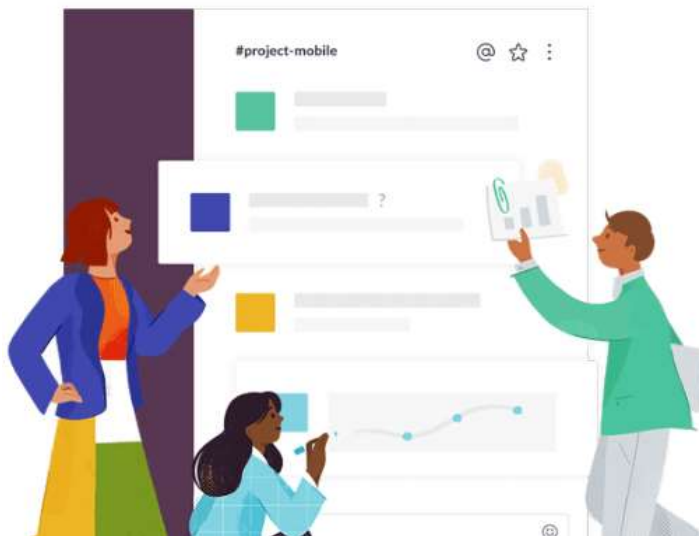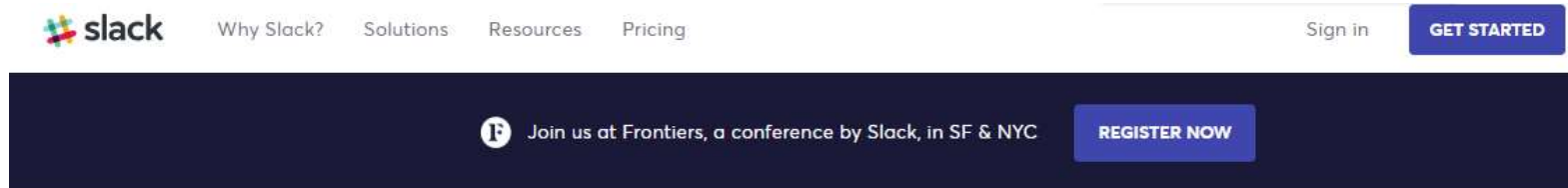- Meeting Usability Objectives

ITHB 2019

# WEB: AN OVERVIEW

Considering the vast range of entities involved, Web sites can be generally categorized as:

- Personal Web sites

- Commercial Web sites

- Organisational including government and non-profit organization Web sites, and

- Entertainment Web sites

# FUNDAMENTALS OF WEB

- hypertext documents are created using a special kind of document formatting or "markup" language called **HyperText Markup Language** (**HTML**).

- HTML is sent or received over the network using **HyperText  Transfer Protocol** (**HTTP**).

- A **browser** is a software program which interprets the HTML documents and displays it on the user's screen.

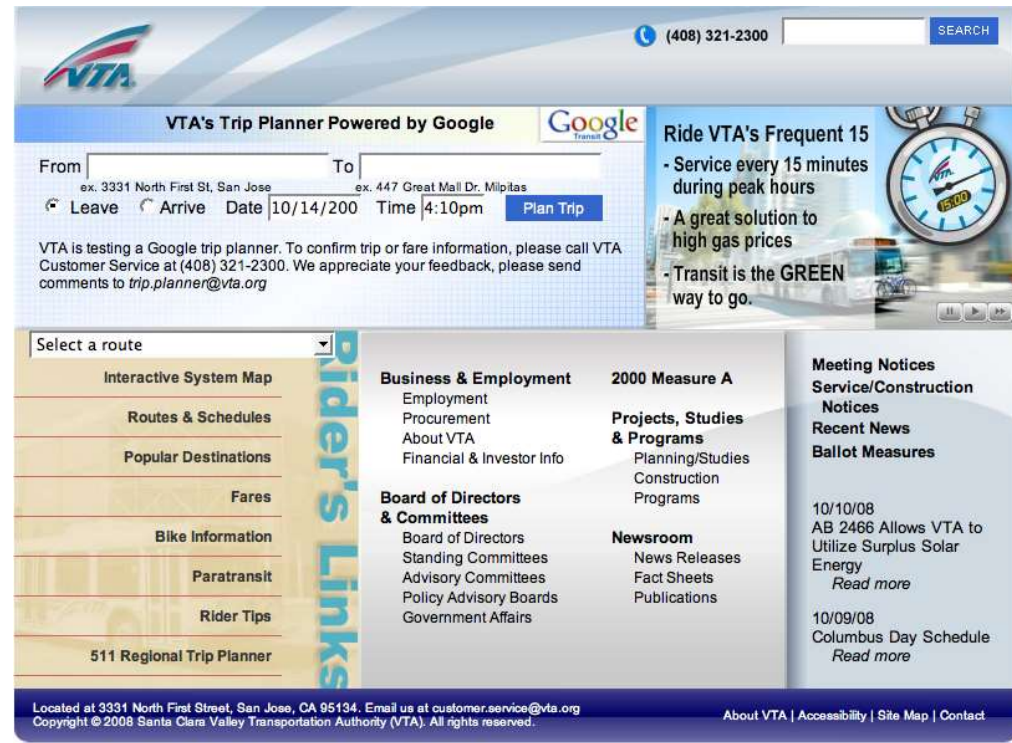# THE MAKING OF A GOOD DESIGN



Content is important,

but content alone will not make your site work.

# THE MAKING OF A GOOD DESIGN

Good Design is:

- Understandable
- Interesting
- Easy to use
- Uniform in look and feel
- Done from a visitor's point of view:

WYSIWYW (What You See Is What You WANT)

# GOOD DESIGN MAXIMS

"Rules" are only guidelines -- no single model fits every situation, and there is no such thing as the "right" way to create a web site.

Remember WYSIWYW

- Web users want control over the online material -- they want to seamlessly obtain the information they need.
- Don't force visitors down a specific path -- give them control.

# STATIC AND DYNAMIC WEB SITES

- static Web site ;

    Most of the Web sites are static as they present pre-defined, static information, in the sense the pages retrieved by different users at different times remain the same. To make a change to the content, the files need to be manually opened, data changed and the new version should be uploading to the Web.

- Dynamic Web ; site pages are ones that retrieves fresh information each time you view

# TYPES OF WEB SITES

1. Blog (Web Log): site generally used to post online diaries which may include discussion forums,
2. Forum: a site where people discuss various topics,
3. Mirror Site: a complete reproduction of a Web site,
4. Social Networking Site: where users could communicate with one another and share media,
5. Wiki Site: which users collaboratively edit (such as Wikipedia and Wikihow),
6. Web Portal: that provides a starting point or a gateway to other resources on the Internet
7. Search Engine Site
8. School Site
9. Community Site: a site where persons with similar interests communicate with each other, usually by chat or message boards, such as MySpace or Facebook
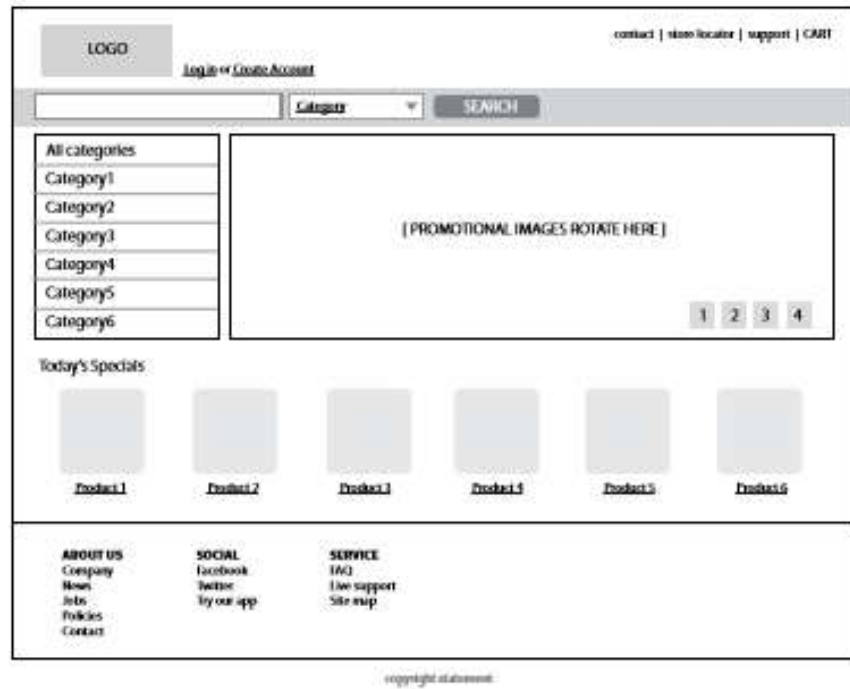10. Corporate Web Site

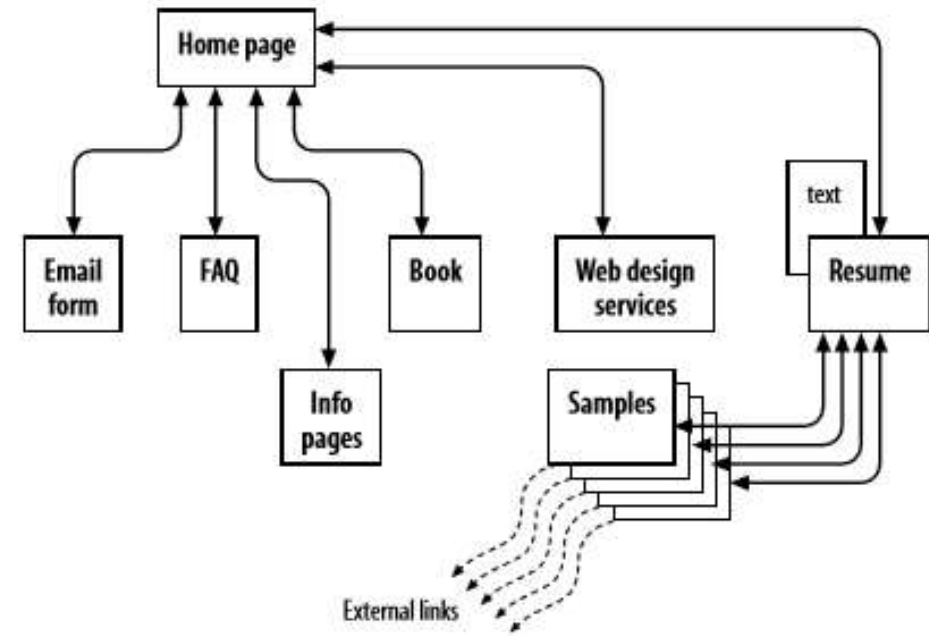**Figure 1-1.** Wireframe diagram.



**Figure 1-2.** A simple site diagram.

# DEVELOPMENT

- Authoring/markup ; Adobe Dreamweaver, Microsoft Expresion Web, Nvu

- Styling ; CSS

- HTML editor ; textpad, noepad, sublime, etc

# Frontend Versus Backend

You may hear web designers and developers say that they specialize in either the frontend or backend of website creation.

## Frontend design

"Frontend" refers to any aspect of the design process that appears in or relates directly to the browser. This book focuses primarily on frontend web design.

The following tasks are commonly considered to be frontend tasks:

- Graphic design and image production
- Interface design
- Information design as it pertains to the user's experience of the site
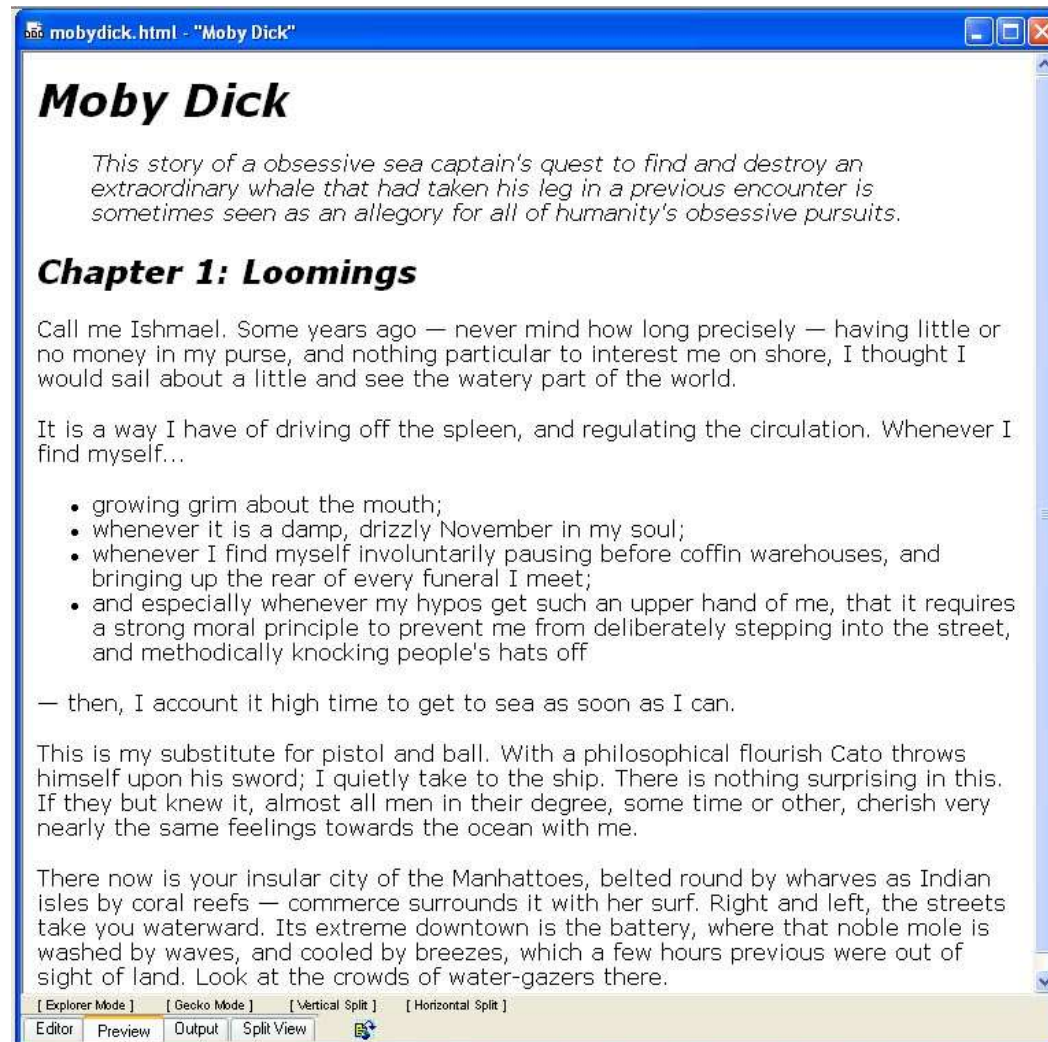- HTML document and style sheet development
- JavaScript

## Backend development

"Backend" refers to the programs and scripts that work on the server behind the scenes to make web pages dynamic and interactive. In general, backend web development falls in the hands of experienced programmers, but it is good for all web designers to be familiar with backend functionality.

The following tasks take place on the backend:

- Information design as it pertains to how the information is organized on the server
- Forms processing
- Database programming
- Content management systems
- Other server-side web applications using PHP, JSP, Ruby, ASP.NET, Java, and other programming languages

# CONTENT TYPES



Screenshot of a window titled "mobydick.html - 'Moby Dick'" showing an HTML editor preview:

**Moby Dick**

*This story of a obsessive sea captain's quest to find and destroy an extraordinary whale that had taken his leg in a previous encounter is sometimes seen as an allegory for all of humanity's obsessive pursuits.*

**Chapter 1: Loomings**

Call me Ishmael. Some years ago — never mind how long precisely — having little or no money in my purse, and nothing particular to interest me on shore, I thought I would sail about a little and see the watery part of the world.

It is a way I have of driving off the spleen, and regulating the circulation. Whenever I find myself...

- growing grim about the mouth;
- whenever it is a damp, drizzly November in my soul;
- whenever I find myself involuntarily pausing before coffin warehouses, and bringing up the rear of every funeral I meet;
- and especially whenever my hypos get such an upper hand of me, that it requires a strong moral principle to prevent me from deliberately stepping into the street, and methodically knocking people's hats off

— then, I account it high time to get to sea as soon as I can.

This is my substitute for pistol and ball. With a philosophical flourish Cato throws himself upon his sword; I quietly take to the ship. There is nothing surprising in this. If they but knew it, almost all men in their degree, some time or other, cherish very nearly the same feelings towards the ocean with me.

There now is your insular city of the Manhattoes, belted round by wharves as Indian isles by coral reefs — commerce surrounds it with her surf. Right and left, the streets take you waterward. Its extreme downtown is the battery, where that noble mole is washed by waves, and cooled by breezes, which a few hours previous were out of sight of land. Look at the crowds of water-gazers there.

[ Explorer Mode ]   [ Gecko Mode ]   [ Vertical Split ]   [ Horizontal Split ]

Editor | Preview | Output | Split View

# SEMANTIC STRUCTURE

# SEMANTIC MARKUP



A screenshot of mobydick.html - "Moby Dick" editor window showing:

**Moby Dick** ← `<h1>`

*This story of a obsessive sea captain's quest to find and destroy an extraordinary whale that had taken his leg in a previous encounter is sometimes seen as an allegory for all of humanity's obsessive pursuits.* ← `<blockquote>`

**Chapter 1: Loomings** ← `<h2>`

Call me Ishmael. Some years ago — never mind how long precisely — having little or no money in my purse, and nothing particular to interest me on shore, I thought I would sail about a little and see the watery part of the world. ← `<p>`

It is a way I have of driving off the spleen, and regulating the circulation. Whenever I find myself... ← `<p>`

← `<ul>`
- growing grim about the mouth; ← `<li>`
- whenever it is a damp, drizzly November in my soul; ← `<li>`
- whenever I find myself involuntarily pausing before coffin warehouses, and bringing up the rear of every funeral I meet; ← `<li>`
- and especially whenever my hypos get such an upper hand of me, that it requires a strong moral principle to prevent me from deliberately stepping into the street, and methodically knocking people's hats off ← `<li>`

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# HTML ?

- HTML is a language for describing web pages.

- HTML stands for **H**yper **T**ext **M**arkup **L**anguage

- HTML is not a programming language, it is a **markup language**

- A markup language is a set of **markup tags**

- The purpose of the tags are to **describe page content**

# HISTORY

○ HTML 2.0 (November 1995)

○ HTML 3.2 was published as a W3C Recommendation(January 1997) ; font, tabel, applet, superscripts, subscript etc

○ HTML 4.0 was published as a W3C Recommendation (December 1997) ; separates content from presentation, CSS

○ HTML 4.01was published as an ISO/IEC international standard(May 2000).

○ HTML 5(Still work in progress).

# HTML 5

- HTML5 is a cooperation between the World Wide Web Consortium(W3C) and the Web Hypertext Application Technology WorkingGroup (WHATWG).

- In 2006, they started work on new version of HTML.

- HTML5 is still a work in progress.

- No browser currently fully support HTML5.

- Some of the browsers continue to add new features of HTML in their new versions (Safari, Chrome, Firefox, Opera, Internet Explorer)

# HTML TAGS

○ HTML markup tags are usually called HTML tags

○ HTML tags are keywords (tag names) surrounded by **angle brackets** like <html>

○ HTML tags normally **come in pairs** like <b> and </b>

○ The first tag in a pair is the **start tag,** the second tag is the **end tag**

○ The end tag is written like the start tag, with a **forward slash** before the tag name

○ Start and end tags are also called **opening tags** and **closing tags**

content

# HOW DID HTML5 GET STARTED?

Some rules for HTML5 were established:

- New features should be based on HTML, CSS, DOM, and JavaScript (APIs)

- Reduce the need for external plugins (like Flash)

- Better error handling

- More markup to replace scripting

- HTML5 should be device independent

# REMOVED ELEMENTS

The following HTML 4.01 elements are removed from HTML5:

<acronym> <applet> <basefont> <big>
<center>    <dir> <font> <frame> <frameset>
<noframes> <strike> <tt> <u>

# NEW CSS SUPPORT

- Cascading Style Sheets (CSS) is a style sheet language used for describing the presentation semantics (the look and formatting) of a document written in a markup language.

- The CSS specifications are maintained by the World Wide Web Consortium(W3C).

- Internet media type (MIME type) text/css is registered for use with CSS.

- HTML supports CSS3.

- CSS3 is supported by major browsers.

- CSS reduces presentation duty of an HTML page. Modification of looks is simple.

# A BASIC HTML5 TEMPLATE

```
<!DOCTYPE html>
<html>
<body>

<h1>My First Heading</h1>

<p>My first paragraph.</p>

</body>
</html>
```

To start coding HTML, just create a new file with ".html" extension, our touch it

**Example Explained**
The DOCTYPE declaration defines the document type
The text between <html> and </html> describes the web page
The text between <body> and </body> is the visible page content
The text between <h1> and </h1> is displayed as a heading
The text between <p> and </p> is displayed as a paragraph

# HTML Page Structure

Below is a visualization of an HTML page structure:

```
<html>

    <body>

        <h1>This a Heading</h1>

        <p>This is a paragraph.</p>

        <p>This is another paragraph.</p>

    </body>

</html>
```
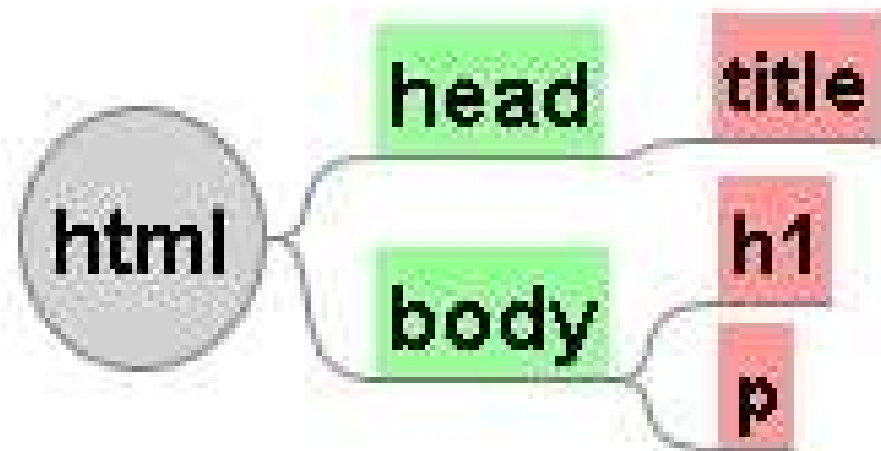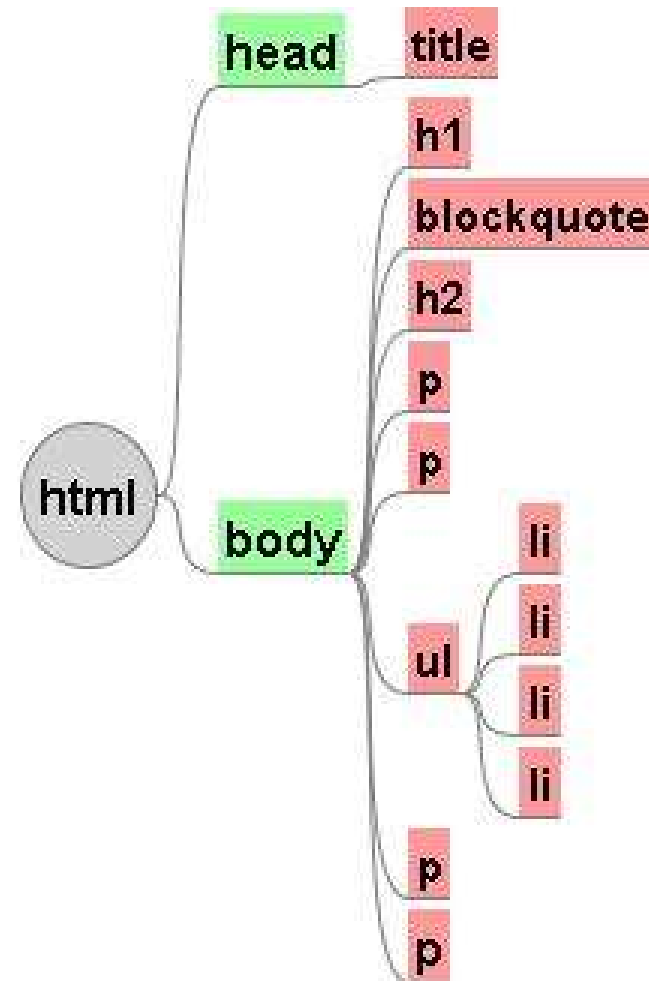
# STRUCTURE HIERARCHICAL

# HIERARKI

<!DOCTYPE> is not an HTML tag. It is an information (a declaration) to the browser about what version the HTML is written in.

**HTML5**
<!DOCTYPE html>

**HTML 4.01**
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN"
"http://www.w3.org/TR/html4/loose.dtd">

**XHTML 1.0**
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
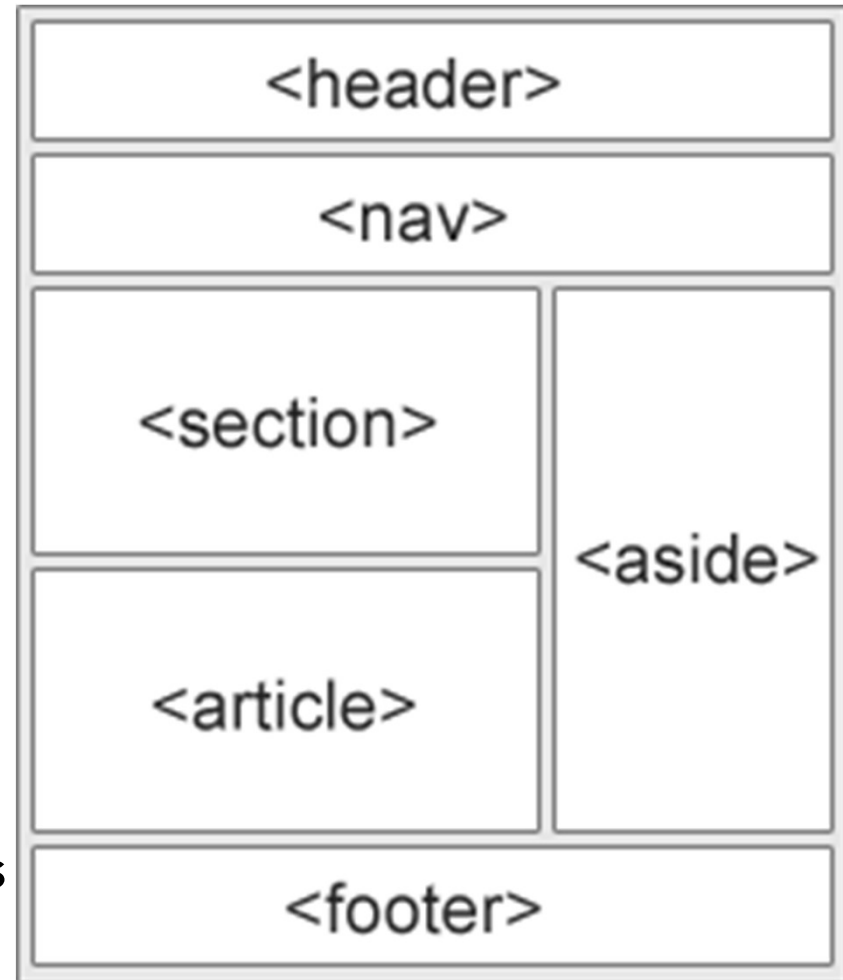
# NEW ELEMENTS:

Many web sites contain HTML code like:

<div id="nav">

<div class="header">

<div id="footer">
to indicate navigation, header, and footer.

HTML5 offers new semantic elements to define different parts of a web page:

| Tag | Description |
| --- | --- |
| <article> | Defines an article |
| <aside> | Defines content aside from the page content |
| <details> | Defines additional details that the user can view or hide |
| <figcaption> | Defines a caption for a <figure> element |
| <figure> | Specifies self-contained content, like illustrations, diagrams, photos, code listings, etc. |
| <footer> | Defines a footer for a document or section |
| <header> | Specifies a header for a document or section |
| <main> | Specifies the main content of a document |
| <mark> | Defines marked/highlighted text |
| <nav> | Defines navigation links |
| <section> | Defines a section in a document |
| <summary> | Defines a visible heading for a <details> element |
| <time> | Defines a date/time |

# NEXT BASIC SYNTAX