

# Course syllabus: BUAD 3283 E-Commerce Web Development

## Spring Semester, 2018

Bemidji State University

Memorial Hall Room 270

Tuesday/Thursday 2:00–3:15 p.m.

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## Course Description

WWW environment, browsers, Web 2.0, Ajax Client and programming techniques. Major topics include Web page design, Web-based multimedia/graphics, XHTML, W3C XHTML validation service, CSS AND JavaScript. Create Headings, Links, Images, Special characters, Tables, Lists, Forms, Positioning Elements, Embedded Style Sheets, Text Flow, Box Model, User Style sheet and Drop-Down Menu. Prerequisites: BUAD 2280 and any computer programming course. (Source: BSU 2015–2016 catalog)

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## Contact Info

**Instructor** Nate Nolting  
**Office** Paul Bunyan Communications  
**Phone** 218-444-1107 (only in emergencies)  
**Email** natebsu@gmail.com  
**Office Hours** 30 minutes after class

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## Requirements

### Texts

#### **HTML and CSS: Design and Build Websites 1st Edition**

by Jon Duckett

ISBN-10: 1118008189

ISBN-13: 978-1118008188

Publisher: Wiley; 1st edition (November 8, 2011)

Paperback: 490 pages

Codes for this book: <http://www.htmlandcssbook.com/code-samples/>

#### **JavaScript and JQuery: Interactive Front-End Web Development 1st Edition**

by Jon Duckett

ISBN-10: 1118531647

ISBN-13: 978-1118531648

Publisher: Wiley; 1st edition (June 30, 2014)

Paperback: 640 pages

Codes for this book: <http://www.javascriptbook.com/press/>

Those above two books can also be bought as a set:

## **Web Design with HTML, CSS, JavaScript and jQuery Set 1st Edition**

by Jon Duckett

ISBN-10: 1118907442

ISBN-13: 978-1118907443

Publisher: Wiley; 1 edition (July 8, 2014)

### **Note**

Additional reading assignments from other publications such as journal/conference papers, white papers, or reports can be assigned by the instructor.

## **Web Hosting Account**

Please sign-up for a free account with any of the free hosting services available on the Internet, for example:

- X10 hosting at: <https://x10hosting.com/>

### **Note:**

Instead of using your BSU email address, use your Gmail or Yahoo email address for signing-up. Some of those free services require you to visit your account at least once a month or so to avoid any suspension due to inactivity.

## **Source Code**

Somewhere to store your source code, whether it's on a flash drive or stored on a cloud platform like Google Drive or Dropbox.

## **Software**

### **Editor**

An editor for writing assignment code, for example, Atom <https://atom.io> or Sublime Text <https://www.sublimetext.com>.

### **Browser**

Web browser with developer tools like Chrome or Firefox.

### **GIT**

GIT SCM and an optional GIT SCM GUI like SourceTree <https://www.sourcetreeapp.com>.

### **FTP**

An FTP client to send files to your hosting account, for example Filezilla <https://filezilla-project.org>.

## **GitHub**

A GitHub account for showing source code for assignments and projects.

Assignments will be posted on <https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development>

You will maintain your own GitHub repository for your assignments.

## Slack

A Slack account that will be used for messaging out of class. This will be the best way to ask a question out of class. You will receive a invite link in your syllabus.

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## Additional Resources

### Texts

#### **Electronic Commerce**

by Gary P. Schneider

11th Edition

ISBN-10: 1-285-42543-X

ISBN-13: 978-1-285-42543-6

Course Technology @2014

#### **Effortless E-Commerce with PHP and MySQL**

by Larry Ullman

ISBN-10: 0-321-94936-6

ISBN-13: 978-0-321-94936-3

#### **The Missing Link: An Introduction to Web Development and Programming**

by Michael Mendez

ISBN: 978-0-9897226-5-0

SUNY Fredonia 2014

(OPEN TEXTBOOK available for Free at <http://textbooks.opensuny.org/the-missing-link-an-introduction-to-web-development-and-programming/>)

### Websites

- Php <http://www.php.net/>
- Mozilla Developer Network (MDN): <https://developer.mozilla.org/en-US>
- Stack Overflow: <https://stackoverflow.com>
- Reddit: <https://www.reddit.com/user/fordlincolnhg/m/webdev/>

### Sandboxes

- CodePen <https://codepen.io/>
  - JSFiddle <https://jsfiddle.net/>
  - JS Bin <https://jsbin.com/?>
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## The Department of Business Administration Mission

## Educate students through a learning-centered environment.

To achieve its mission, the Department of Business Administration has adopted the following broad-based, student learning goal:

- Graduates will be prepared for entry into careers in business and for contributions to their global and local communities.

In addition, the Department of Business Administration has adopted the following program-level student learning outcomes (*starred outcomes are a focus of this course*):

1. ★ Graduates will demonstrate a foundational knowledge in the field of business.
2. ★ Graduates will demonstrate information literacy.
3. ★ Graduates will demonstrate ability to use practical business tools.
4. ★ Graduates will demonstrate professional communication skills.
5. ★ Graduates will demonstrate ability to work effectively as part of a team.
6. ★ Graduates will demonstrate the ability to analyze complex business situations and ethical obligations in a realistic business environment.
7. Graduates will demonstrate ability to analyze complex business situations and ethical obligations in a realistic business environment.

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## Course Objectives and Learning Outcomes

After completing this course the students are able to do following:

- Explain components for setting-up e-commerce site (DSLO# 1, 2, 5)
- Build a simple web site that organizes information effectively (DSLO# 4, 5)
- Identify an organization for information based on its inherent structure (chronological, alphabetic, etc.) (DSLO# 2)
- Use HTML tags, elements and attributes in developing web sites (DSLO# 2, 3)
- Use cascading style sheets (CSS) to create style standards for a web site (DSLO# 2, 3)
- Create a navigational framework that matches the content and genre of the site (DSLO# 3)
- Explain separation of concerns as it applies to the design and implementation of a web site (DSLO# 2)
- Describe the issues involved in developing a web interface (DSLO# 2, 3)
- Design and implement a web interface (DSLO# 2, 3)
- Compare/contrast graphic media file format characteristics such as color depth, compression and CODEC (DSLO# 2)
- Explain and compare media file formats including lossy vs. lossless compression, color palettes, streaming formats, and CODECs (DSLO# 2)
- Develop Client-side scripts using JavaScript (DSLO# 2, 3)
- Explain how server-side technology such as PHP works (DSLO# 2, 3)

DSLO = Department Student Learning Outcomes

| Learning outcomes  | Measures                                 |
|--|--|
| setting-up e-commerce site, building simple web site, designing web interface, and creating navigational | Reading chapters, take quizzes, hands-on |

|                                   |   |
|-----------------------------------|---|
| framework                         | experience, Discussion, and final exam  |
| Using HTML                        | Doing projects, and Hands-on experience in the Computer                           |
| CSS, JavaScript, PHP, media files | Reading chapters, doing projects in the Computer, discussion, quiz and Final Exam |
| Issue in developing web sites     | Doing projects , quizzes and Final Exam   |

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## Grading

Your final grade is based on a straight point calculation: points earned/points offered. However, participation and attendance will be considered, but only if it will help your grade.

| Grade | Percentage           |
|-------|----------------------|
| A     | 90% and up           |
| B     | 80–89%               |
| C     | 70–79%               |
| D     | 60–69%               |
| F     | 59% and below (fail) |

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## Extra Credit

Extra credit may be available throughout the semester. Do not count on extra credit though!

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## Assigned Reading

There may be multiple readings each week. Readings may consist of chapters from the textbook, companion readings, video viewings, interactive tools within the learning management system, the syllabus, and other items.

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## Assignments

There will be multiple mini assignments that will be turned in through Github. These assignments will be due 12:01 a.m. on the Tuesday or Thursday the assignment is due unless specified in the Course Assignments.

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## Midterm and Final



There will be a midterm project that will be due at a date to be assigned by the instructor. The final examination will actually be the completion of the project that you will be working on throughout the entire semester. This means it is **VERY IMPORTANT** to keep up with what is required for the project, and not wait until the last minute to try to do everything. This is your warning.

## Note

The professor reserves the right to offer unannounced quizzes and assignments, and/or activities at any time.

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## Authorized Absences

You have the choice whether to show up to class or not. That being said, attendance and participation will only help your grade. The instructor reserves the right to change the schedule of reading/or due date for assignments, so being in class is important.

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## Late work

Not accepted unless you have prior approval. Anything turned in after the due date will receive a failing grade.

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## Accommodations

Upon request, this document can be made available in alternative formats. If you have a documented disability and need accommodations for this course, please contact the Disability Services Office in 201 Sanford Hall; phone: (218) 755-3883; email [DisabilityServices@bemidjistate.edu](mailto:DisabilityServices@bemidjistate.edu). Minnesota Relay Service is available at 1-800-627-3529.

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## Academic integrity and general conduct

You are responsible to read and abide by the rules contained within the student handbook: <http://www.bemidjistate.edu/students/handbook/>. Any form of academic dishonesty (e.g., cheating, plagiarism, and misrepresentation), inappropriate behavioral conduct, or general disruptive conduct will not be tolerated and will be dealt with in accordance with University Policy.

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## Course Schedule

This course schedule is tentative and subject to change. **ALL** assignments are due no later than 12:01 a.m. on the date listed unless otherwise noted.

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### January 9th

Get Syllabus and have a good week!!!

## Assignment

1. Download and install software and decide where you will store your source code.
  2. Setup your own GitHub Account and let me know what your repository will be.
    - Watch the syllabus repository at <https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development> to receive notifications of changes.
  3. Signup for the Slack channel with the link in Requirement section.
  4. Get your web hosting account setup and let me know what the url is.
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## January 11th

No Class

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## January 16th

### Discussion

- **Review syllabus, go over any issues with the setup from last week.**
- **How the web works**
  - Domain Name System (DNS) [https://en.wikipedia.org/wiki/Domain\\_Name\\_System](https://en.wikipedia.org/wiki/Domain_Name_System)
  - Transport Layer Security (TLS) [https://en.wikipedia.org/wiki/Transport\\_Layer\\_Security](https://en.wikipedia.org/wiki/Transport_Layer_Security)
- **Elements of an E-Commerce web application.**
  - Payment Gateway for handling transactions  
[https://en.wikipedia.org/wiki/Payment\\_gateway](https://en.wikipedia.org/wiki/Payment_gateway)
  - TLS for transferring data
  - Handling sensitive data
    - Sanitize in, encode out <https://security.stackexchange.com/a/95330>
- **How a web page is created**
  - HTML <https://en.wikipedia.org/wiki/HTML>
  - Body for page structure and display
  - Head for page instructions
  - CSS for styling
  - Javascript for interactions and DOM manipulations
  - Includes such as images and other media

### Notes

See [course assignment/course notes 03 January 16.md](https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course%20assignment/course%20notes%2003%20January%2016.md) ([https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course assignment/course notes 03 January 16.md](https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course%20assignment/course%20notes%2003%20January%2016.md))

### **Assignment**

See [course assignment/course assignment 03 January 16.md](https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course%20assignment/course%20assignment%2003%20January%2016.md) ([https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course assignment/course assignment 03 January 16.md](https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course%20assignment/course%20assignment%2003%20January%2016.md))

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## **January 18th**

### **Discussion**

- Files for a web site
- Structural / Semantic tags
- tables, lists, and links

### **Notes**

See [course assignment/course notes 04 January 18.md](https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course%20assignment/course%20notes%2004%20January%2018.md) ([https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course assignment/course notes 04 January 18.md](https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course%20assignment/course%20notes%2004%20January%2018.md))

### **Assignment**

See [course assignment/course assignment 04 January 18.md](https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course%20assignment/course%20assignment%2004%20January%2018.md) ([https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course assignment/course assignment 04 January 18.md](https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course%20assignment/course%20assignment%2004%20January%2018.md))

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## **January 23rd**

### **Discussion**

- Source Control

### **Notes:**

See [course assignment/course notes 05 January 23.md](https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course%20assignment/course%20notes%2005%20January%2023.md) ([https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course assignment/course notes 05 January 23.md](https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course%20assignment/course%20notes%2005%20January%2023.md))

### **Assignment:**

See [course assignment/course assignment 05 January 23.md](https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course%20assignment/course%20assignment%2005%20January%2023.md) ([https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course assignment/course assignment 05 January 23.md](https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course%20assignment/course%20assignment%2005%20January%2023.md))

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## January 25th

### Discussion

- Web images

### Notes

See [course notes/course notes 06 January 25.md](https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course%20notes/course%20notes%2006%20January%2025.md) ([https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course notes/course notes 06 January 25.md](https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course%20notes/course%20notes%2006%20January%2025.md))

### Assignment:

See [course assignment/course assignment 06 January 25.md](https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course%20assignment/course%20assignment%2006%20January%2025.md) ([https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course assignment/course assignment 06 January 25.md](https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course%20assignment/course%20assignment%2006%20January%2025.md))

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## January 30th

### Discussion

- **Tables**
  - Used for tabular data
  - Consists of rows and columns
  - Tables have a head
    - thead tag wrapping a tr with th columns
  - Tables have a body
    - tbody tag wrapping a tr with td columns
  - Space can be added to table with cellpadding and cellspacing table attributes.
  - Cell and row spacing only recognizes padding for CSS
  - Table columns will collapse to the widest length
    - display: table in css can be used to center objects because of collapse.
- **Forms**
  - Used for sending data between pages and domains with the action attribute.
  - can send requests over either GET or POST protocols with the method attribute.
  - Various input types to capture user inputs: text, textarea, list select, radio, checkbox, etc.
  - New input types added to HTML5 to target devices tel, email, date, url, search etc.
  - Inputs grouped inside a fieldset structural tag.
  - Inputs pair with a label tag for titling input.

- **Other HTML elements**

- Comments, represented by `<!-- a comment -->`
- HTML5 brings in several structural elements that describe the page: header, footer, sidebar, article, nav, etc.
- iframes can be used to include content from other pages
  - YouTube embed code uses iframe to load in embeddable videos.

- **Other HTML attributes**

- id attribute used to identify elements on a page
  - Must be unique.
  - used for targeting a specific element in JS
- class attribute
  - Used to add style classes to elements
  - Also used for grouping elements together

## Notes

See [course notes/course notes 07 January 30.md](https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course%20notes/course%20notes%2007%20January%2030.md) ([https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course notes/course notes 07 January 30.md](https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course%20notes/course%20notes%2007%20January%2030.md))

## Assignment:

See [course assignment/course assignment 07 January 30.md](https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course%20assignment/course%20assignment%2007%20January%2030.md) ([https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course assignment/course assignment 07 January 30.md](https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course%20assignment/course%20assignment%2007%20January%2030.md))

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## February 1st

TBA

####Notes:

See [course notes/course notes 08 February 01.md](https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course%20notes/course%20notes%2008%20February%2001.md) ([https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course notes/course notes 08 February 01.md](https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course%20notes/course%20notes%2008%20February%2001.md))

####Assignment:

See [course assignment/course assignment 08 February 01.md](https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course%20assignment/course%20assignment%2008%20February%2001.md) ([https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course assignment/course assignment 08 February 01.md](https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course%20assignment/course%20assignment%2008%20February%2001.md))

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## February 6th

TBA

####Notes:

See [course notes/course notes 09 February 06.md](https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course%20notes/course%20notes%2009%20February%2006.md) ([https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course notes/course notes 09 February 06.md](https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course%20notes/course%20notes%2009%20February%2006.md))

####Assignment:

See [course assignment/course assignment 09 February 06.md](https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course%20assignment/course%20assignment%2009%20February%2006.md) ([https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course assignment/course assignment 09 February 06.md](https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course%20assignment/course%20assignment%2009%20February%2006.md))

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## February 8th

TBA

####Notes:

See [course notes/course notes 10 February 08.md](https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course%20notes/course%20notes%2010%20February%2008.md) ([https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course notes/course notes 10 February 08.md](https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course%20notes/course%20notes%2010%20February%2008.md))

####Assignment:

See [course assignment/course assignment 10 February 08.md](https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course%20assignment/course%20assignment%2010%20February%2008.md) ([https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course assignment/course assignment 10 February 08.md](https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course%20assignment/course%20assignment%2010%20February%2008.md))

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## February 13th

TBA

####Notes:

See [course notes/course notes 11 February 13.md](https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course%20notes/course%20notes%2011%20February%2013.md) ([https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course notes/course notes 11 February 13.md](https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course%20notes/course%20notes%2011%20February%2013.md))

####Assignment:

See [course assignment/course assignment 11 February 13.md](https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course%20assignment/course%20assignment%2011%20February%2013.md) ([https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course assignment/course assignment 11 February 13.md](https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course%20assignment/course%20assignment%2011%20February%2013.md))

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## February 15th

TBA

####Notes:

See [course notes/course notes 12 February 15.md](https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course%20notes/course%20notes%2012%20February%2015.md) ([https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course notes/course notes 12 February 15.md](https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course%20notes/course%20notes%2012%20February%2015.md))

####Assignment:

See [course assignment/course assignment 12 February 15.md](https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course%20assignment/course%20assignment%2012%20February%2015.md)  
([https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course assignment/course assignment 12 February 15.md](https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course%20assignment/course%20assignment%2012%20February%2015.md))

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## February 20th

TBA

####Notes:

See [course notes/course notes 13 February 20.md](https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course%20notes/course%20notes%2013%20February%2020.md) ([https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course notes/course notes 13 February 20.md](https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course%20notes/course%20notes%2013%20February%2020.md))

####Assignment:

See [course assignment/course assignment 13 February 20.md](https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course%20assignment/course%20assignment%2013%20February%2020.md)  
([https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course assignment/course assignment 13 February 20.md](https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course%20assignment/course%20assignment%2013%20February%2020.md))

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## February 22nd

TBA

####Notes:

See [course notes/course notes 14 February 22.md](https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course%20notes/course%20notes%2014%20February%2022.md) ([https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course notes/course notes 14 February 22.md](https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course%20notes/course%20notes%2014%20February%2022.md))

####Assignment:

See [course assignment/course assignment 14 February 22.md](https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course%20assignment/course%20assignment%2014%20February%2022.md)  
([https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course assignment/course assignment 14 February 22.md](https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course%20assignment/course%20assignment%2014%20February%2022.md))

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## February 27th

TBA

####Notes:

See [course notes/course notes 15 February 27.md](https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course%20notes/course%20notes%2015%20February%2027.md) ([https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course notes/course notes 15 February 27.md](https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course%20notes/course%20notes%2015%20February%2027.md))

####Assignment:

See [course assignment/course assignment 15 February 27.md](https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course%20assignment/course%20assignment%2015%20February%2027.md)  
([https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course assignment/course assignment 15 February 27.md](https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course%20assignment/course%20assignment%2015%20February%2027.md))

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## March 1st

TBA

####Notes:

See [course notes/course notes 16 March 01.md](https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course%20notes/course%20notes%2016%20March%2001.md) ([https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course notes/course notes 16 March 01.md](https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course%20notes/course%20notes%2016%20March%2001.md))

####Assignment:

See [course assignment/course assignment 16 March 01.md](https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course%20assignment/course%20assignment%2016%20March%2001.md) ([https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course assignment/course assignment 16 March 01.md](https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course%20assignment/course%20assignment%2016%20March%2001.md))

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## March 6th

TBA

####Notes:

See [course notes/course notes 17 March 06.md](https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course%20notes/course%20notes%2017%20March%2006.md) ([https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course notes/course notes 17 March 06.md](https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course%20notes/course%20notes%2017%20March%2006.md))

####Assignment:

See [course assignment/course assignment 17 March 06.md](https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course%20assignment/course%20assignment%2017%20March%2006.md) ([https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course assignment/course assignment 17 March 06.md](https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course%20assignment/course%20assignment%2017%20March%2006.md))

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## March 8th

TBA

####Notes:

See [course notes/course notes 18 March 08.md](https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course%20notes/course%20notes%2018%20March%2008.md) ([https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course notes/course notes 18 March 08.md](https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course%20notes/course%20notes%2018%20March%2008.md))

####Assignment:

See [course assignment/course assignment 18 March 08.md](https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course%20assignment/course%20assignment%2018%20March%2008.md) ([https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course assignment/course assignment 18 March 08.md](https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course%20assignment/course%20assignment%2018%20March%2008.md))

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## March 13th

TBA



####Notes:

See [course notes/course notes 19 March 13.md](https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course%20notes/course%20notes%2019%20March%2013.md) ([https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course notes/course notes 19 March 13.md](https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course%20notes/course%20notes%2019%20March%2013.md))

####Assignment:

See [course assignment/course assignment 19 March 13.md](https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course%20assignment/course%20assignment%2019%20March%2013.md) ([https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course assignment/course assignment 19 March 13.md](https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course%20assignment/course%20assignment%2019%20March%2013.md))

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## March 15th

TBA

####Notes:

See [course notes/course notes 20 March 15.md](https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course%20notes/course%20notes%2020%20March%2015.md) ([https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course notes/course notes 20 March 15.md](https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course%20notes/course%20notes%2020%20March%2015.md))

####Assignment:

See [course assignment/course assignment 20 March 15.md](https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course%20assignment/course%20assignment%2020%20March%2015.md) ([https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course assignment/course assignment 20 March 15.md](https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course%20assignment/course%20assignment%2020%20March%2015.md))

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## March 20th

TBA

####Notes:

See [course notes/course notes 21 March 20.md](https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course%20notes/course%20notes%2021%20March%2020.md) ([https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course notes/course notes 21 March 20.md](https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course%20notes/course%20notes%2021%20March%2020.md))

####Assignment:

See [course assignment/course assignment 21 March 20.md](https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course%20assignment/course%20assignment%2021%20March%2020.md) ([https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course assignment/course assignment 21 March 20.md](https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course%20assignment/course%20assignment%2021%20March%2020.md))

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## March 22nd

TBA

####Notes:

See [course notes/course notes 22 March 22.md](https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course%20notes/course%20notes%2022%20March%2022.md) ([https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course notes/course notes 22 March 22.md](https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course%20notes/course%20notes%2022%20March%2022.md))

####Assignment:

See [course assignment/course assignment 22 March 22.md](https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course%20assignment/course%20assignment%2022%20March%2022.md)  
([https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course assignment/course assignment 22 March 22.md](https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course%20assignment/course%20assignment%2022%20March%2022.md))

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## March 27th

TBA

####Notes:

See [course notes/course notes 23 March 27.md](https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course%20notes/course%20notes%2023%20March%2027.md) ([https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course notes/course notes 23 March 27.md](https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course%20notes/course%20notes%2023%20March%2027.md))

####Assignment:

See [course assignment/course assignment 23 March 27.md](https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course%20assignment/course%20assignment%2023%20March%2027.md)  
([https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course assignment/course assignment 23 March 27.md](https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course%20assignment/course%20assignment%2023%20March%2027.md))

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## March 29th

TBA

####Notes:

See [course notes/course notes 24 March 29.md](https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course%20notes/course%20notes%2024%20March%2029.md) ([https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course notes/course notes 24 March 29.md](https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course%20notes/course%20notes%2024%20March%2029.md))

####Assignment:

See [course assignment/course assignment 24 March 29.md](https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course%20assignment/course%20assignment%2024%20March%2029.md)  
([https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course assignment/course assignment 24 March 29.md](https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course%20assignment/course%20assignment%2024%20March%2029.md))

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## April 3rd

TBA

####Notes:

See [course notes/course notes 25 April 03.md](https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course%20notes/course%20notes%2025%20April%2003.md) ([https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course notes/course notes 25 April 03.md](https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course%20notes/course%20notes%2025%20April%2003.md))

####Assignment:

See [course assignment/course assignment 25 April 03.md](https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course%20assignment/course%20assignment%2025%20April%2003.md) ([https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course assignment/course assignment 25 April 03.md](https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course%20assignment/course%20assignment%2025%20April%2003.md))

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## April 5th

TBA

####Notes:

See [course notes/course notes 26 April 05.md](https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course%20notes/course%20notes%2026%20April%2005.md) ([https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course notes/course notes 26 April 05.md](https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course%20notes/course%20notes%2026%20April%2005.md))

####Assignment:

See [course assignment/course assignment 26 April 05.md](https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course%20assignment/course%20assignment%2026%20April%2005.md) ([https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course assignment/course assignment 26 April 05.md](https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course%20assignment/course%20assignment%2026%20April%2005.md))

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## April 10th

TBA

####Notes:

See [course notes/course notes 27 April 10.md](https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course%20notes/course%20notes%2027%20April%2010.md) ([https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course notes/course notes 27 April 10.md](https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course%20notes/course%20notes%2027%20April%2010.md))

####Assignment:

See [course assignment/course assignment 27 April 10.md](https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course%20assignment/course%20assignment%2027%20April%2010.md) ([https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course assignment/course assignment 27 April 10.md](https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course%20assignment/course%20assignment%2027%20April%2010.md))

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## April 12th

TBA

####Notes:

See [course notes/course notes 28 April 12.md](https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course%20notes/course%20notes%2028%20April%2012.md) ([https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course notes/course notes 28 April 12.md](https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course%20notes/course%20notes%2028%20April%2012.md))

####Assignment:

See [course assignment/course assignment 28 April 12.md](https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course%20assignment/course%20assignment%2028%20April%2012.md) ([https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course assignment/course assignment 28 April 12.md](https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course%20assignment/course%20assignment%2028%20April%2012.md))

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## April 17th

TBA

####Notes:

See [course notes/course notes 29 April 17.md](https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course%20notes/course%20notes%2029%20April%2017.md) ([https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course notes/course notes 29 April 17.md](https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course%20notes/course%20notes%2029%20April%2017.md))

####Assignment:

See [course assignment/course assignment 29 April 17.md](https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course%20assignment/course%20assignment%2029%20April%2017.md) ([https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course assignment/course assignment 29 April 17.md](https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course%20assignment/course%20assignment%2029%20April%2017.md))

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## April 19th

TBA

####Notes:

See [course notes/course notes 30 April 19.md](https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course%20notes/course%20notes%2030%20April%2019.md) ([https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course notes/course notes 30 April 19.md](https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course%20notes/course%20notes%2030%20April%2019.md))

####Assignment:

See [course assignment/course assignment 30 April 19.md](https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course%20assignment/course%20assignment%2030%20April%2019.md) ([https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course assignment/course assignment 30 April 19.md](https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course%20assignment/course%20assignment%2030%20April%2019.md))

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## April 24th

TBA

####Notes:

See [course notes/course notes 31 April 24.md](https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course%20notes/course%20notes%2031%20April%2024.md) ([https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course notes/course notes 31 April 24.md](https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course%20notes/course%20notes%2031%20April%2024.md))

####Assignment:

See [course assignment/course assignment 31 April 24.md](https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course%20assignment/course%20assignment%2031%20April%2024.md) ([https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course assignment/course assignment 31 April 24.md](https://github.com/natenolting/BUAD-3283-E-Commerce-Web-Development/blob/spring2018/course%20assignment/course%20assignment%2031%20April%2024.md))

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## Course Notes for January 9th

TBA

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## Course Notes for January 11th

# Course Notes for January 16th

## How a web page is created

### HTML page structure

```
<!DOCTYPE html> <!-- Document Type -->
<html lang="en">
<!-- Start instructions for page -->
<head>
  <!-- Page Encoding -->
  <meta charset="UTF-8">
  <!-- Title of page -->
  <title>Title</title>
  <!-- Link to a external stylesheet -->
  <link rel="stylesheet" href="/link/to/a/style/sheet.css">
  <!-- Link to a external JavaScript file -->
  <script type="application/javascript"
src="/link/to/a/page/blocking/js/file.js"></script>
  <!-- Embedded JavaScript -->
  <script type="application/javascript">
    console.log('Hello World');
  </script>
</head>
<!-- End instructions for page -->
<!-- Start visual part of page -->
<body>
  
  <p>Hello World</p>
  <script type="application/javascript"
src="/link/to/a/non/page/blocking/js/file.js"></script>
</body>
<!-- End visual part of page -->
</html>
```

## Parts

### Tags

- They include paragraph, lists, tables, etc.
- They either require open and close tags or are self closing

- Open and close: `<p>Hello World</p>`
- Self closing: ``
- They have attributes: ``, src and alt are attributes.

## DOCTYPE

- Many different HTML DOCTYPE Declaration depending on the type of document <https://www.w3.org/QA/2002/04/valid-dtd-list.html>
- **The standard now is the HTML5 DOCTYPE** `<!DOCTYPE html>`

## HTML

- Body and head are wrapped with `<html></html>`
- Sets the language of page with the lang attribute <https://w3c.github.io/html/dom.html#the-lang-and-xml:lang-attributes>

## Head

- Contained within `<head></head>`
- Includes instructions for the page
  - Example: `<meta charset="UTF-8">` Tells the browser to use UTF-8 character encoding for the HTML page.
- Include external CSS and JS
- Meta tags used by browser, search spiders, screen readers, etc.

## Body

- Contains the visual output of the page
- Contained within `<body></body>`

---

# Course Notes for January 18th

## Files for a web site

### Index

- index.html, index.php, others depending on server language
- Entry point of web site

## Cascading Style Sheet (CSS)

- .css file extension
- Holds styling for the site
- Linked in the head typically with `<link rel="stylesheet" href="/link/to/css/file.css">`

## JavaScript

- .js file extension
- Might be library file or a custom script
- Linked in the head or at the end of the body tags in the HTML with `<script src="/link/to/script.js"></script>`

## Other Files

- .htaccess for Apache server instructions
- robots.txt for instructions given to search engines <http://www.robotstxt.org/>
- Verification files for 3rd party tools, ie. Google Analytics

# Structural / Semantic tags

## Structural Tags

- Meant for layout of a web page
- Typically are block elements
- Give structure to pages
- Used for header, footer, navigation, articles, etc.
- Include div, p, ul, ol, h1 → h6, br, hr, table, etc.

## Semantic Tags

- Meant to describe elements
- Used inside structural elements to give content more meaning
- Typically bad practice to include structural elements inside a semantic tag: `<p><strong>I'm strong</strong></p>` rather than `<strong><p>I'm strong but invalid</p></strong>`
- Include em, strong, code, blockquote, span, and many more
- Just pick the tag that seems the most appropriate

## Tables

- Typically only of tabular data
- Starts with table with rows tr that wrap a list of columns td
- Head row has th column tags

### Table example

```
<table>
  <tr>
    <th>Foo</th>
    <th>Bar</th>
    <th>Baz</th>
  </tr>
  <tr>
    <td>Foo</td>
    <td>Bar</td>
    <td>Baz</td>
  </tr>
</table>
```

Makes:

**Foo Bar Baz**

Foo Bar Baz

## Lists

- Unordered ul creates a bulleted list by default
- Ordered ol create a numbered list by default
- List items wrapped with li tags

### Link example

```
<ul>
  <li>Foo</li>
  <li>Bar</li>
  <li>Bazz</li>
</ul>

<ol>
  <li>Foo</li>
  <li>Bar</li>
  <li>Bazz</li>
</ol>
```

Makes:

- Foo
- Bar
- Bazz

1. Foo
2. Bar
3. Bazz



## Links

- Links can act as semantic or structural
- Links can link to different pages and target specific place on a page
- Links can target an app, open an email message, prompt a phone call, etc.

### Link Examples

```
<!-- link to another page -->
<a href="/link/to/another/page.html">Link to another page</a>

<!-- link to an external page -->
<a href="https://google.com">Link to Google</a>

<!-- link to a specific point on a page... -->
<a href="#anchor">Link to an anchor</a>
<!-- ...then at the point that the above should link to -->
<a name="anchor" id="anchor"></a>

<!-- link that opens an email -->
<a href="mailto:somone@example.com">Link to Email</a>

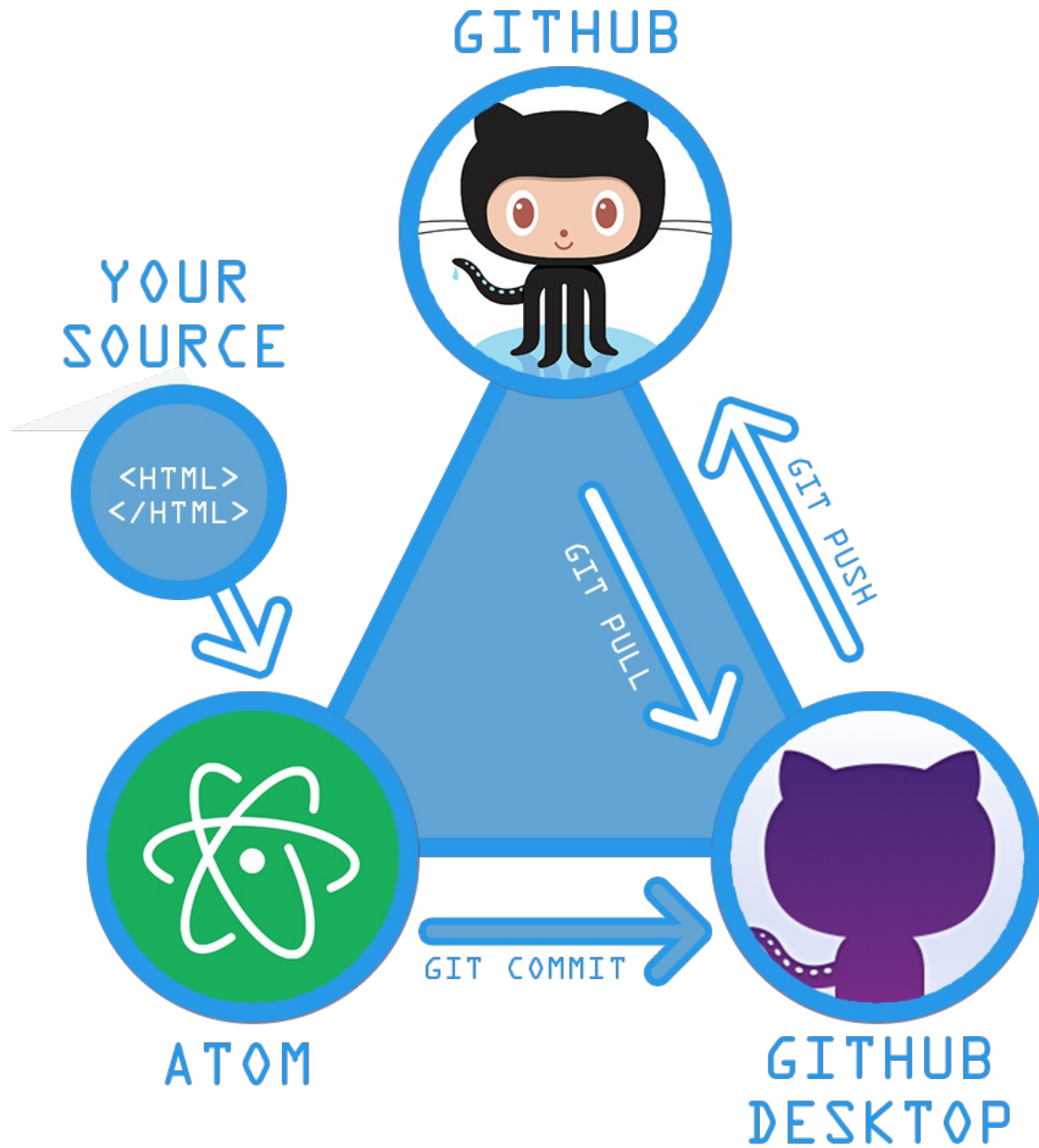
<!-- link to call a number -->
<a href="tel:1234567890">Call a number</a>
```

---

## Course Notes for January 23rd

### Source Control

- Discussion on how to get code changes into the cloud on GitHub.



There are quite a few GUI tools for getting code into source control. (<https://git-scm.com/download/gui/windows>) When working with [GitHub](https://github.com/) (<https://github.com/>) it seems that the easiest route to take would be to use [Atom](https://atom.io/) (<https://atom.io/>) for edits, then use [GitHub Desktop](https://desktop.github.com/) (<https://desktop.github.com/>) for interacting with your remote repository. The tools a developer picks to complete a task or solve a problem is largely immaterial as long as the end result is successful.

---

## Course Notes for January 25th

### Types of Web images

There are 4 main types of web images: gif, jpeg, png and SVG. Each has advantages and disadvantages over the others. The image type used depends on the situation. All file formats use the `img` tag with the `src` attribute being the path to the file. The `alt` attribute should be used incase the image file did not load.

```

```

## [GIF \(https://en.wikipedia.org/wiki/GIF\)](https://en.wikipedia.org/wiki/GIF)

- Gifs (Graphics Interchange Format) use the file extension `.gif`
- They are typically used for small graphics or for images that only utilize a few colors.
- They can be animated.
- Gifs can contain anywhere from 2 – 256 colors. The greater the color count the larger the file size can be.
- Can have an alpha channel with aliased transition between background and image without using a matte.
  - When using a matte the selected color should match the background the image will be placed on.

**Example: 5 colors with no matte transparency:**

```

```

**Example: 5 colors with white matte transparency:**

```

```

**Example: 5 colors with black matte transparency:**

```

```

## [JPEG \(https://en.wikipedia.org/wiki/JPEG\)](https://en.wikipedia.org/wiki/JPEG)

- JPEGs (Joint Photographic Experts Group) are typically use for photo graphic images.
- Can use either the `.jpg` pr `.jpeg` file extension.
- Has no option for transparency
- uses "lossy" compression when saving for web.
- Image quality vs. file size should be kept in mind when saving jpeg files for web.

**Example: photographic image:**



## **[PNG \(https://en.wikipedia.org/wiki/Portable\\_Network\\_Graphics\)](https://en.wikipedia.org/wiki/Portable_Network_Graphics)**

- PNGs (Portable Network Graphics) are typically used for graphics, logos and icons.
- PNGs have the file extension .png
- 24 bit PNG (png-24) files are similar to JPEGs but are "lossless".
- 8 bit PNG (png-8) are like GIF images where the file can have colors from 2 to 256 colors.
- Both can use an alpha channel and have smooth, antialiased edges.

**Example: 5 color png-8 with transparency:**



**Example: png-24 with transparency:**



## **[SVG \(https://en.wikipedia.org/wiki/Scalable\\_Vector\\_Graphics\)](https://en.wikipedia.org/wiki/Scalable_Vector_Graphics)**

- SVG (Scalable Vector Graphics) are text files made up of points and lines to create shapes.
- Can be created in any vector art application or programmatically.
- Useful if a graphic needs to be represented in many different sizes.
- Will not lose quality when scaled.

**Example, same image scaled**





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## Course Notes for January 30th

Tables

## Represent tabular data

A comma separated value (CSV) can be represented as a table. The first row represents the head row with columns of the table and the rest of the data is represented as rows with columns.

```
Head1, Head2, Head3;  
foo, bar, baz;  
alpha, beta, capa;
```

**Head1 Head2 Head3**

foo bar baz  
alpha beta capa

```
<table>  
  <thead>  
    <tr>  
      <th>Head1</th>  
      <th>Head2</th>  
      <th>Head3</th>  
    </tr>  
  </thead>  
  <tbody>  
    <tr>  
      <td>foo</td>  
      <td>bar</td>  
      <td>baz</td>  
    </tr>  
    <tr>  
      <td>alpha</td>  
      <td>beta</td>  
      <td>capa</td>  
    </tr>  
  </tbody>  
</table>
```

## Center block elements with display: table;

The CSS property display can be set to table to make a block element collapse so it can be 'auto' centered. Set margin-left and margin-right to auto to use this effect.

Hi, I'm centered!

```
<div style="padding: 10px; background: #ccc;">
  <div style="display: table; margin: 0 auto; color: #000; font-weight: 700;
border: 1px dotted #000;">
    Hi, I'm centered!
  </div>
</div>
```

## Padding, margin and table cells.

Table cells and rows will ignore margin but padding is ok to use. Css is preferential to using the cellpadding and cellspacing attributes.

## Forms

### Forms are build with a combination of inputs

Contact Form

Name

Email

Phone

File

 No file selected

Comment

Select

☐ A Checkbox

```
<form action="/path/to/endpoint" method="get" enctype="multipart/form-data"
class="my-form">
  <fieldset>
    <legend>Contact Form</legend>
    <div>
      <label for="name">Name</label><input id="name" type="text" />
    </div>
    <div>
      <label for="email">Email</label><input id="email" type="email" />
    </div>
    <div>
      <label for="phone">Phone</label><input id="phone" type="tel" />
    </div>
    <div>
      <label for="file">File</label><input id="file" type="file" />
    </div>
    <div>
      <label for="comment">Comment</label><textarea name="comment" id="comment"
cols="30" rows="10"></textarea>
    </div>
    <div>
      <label for="select">Select</label><select name="comment" id="select">
        <option value="foo">Foo</option>
        <option value="bar">Bar</option>
        <option value="baz">Baz</option>
      </select>
    </div>
    <div>
    </div>
    <div>
      <label for="checkbox"><input type="checkbox" /> A Checkbox</label>
    </div>
    <div>
      <input type="submit" name="submit" value="Submit" />
    </div>
  </fieldset>
</form>
```

## Other structural HTML elements

```
<header>Page header</header>
<navigation>Naviation</navigation>
<article>Article 1</article>
<article>Article 2</article>
<article>Article 3</article>
<footer>Page footer</footer>
```



## **Course Notes for February 1st**

TBA

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## **Course Notes for February 6th**

TBA

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## **Course Notes for February 8th**

TBA

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## **Course Notes for February 13th**

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## **Course Notes for February 15th**

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## **Course Notes for February 20th**

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## **Course Notes for February 22nd**

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## **Course Notes for February 27th**

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## **Course Notes for March 1st**

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## **Course Notes for March 6th**

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## **Course Notes for March 8th**

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## **Course Notes for March 13th**

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## **Course Notes for March 15th**

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## **Course Notes for March 20th**

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## **Course Notes for March 22nd**

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## **Course Notes for March 27th**

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## **Course Notes for March 29th**

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## **Course Notes for April 3rd**

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## **Course Notes for April 5th**

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## **Course Notes for April 10th**

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## **Course Notes for April 12th**

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## **Course Notes for April 17th**

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## **Course Notes for April 19th**

TBA

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## **Course Notes for April 24th**

TBA

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