

# Website Development

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IT117 - UNIT 2

# Unit 2

## Discussion

### - Topic 1

*Note: The discussion Topic 1 this week asks about developing with a template. This is referring to the use of a template created by you, the developer, from scratch. It is NOT asking about pre-made template that are created by someone else.*

#### **Topic 1:**

For your assignment this week, **you will create a Web page** from the given code **and save it as a template**. You will refer to that template each week and use it as a starter page for each page of your website.

**Explain the reasons why you would be encouraged to create and use a template** instead of creating a new page file each week.

Discuss the **advantages and disadvantages of creating and using a template**.

*(not the advantages and disadvantages of using a pre-made template created by someone else)*

## Unit 2 Discussion - Topic 2

*Note: Topic 2 does NOT require a reference*

### **Unit 2 - Topic 2 Only:**

- Initial post addressing the entire topic posted by Saturday
  - Discuss your experience with the Web server, not the process of creating a website page file.
- Respond to at least two classmates
- Post on three different days throughout the unit

Use the provided tutorial to help you access your student Web server account. Log in and spend some time exploring the file manager. Do not delete any folders or add any folders at this time.

## Unit 2 Discussion - Topic 2

*Note: Topic 2 does NOT require a reference*

Once logged into the server, click the IT117-02 folder to open it.

Click the UPLOAD button and browse your computer for the file you want to upload. If you haven't completed your assignment yet, you can upload any file for the purposes of the discussion. Just be sure to delete the uploaded file before logging out if it is a file other than index.html.

Discuss your experience with the server itself, not your experience coding the assignment. Use this opportunity to discuss and find answers to questions you may have and to get help if needed using the file manager, logging into the server, etc.

# Discussion Topics

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## Unit 2 Discussion Instructions ▾



### DISCUSSION INSTRUCTIONS

In each course you take at Purdue University Global, you are part of a learning community. All members are working to strengthen their professional and communication skills and achieve their academic and career goals. Group discussion allows for new perspectives and personal growth. Discussion Boards are an important part of your learning; they provide an opportunity to asynchronously interact with your classmates and instructor.

Using the required academic readings, and supplemental academic research, you will address the questions in the Discussion Board while adhering to the Discussion Board rubric.

[Access the Unit 2 Discussion Topic 1 Board](#)

[Access the Unit 2 Discussion Topic 2 Board](#)

Review the **Discussion Board Basics tutorial** [↗](#) for a step-by-step overview of the Discussion Board posting process.



The standard markup language for Web pages

- The current version of HTML is HTML5

Made up of a collection of elements that display content on a website page

- HTML elements are the building blocks of HTML pages
- HTML elements are represented by tags
  - Tags are coded between < and > brackets

# Hypertext Markup Language (HTML)

# TextEdit

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- If you are using a Mac, you will need to use TextEdit for assignments 2-9.
  - TextEdit is a free text editor installed on all Mac systems.
- You must set up TextEdit before you can use it to code HTML
  - Use this link to set up TextEdit: <https://support.apple.com/guide/textedit/work-with-html-documents-txtd0b6cd61/mac>

*Before you code any HTML or add any text, be sure to have TextEdit set up correctly. Double check that you have set TextEdit to **Plain Text** and that you have **disabled Smart Quotes***

# HTML Files

## Using an editor, HTML is coded into a file

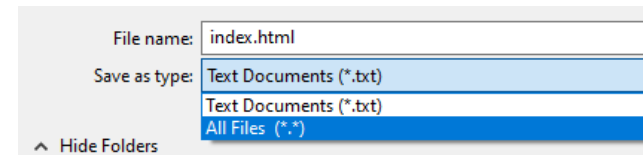
\*In this class, you will use MS Notepad (TextEdit)



Notepad  
App

## The file must be saved as a .html file

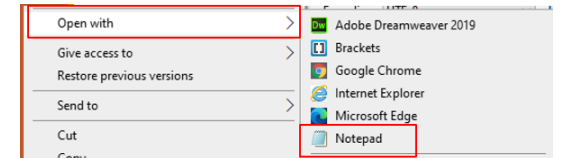
\*File > Save As > type file name and extension > Select All Files



## The .html file is converted in the browser into a website page

\*Double click saved file to open in local browser

\*Right click > select Open With > Notepad to edit





## Page Structure

All HTML files (Web pages) require the following elements, in this order:

```
<!doctype html>
```

```
<html>
```

```
<head>
```

```
<title></title>
```

```
</head>
```

```
<body>
```

```
</body>
```

```
</html>
```

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```
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```

```
<body>
```

```
</body>
```

```
</html>
```

- Elements are created using syntax called tags.

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```
</head>
```

```
<body>
```

```
</body>
```

```
</html>
```

- Elements are created using syntax called tags.
  - A tag is created by typing the tag name between < and > brackets.
  - <tagname>

# Page Structure

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```
<html>
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```
<head>
```

```
<title></title>
```

```
</head>
```

```
<body>
```

```
</body>
```

```
</html>
```

- Elements are created using syntax called tags.
  - A tag is created by typing the tag name between < and > brackets.
  - <tagname>
- An element is “closed” using a closing tag.

# Page Structure

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```
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```

```
<title></title>
```

```
</head>
```

```
<body>
```

```
</body>
```

```
</html>
```

- Elements are created using syntax called tags.
  - A tag is created by typing the tag name between < and > brackets.
  - <tagname>
- An element is “closed” using a closing tag.
  - A closing tag is created by typing / in front of the tag name, between < and > brackets
  - </tagname>

# The doctype statement

All HTML files (Web pages) require the following elements, in this order:

```
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```

```
<html>
```

```
<head>
```

```
<title>
```

```
</title>
```

```
</head>
```

```
<body>
```

```
</body>
```

```
</html>
```

All HTML Web pages require a doctype statement.

- This statement ensures the browser understands how to display the page
- This statement also helps validators know what version of HTML is used

There are different statements for each type of document

- XHTML transitional uses:  
`<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN" "http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">`
- HTML5 uses:  
`<!doctype html>`

In this course we will use HTML5 `<!doctype html>`

- You will see this often: `<IDOCTYPE html>` but **in this course** we will comply with the current standard of NO CAPS and **use `<!doctype html>`**

# The html element

All HTML files (Web pages) require the following elements, in this order:

```
<!doctype html>
```

```
<html>
```

```
<head>
```

```
<title>
```

```
</title>
```

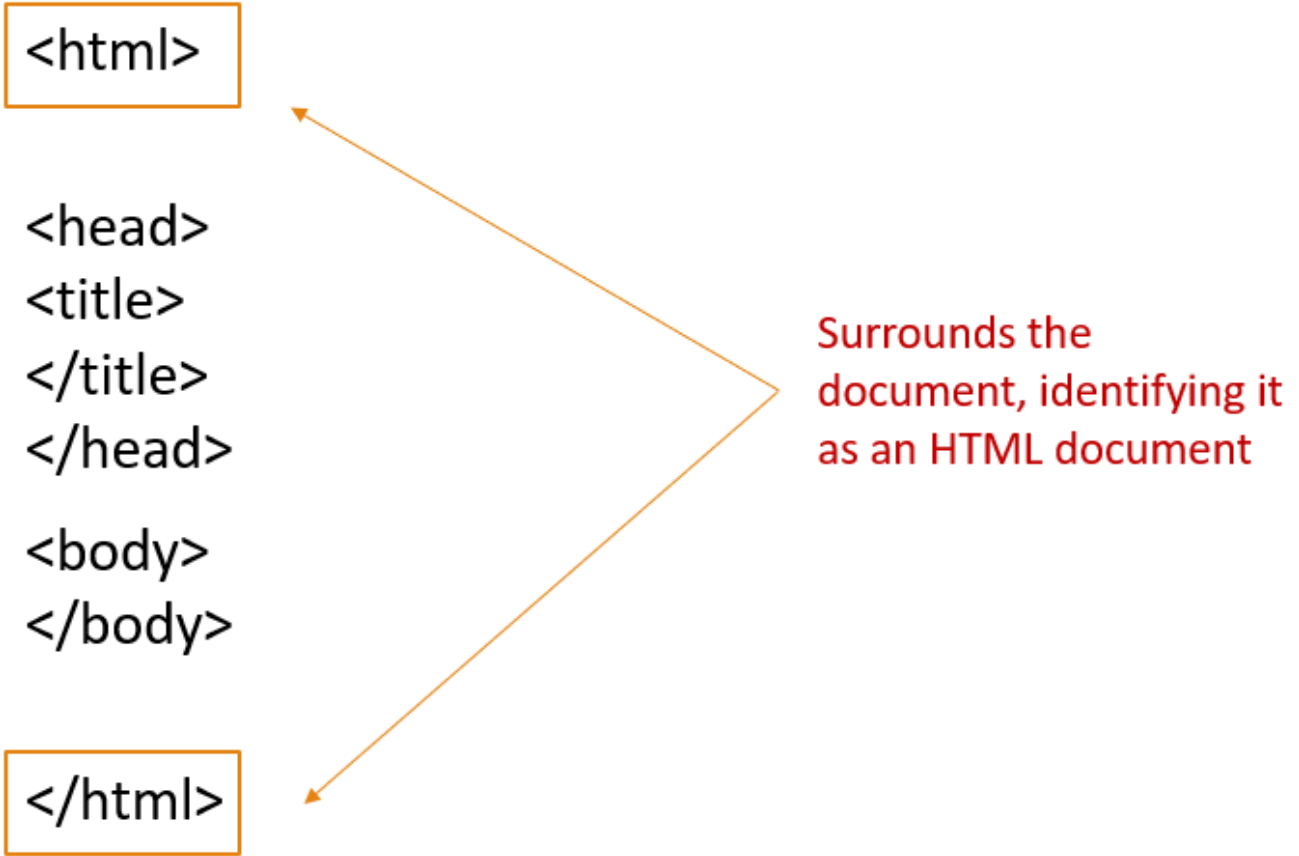
```
</head>
```

```
<body>
```

```
</body>
```

```
</html>
```

Surrounds the document, identifying it as an HTML document



## The head element

All HTML files (Web pages) require the following elements, in this order:

```
<!doctype html>
```

```
<html>
```

```
<head>
```

```
  <title>Website Page Title</title>
```

```
</head>
```

```
<body>
```

```
</body>
```

```
</html>
```

The head is the parent element that holds the title and other elements that do not appear in the browser window



# The title element

All HTML files (Web pages) require the following elements, in this order:

```
<!doctype html>
```

```
<html>
```

```
<head>
```

```
<title>Website Page Title</title>
```

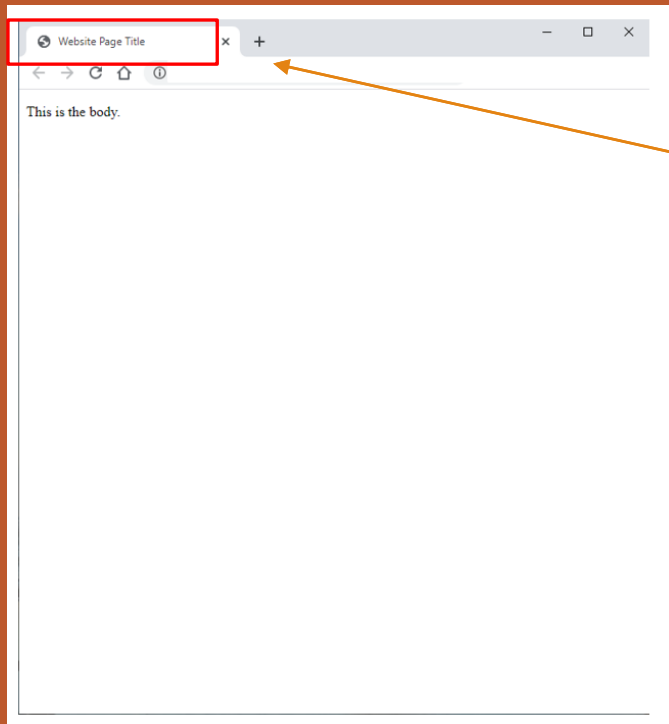
```
</head>
```

```
<body>
```

```
</body>
```

```
</html>
```

The title is coded inside the head and contains the text that appears in the browser tab



# The body element

All HTML files (Web pages) require the following elements, in this order:

```
<!doctype html>
```

```
<html>
```

```
<head>
```

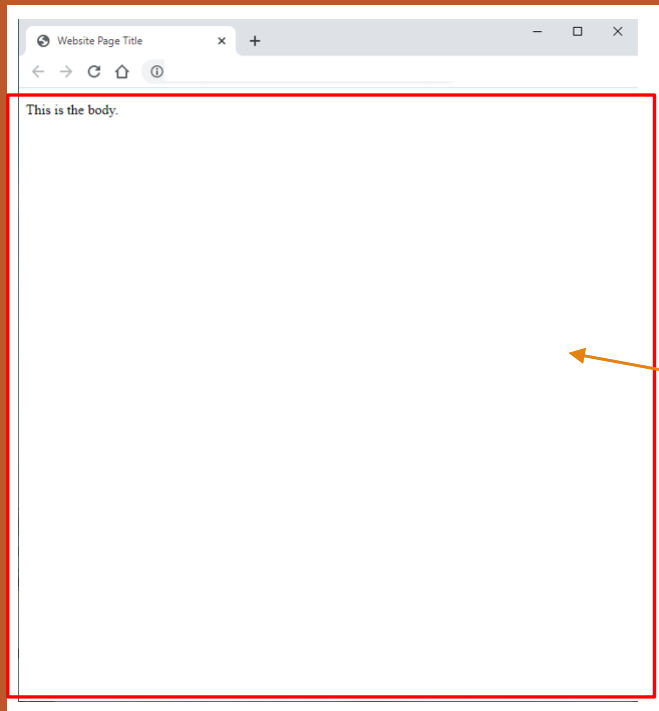
```
<title></title>
```

```
</head>
```

```
<body>This is the body</body>
```

```
</html>
```

The body is coded after the head and contains all content that appears in the browser window





# Semantic Elements

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HTML5 Structure Semantic Tags

`<header></header>`

`<main></main>`

`<nav></nav>`

`<footer></footer>`

*\*All semantic tags must be coded between  
<body> and </body>*

# Template

## Template HTML page

- Should include all structure tags
- Should include layout semantic tags
- Add any elements that will be included in all pages as you develop in upcoming units
- Some advantages of creating and using a template:
  - Promotes uniformity
  - Reduces errors
  - Increases efficiency
    - Faster page load
    - Shorter development time

```
<!doctype html>
<html>

<head>
  <title></title>
</head>

<body>
  <header></header>
  <nav></nav>
  <main></main>
  <footer></footer>
</body>

</html>
```

# Template Code

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# HTML Text Supporting Tags

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## Example:

*<p>This is a paragraph. It includes three or four sentences. A website page may have many paragraphs, but each should be coded using the p tag pair.</p>*

*\*All page content must be supported by HTML tags*

## Website page content is often written in paragraph format

- Each paragraph of text is coded between <p> and </p> tags
- A website page paragraph is defined as **a set of three or four sentences**
- <p> and </p> surrounds each paragraph
- The p tag pair creates a double line break after the text

# Other Common Tags

*\*Empty tags do not require a closing tag as they do not contain content*

## Some common tags used in pages:

- `<br>`
  - Creates a line break (single space)
  - Moves an element one line down the page
  - *Should **NOT** be used inside or between paragraphs*
- `<hr>`
  - Creates a horizontal line across the page
  - Centered by default

# Using Heading (hn) Tags

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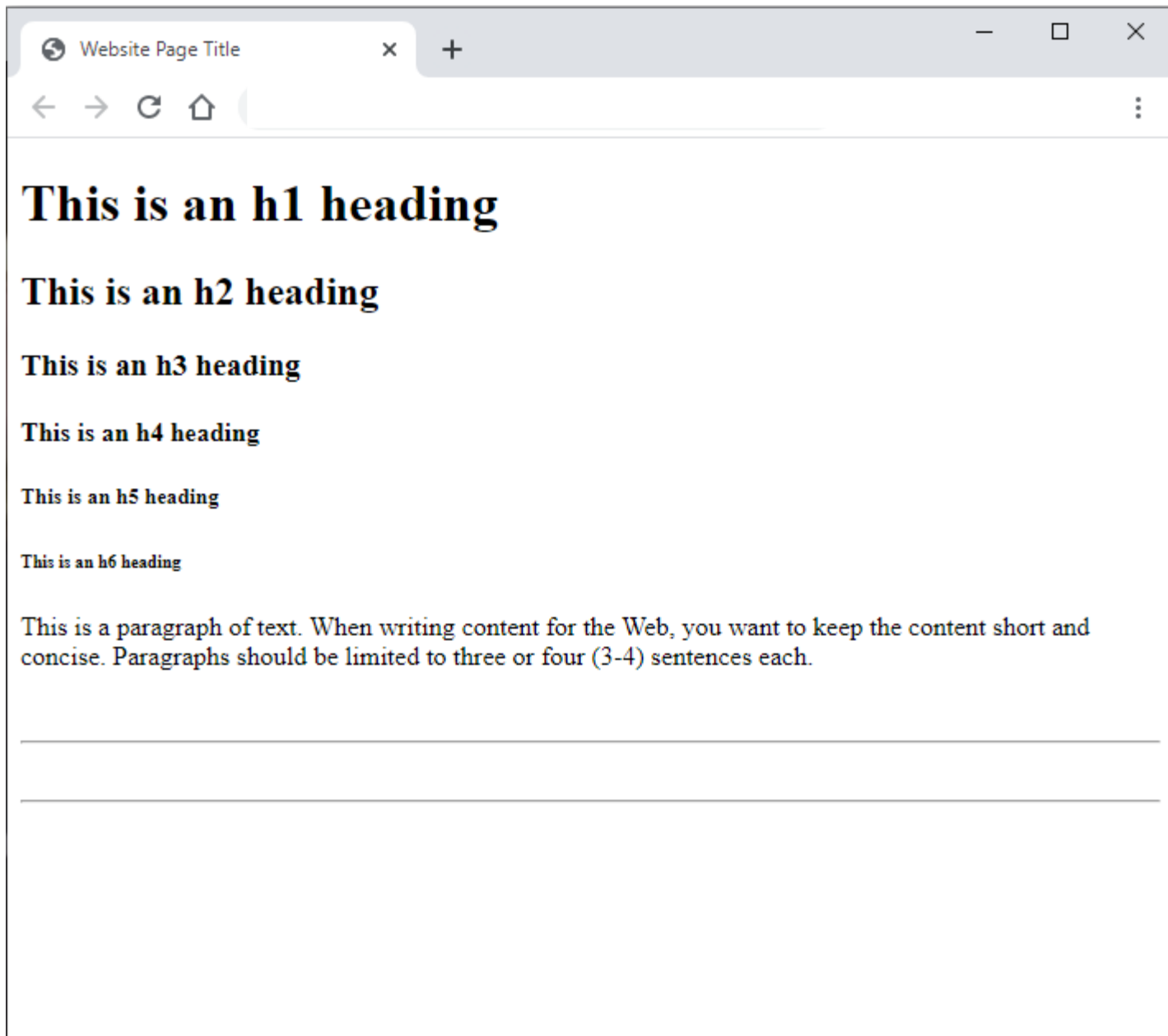
The hn tags (heading tags where “n” stands for a number 1-6)

Text inside hn tags is set a specific size according to the number used

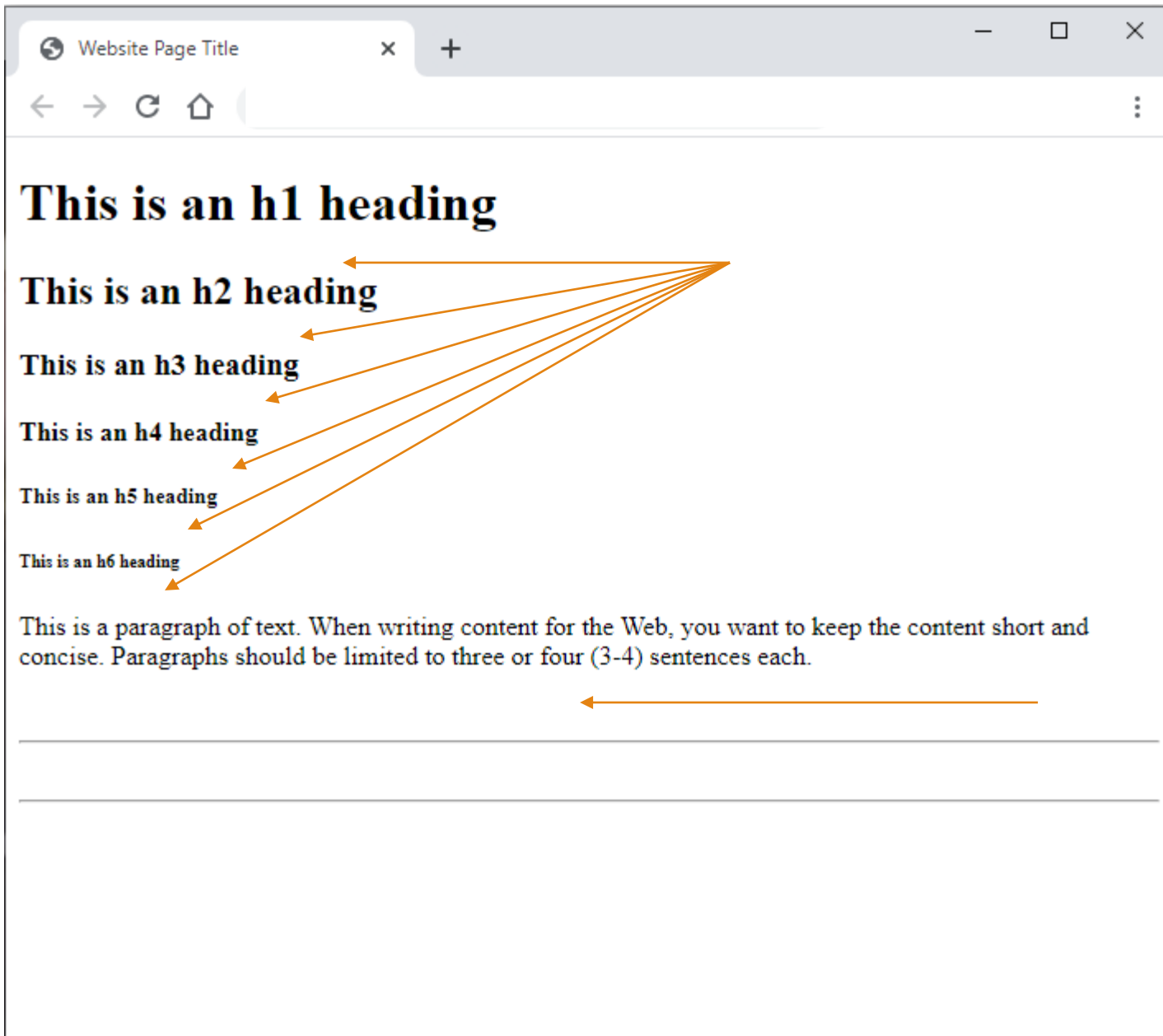
Text inside hn tags is displayed as bold

- `<h1></h1>` is the largest heading tag
  - Can only be one per page
  - Required on all pages
- `<h6></h6>` is the smallest heading tag
  - All headings can be used multiple times on a page, except h1.
  - *You cannot skip hn tags. If you use h3, you must first use h1 and h2.*





Example



# Example

*Note the double space that is automatically inserted after each  $h_n$  heading and after the paragraph.*

The image shows a browser window with a single tab titled "Website Page Title". The address bar contains navigation icons (back, forward, refresh, home) and a menu icon. The page content includes:

- This is an h1 heading**
- This is an h2 heading**
- This is an h3 heading**
- This is an h4 heading**
- This is an h5 heading**
- This is an h6 heading**

A red bracket groups these six heading lines. To the right of the bracket is a list of two red bullet points:

- Note how the hn sizes decrease proportionately.
- Note how each hn heading, regardless of size, is displayed as bold text.

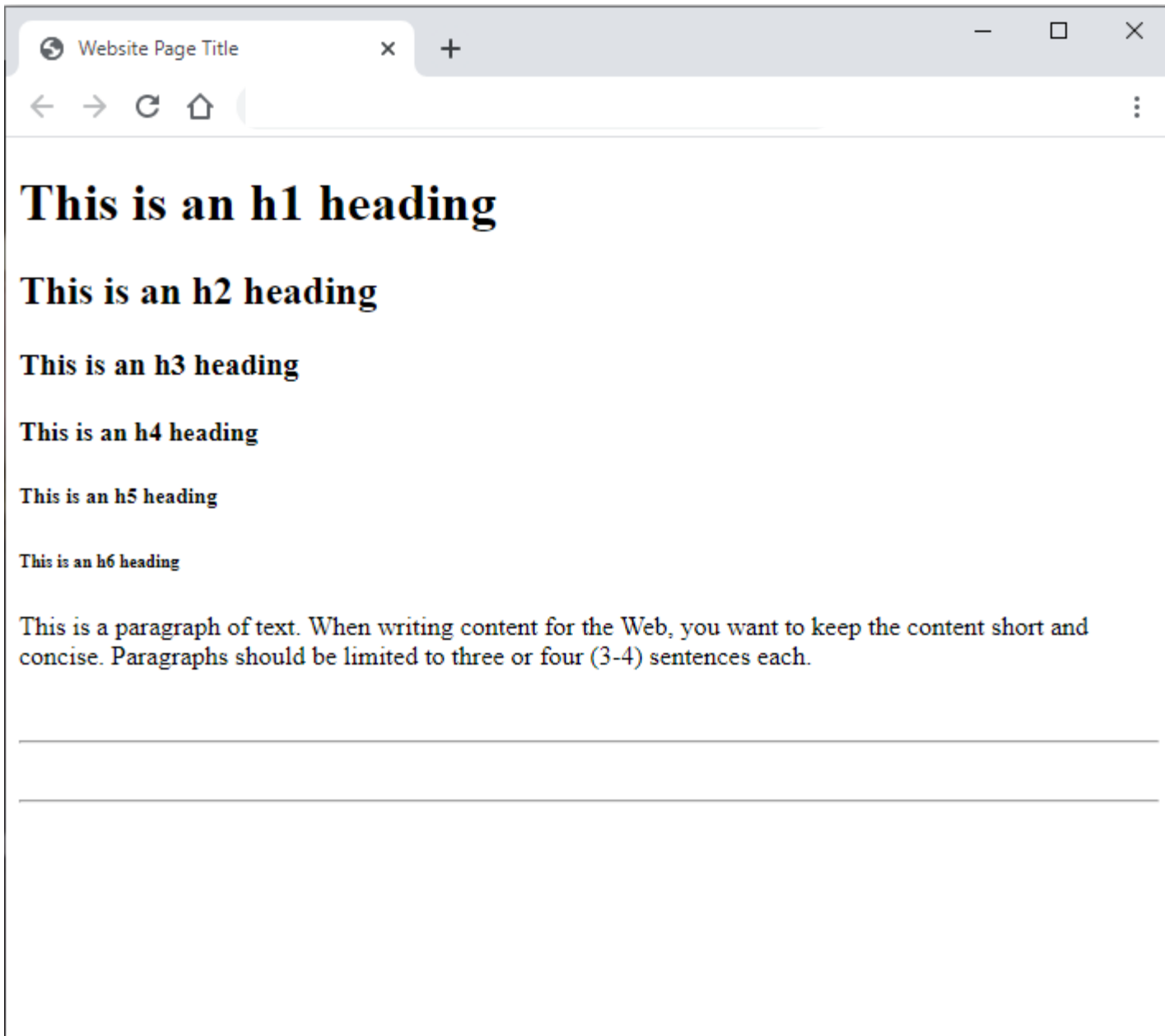
Below the headings is a paragraph of text:

This is a paragraph of text. When writing content for the Web, you want to keep the content short and concise. Paragraphs should be limited to three or four (3-4) sentences each.

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# Example



# Example

*The arrows point to horizontal rules (hr elements) with a line break (br element) between.*

```
<hr>  
<br>  
<hr>
```

# Checking Spelling/Grammar

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All code and text content must be manually typed into Notepad/TextEdit.

- There is no spell check in these applications

You can copy/paste from Notepad/TextEdit or the browser view into MS Word, Grammarly, etc. to check your spelling and grammar.

*However, you **CANNOT** copy/paste from any outside application back into Notepad/TextEdit.*

You will need to manually correct any spelling/grammatical errors directly in Notepad/TextEdit.

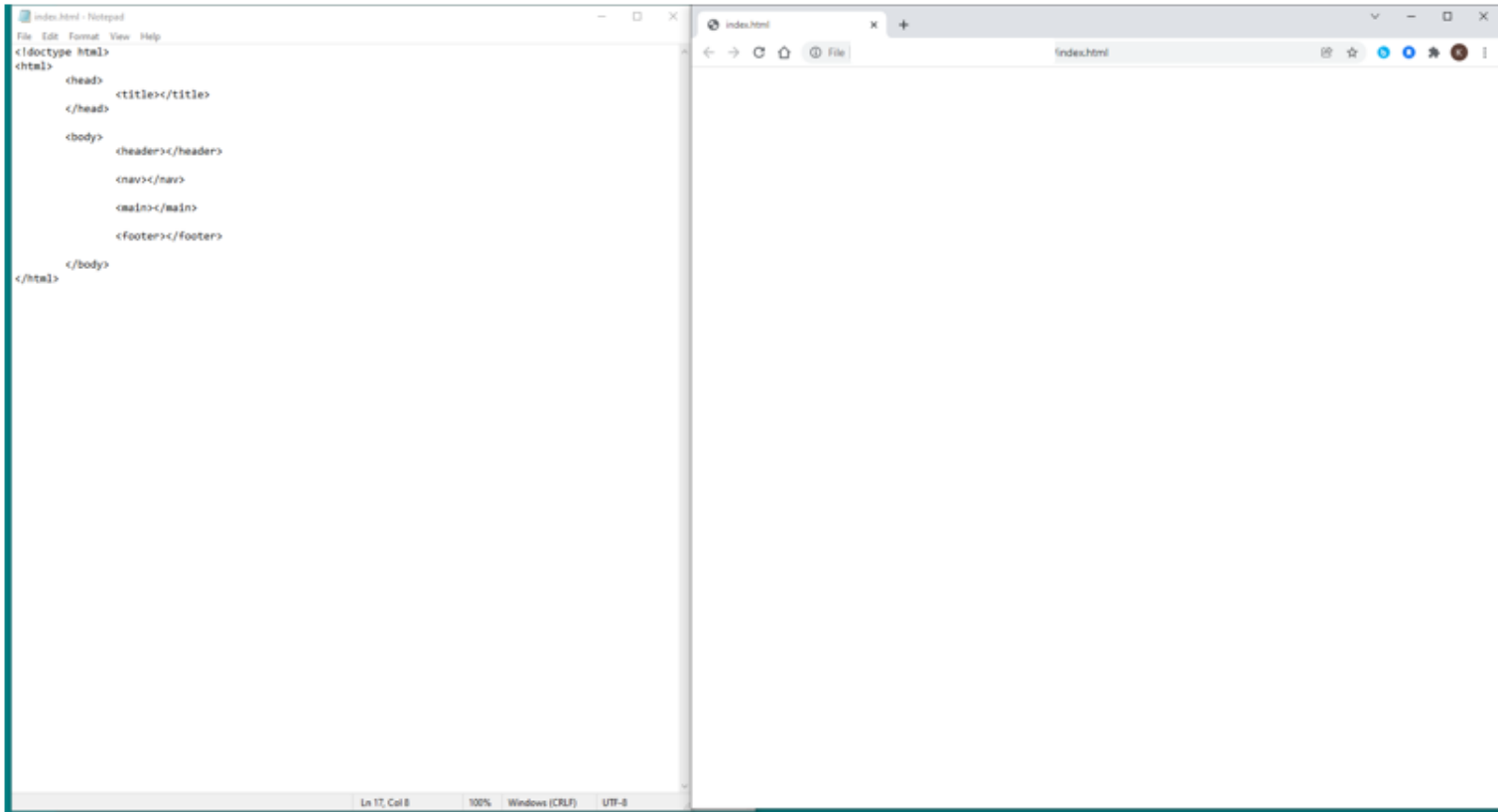
# Side By Side Development

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As you work on your file(s), you will want to be able to see changes in real time.

Open Notepad and your **local browser** side by side

When you add an element or content, save in Notepad. Refresh the local browser to view changes.



Tip: Keyboard shortcut Ctrl + S (Command-S) will save the Notepad (TextEdit) file and keyboard shortcut Ctrl + R (Command-R) will refresh the browser.

# Saving Pages in Notepad

## Click

- Click File > Save As to save pages

## Type

- Type the name of the page, including file extension
  - For example: index.html, menu.html, etc.

## Select

- Select “All Files” from the Save As Type drop menu

## Local File vs Published File

### Local files:

- Stored on your computer (or external drive/cloud, etc.).
- Files that only you can access.
- Used while editing.
- Will display in the address bar as a file path (file:// or C:// or E:// etc.)
- In website development, we test our pages in the local browser first, before uploading.

*\*\*Always test the uploaded file via the URL before submitting. The local file does not always display exactly the same as the published file*



# Local File vs Published File

## Published files:

Before others can view your website pages, you must **publish** the files. This means you must upload the files to a server.

- For this course, you will use the Purdue Student Web Server to upload and publish your files.

In order to view the published files, the user, (anyone other than you), needs the “address” or URL for the file.

Your URL for the home (index.html) file of your website is provided in the email you received. It will be labeled as:

- **Your URL is:**
- <https://ist2w.purdueglobal.edu/2302C/IT117-0x/Username>

This URL, or address, points to the current uploaded index.html file in your IT117-0x folder. This is what you need to submit so I can view and grade your work.

*\*\*Always test the uploaded file via the URL before submitting. The local file does not always display exactly the same as the published file*

# Uploading Website Files

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**Once your website file is complete, you need to upload it to a server to be visible on the Internet**

1. Log into the Purdue student Web server
  - a. Use the link and login information provided in the email you received from the server admin
2. Click the IT117-02 folder to open it
  - a. Do **NOT** upload into the Home Drive
3. Click UPLOAD
  - a. Select Browse to get the file from your computer
4. Select the file(s) to be uploaded
5. Upload
6. **View and test your uploaded file(s) using the URL provided in the email**
  - a. Remember the local browser is not the same as the live website page

***\*\*Do not create or delete any folders***

# Submitting Assignments

- **Attach any file (attachment will not be opened) and copy/paste your URL into the Comments**
- **Submit one time only each week**

The Dropbox requires an attachment

- I do not open the attachments so you can attach any file you wish
  - **Since I do not open attachments, it is never necessary to attach more than one file**
  - *\*Attaching your .html file(s) is **NOT** sufficient for submission*
  - I grade the live uploaded file(s) only each week
  - **Must submit your URL or I cannot grade your work**

**\*\*Do not submit the file path from your local browser or the file path from within the server. I cannot access these files and cannot grade your work.**

Your URL will always begin with:  
https://ist2w.purdueglobal.edu...

Wrap-Up

**Questions or Comments?**