**Chapter 1**

3 tiered Client-server architecture

* User interface – Main function is to translate tasks and results to something the user can understand.
* Functional Module – Processes data. May be multi-tiered. Uses embedded languages such as sql.
* Database Management Systems (DBMS) – manages db and allows access to modify data. Mysql

Client-side programming – runs on the client side, CSS, DOM, xHTML, Javascript, XML, XSL(t)…

Server-side programming – runs on servers. Receives requests and sends out a response. C, C++, C#, ` Java, Perl, PHP….

Web Dev Software packages:

* Multimedia editors
  + Adobe
* HTML editors
  + Dreamweaver
  + Bootstrap
* Integrated Development Environment (IDE)
  + Coldfusion
  + Microsoft ASP.NET
  + Visual Studio
  + Netbeans

**Chapter 2**

HTML- Hyper Text Markup Language

Must have .htm or .html extension

Multiple versions, current is HTML5

Contains tags <(directive) (parameters)>…</(directive)>

Tags to know:

* <a href= “http…”>…</a>
  + a is an anchor.
* <html> start of the doc
* Head is header info
* Title = title of doc in browsers caption
* Body displayed in the browser
* B is bold
* <h1>-<h6> different sized heading
* <p> paragraphs
* <img src=”https…”/>
* Alt=”” alternate name if image not available.
* <iframe> is an area that displays another link
* Attributes
  + Class
  + Id
  + Style
  + Title
* Hr horizontal line
* <!-- --> comment
* Style attribute introduces CSS to HTML
  + Background-color: yellow
  + Font-family: Times
  + Text-align: center
* Links is the address to a document on a web
* Hyperlinks can point to any resource on the web
* Anchors define a hyperlink destination inside a doc.
* Target=”\_blank” opens a new page
* <table>
  + <tr> rows
  + <td> data cells
  + <th> heading
  + <caption> table caption
  + <col> defines attributs for 1+ columns
  + <thead> tables head
  + <colgroup> group of table columns
  + <tfoot> table footer
* <ul> unordered list
* <li> list items
* <ol> ordered list
* <dl> definition list
  + <dt> def term
  + <dd> def def
* <form> allows user to enter information
* <input> dependent of type: text, radio, checkbox, submit… can have actions
* Textarea
* Fieldset
* Select : selectable list
* Option: dropdown box
* Input
* Label
* Legend: defines a caption for a fieldset
* Optgroup
* Button
* <frameset> divide the window into frames
* <noframes> noframe section for browsers that do not handle frames
* <frame> defines a subwindow
* Do not use <body> on a page containing frames, or it will not work.
* Html colors
  + 216 web safe cross platform colors
  + Hex colors
* Html4
  + Formatting can be moved out of the doc in a sperate style sheet.
  + Validate your files <!DOCTYPE HTML>
* Inside a Head Element
  + Base, link, meta, title, style, script
* Add keywords for search engines or redirect in the meta tag.,
* Character Entities
  + &, #, ;
* Lang specifies the language

Common structure:

|  |  |
| --- | --- |
| 1 | <html> |

|  |  |
| --- | --- |
| 2 | <head> |

|  |  |
| --- | --- |
| 3 | <title>Title of page</title> |

|  |  |
| --- | --- |
| 4 | </head> |

|  |  |
| --- | --- |
| 5 | <body> |

|  |  |
| --- | --- |
| 6 | This is my first homepage. |

|  |  |
| --- | --- |
| 7 | <b>This text is bold.</b> |

|  |  |
| --- | --- |
| 8 | </body> |

|  |  |
| --- | --- |
| 9 | </html> |

Should always use lower case tags to adhere to HTML4 and XHTML requirements.

All elements should be closed <br/> to be more future proof.

**Chapter 3**

Xml – eXtensible Markup Language

Used to describe data

Used for:

* Separate data
* Simplifies data sharing
* Data transport
* Platform changes
* Data more available

XHTML is almost identical to HTML 4.01

XHTML is a stricter and cleaner version of html

Things properly nested and closed.

XHTML DTD(Doc type def)

HTML5 is the standard

* New features: <canvas>, <video>, <audio>, <article>, <footer>, <header>, <nav>,<section>

<embed src>

<Object> can define a container for external content.

<video> defines a video or movie.

Geolocation: can pinpoint the users location.

CSS: can define how to display HTML. Added in 4.0. external style sheets are stored in CSS files.

2 main parts. Selector and 1+ declarations.

Ex: h1 {color:blue; font-size:12pz;}

ID selector: defined with a #. Id=”para1”

Class selector: defined with a “.”  
class=”center”

Can have multiple styling sheets

1 em = 16 px

Css box model

* Margin – clears an area around the border. Transparent
* Border – lies around the padding and content. Affected by the background color of the box.
* Padding – clears an area around the content. Affected by color
* Content – where text and images appear.