



Introduction to Web Design with HTML5 and CSS 3

Weekly Schedule

Week 1

| Monday | Tuesday | Wednesday | Thursday | Friday |
|----------------------------|------------------------|-------------|--------------------|------------------------------|
| Intro to class and Pretest | How the Internet Works | HTML Basics | HTML Text Elements | HTML Link and Image Elements |

Week 2

| Monday | Tuesday | Wednesday | Thursday | Friday |
|----------------------------------|--|---|---|---------------------|
| Formatting Elements Assignment 1 | Practice Pages - Resume or About Me Page | Practice Pages - Table of Contents Page | Practice Pages - News or Product Catalog Page | Quiz 1 Assignment 2 |

Week 3

| Monday | Tuesday | Wednesday | Thursday | Friday |
|---------------------------------|-------------|-----------------|---------------------------------|-----------------------------|
| Tag Drills 1 and Find My Errors | HTML Tables | HTML 5 Elements | Tag Drills 2 and Find My Errors | HTML Comprehension Exercise |

Week 4

| Monday | Tuesday | Wednesday | Thursday | Friday |
|----------------------|-------------------------------|---------------------------------|---------------------------------|---------------------|
| HTML Block VS Inline | CSS Basics and Inline Styling | CSS Basics and Internal Styling | CSS Basics and External Styling | CSS Classes and IDs |

Week 5

| Monday | Tuesday | Wednesday | Thursday | Friday |
|----------------------------|---------------|-----------------------------------|---------------------------|------------------|
| CSS Comprehension Exercise | CSS Box Model | Quiz 2 CSS Colors and Backgrounds | Tag Drills 3 Assignment 3 | CSS Practice Day |

Week 6

| Monday | Tuesday | Wednesday | Thursday | Friday |
|---------------------|---------------------|-----------------------|---------------------------|---------------------------------|
| CSS Font Properties | CSS Lists and Links | CSS Centering Methods | Tag Drills 4 Assignment 4 | Comments and CSS Practice Pages |





Introduction to Web Design with HTML5 and CSS 3 Weekly Schedule

Week 7

| Monday | Tuesday | Wednesday | Thursday | Friday |
|------------------------|------------------------|-----------------------------|-----------------------------|----------------------------|
| CSS Floats and Columns | CSS Floats and Columns | Dessert Oasis Practice Page | Dessert Oasis Practice Page | Science Club Practice Page |

Week 8

| Monday | Tuesday | Wednesday | Thursday | Friday |
|----------------------------|--------------------------|--|-----------|----------|
| Science Club Practice Page | Pet Palace Practice Page | Pet Palace Practice Page Assignment 5 | Study Day | CSS Test |

Week 9

| Monday | Tuesday | Wednesday | Thursday | Friday |
|-------------|---------------|----------------------------|---|---|
| CSS Effects | Image Editing | Image Editing Assignment 6 | Final Project Introduction and Research | Final Project Wireframe and Style Guide |

Week 10

| Monday | Tuesday | Wednesday | Thursday | Friday |
|---|---|------------------------------------|---|----------------------|
| Final Project Research, Wireframe and Style Guide | Final Project File Setup and Collection | Final Project Setup Page Structure | Final Project Page Structure and Begin Coding | Final Project Coding |

Week 11

| Monday | Tuesday | Wednesday | Thursday | Friday |
|----------------------|----------------------|----------------------|--|----------------------|
| Final Project Coding | Final Project Coding | Final Project Coding | Final Project Coding First Draft Screenshots | Final Project Coding |

Week 12

| Monday | Tuesday | Wednesday | Thursday | Friday |
|----------------------|----------------------|---|----------------------|--|
| Final Project Coding | Final Project Coding | Final Project Peer Review and Revisions | Final Project Coding | Final Project Website Files Due Post Test |



Week 1 Day 1 - Introduction:

Go over class rules and procedures. Include any “get to know you” or introductory activities.

Students take the Pretest found in the Tests and Quizzes folder. Pretest is not counted in final grade. At the end of the term students take the test again for credit. This shows knowledge gained throughout the term.

Week 1 Day 2 - How the Internet Works:

Go to <https://code.org/educate/resources/videos>

Under How the internet works, watch the following videos:

1. "What is the internet?"
2. "THE INTERNET: Wires, Cables, & Wifi"
3. "THE INTERNET: IP Addresses and DNS"
4. "THE INTERNET: Packets, Routing and Reliability"
5. "THE INTERNET: HTTP and HTML"

Vocabulary to know:

- Bits and bytes
- 3 physical methods to connect to the internet
- DNS
- 3 types of browsers
- URL
- HTML

Week 1 Day 3 - HTML Basics:

View Unit 1-1 HTML Basics PowerPoint in the Presentations folder and follow instructions to create 2 new HTML files.

Things to Know:

- Required tags
- 3 S's: Spelling, Spacing, and Syntax

Week 1 Day 4 - Text Elements:

View Unit 1-2 HTML Text Elements PowerPoint in the Presentations folder and follow instructions to add headings, paragraphs, and a list to your page.

Things to Know:

- Paragraph tag
- Headings tags
- Unordered List tags
- Ordered List tags
- 3 S's: Spelling, Spacing, and Syntax

Week 1 Day 5 - Links and Images:

View Unit 1-3 HTML Image and Link Elements PowerPoint in the Presentations folder and follow instructions to add links and images to your page.

Things to Know:

- Anchor tag
 - External links
 - Internal links
 - Bookmark links
- Image tag
- Attributes
- 3 S's: Spelling, Spacing, and Syntax

Assignment 1: Submit Completed Index page (Week 2 Day 1)

Your page should include all of the required tags, a title, all 6 headings, 2 paragraphs, an unordered list, an ordered list, 2 images, an example of all 3 types of links, bolded text, emphasized text, a horizontal rule and a line break.

Sample page is provided in the Sample Pages source files folder called index.html.

Rubric 1: Submit Completed Index Page

Name: _____

| Component | Possible Points | Score |
|--------------------|------------------------|--------------|
| Required Tags | 7 | |
| Title | 1 | |
| H1-H6 | 6 | |
| 2 Paragraphs | 2 | |
| Unordered List | 3 | |
| Ordered List | 3 | |
| 2 Images | 4 | |
| 3 Types of Links | 6 | |
| Bolded Text | 1 | |
| Emphasized Text | 1 | |
| Horizontal Rule | 1 | |
| Line Break | 1 | |
| Total Score | 36 | |

Test

MULTIPLE CHOICE

What is the difference between a start tag and an end tag?

- A. An end tag starts with a forward slash.
- B. They are identical.
- C. An end tag is capitalized.
- D. An end tag is mandatory but a start tag is optional.

What type of content can be placed into a <td> table cell element?

- A. Text only
- B. Text and links only
- C. Text, links, and lists only
- D. Text, links, lists, and images

If you were on a web page and some of the links looked blue and some looked purple, what is the most likely explanation for this?

- A. The web designer styled some links to be blue and others to look purple.
- B. The links that are in purple are dead or inactive.
- C. The purple links are sites that you have already visited.
- D. The browser is having a problem and needs to be closed and restarted.

Why is the .gif format such a poor choice for a photographic image?

- A. It has limited color support.
- B. It results in a much larger file than other formats.
- C. It isn't supported by many browsers.
- D. It is reserved solely for cartoon animations.

Which is not a direct benefit of using CSS?

- A. Gaining more control over how we style our web pages
- B. The ability to make multiple changes to a website from a single location
- C. The ability to place tables and images into our web pages
- D. Separating the content of our web pages from its presentation

ESSAY

Write the CSS code to make all headings display centered and in green:

Write the HTML code to create a link to the file `newpage.html` with link text of `New Page`:

HTML BASICS





What is HTML?

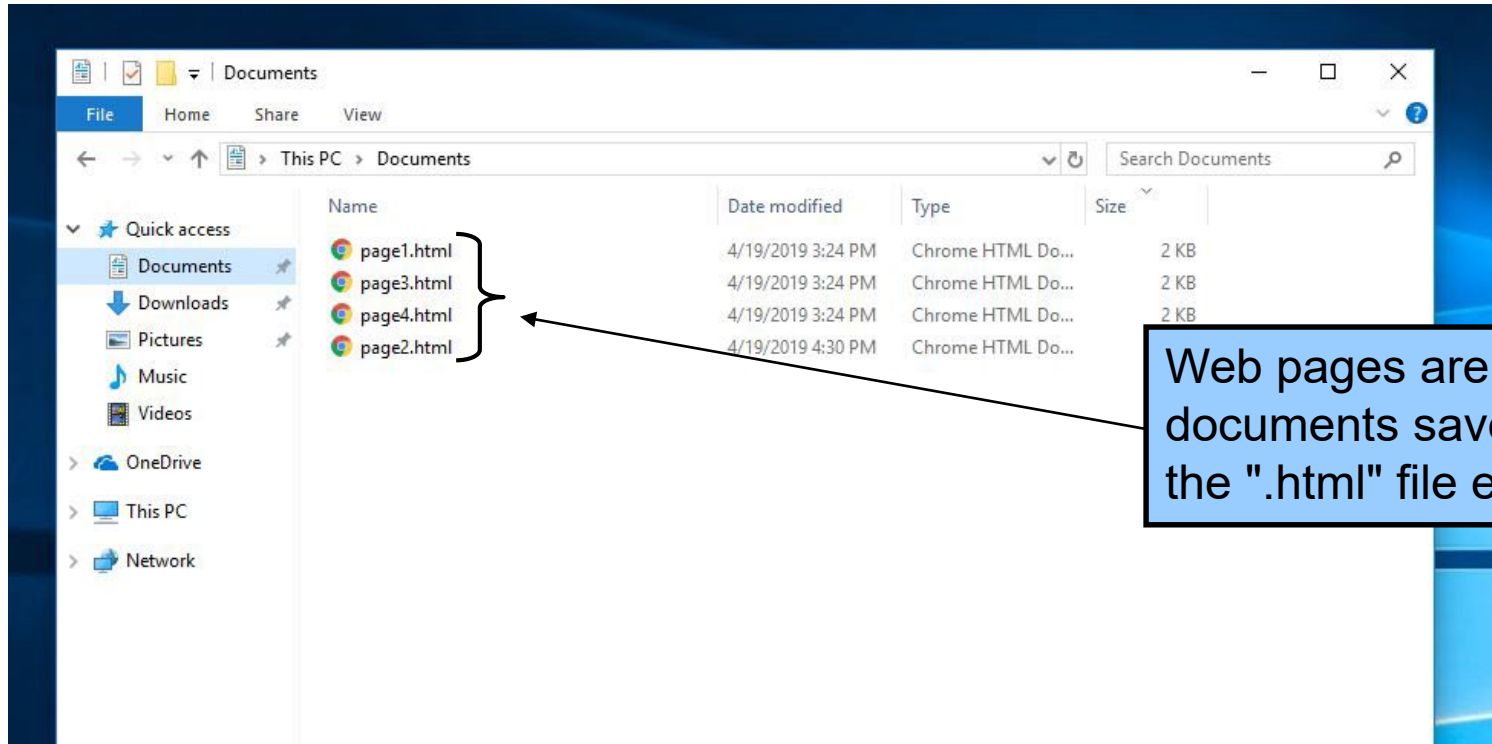
HTML is the language used to create and organize a web page.

- **Hyper**
- **Text**
- **Markup**
- **Language**
- HTML defines and organizes the page content but does not format or style it.

What is a Web Page?



A web page is a file on a computer, just like any other file:



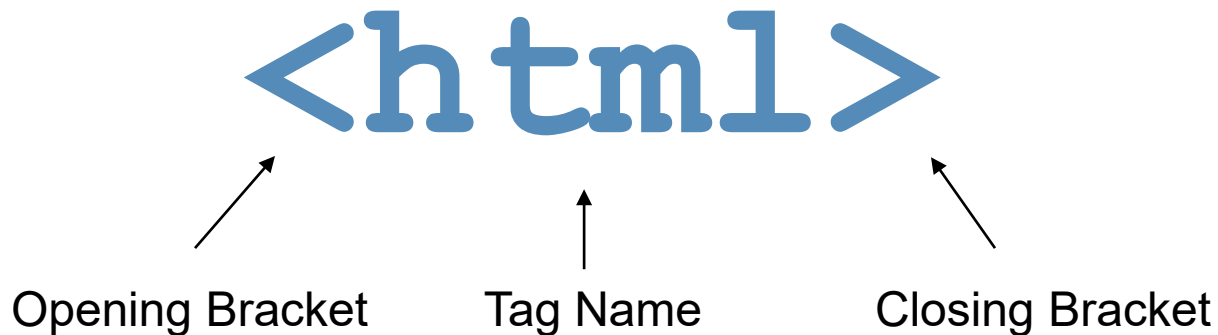
Web pages are plain text documents saved with the ".html" file extension.

These HTML files can be opened in two different ways. If we open them using an editor, such as Brackets, we see the HTML code. If we open them in a web browser (such as Chrome or Firefox), the browser processes the code and displays the content in the browser window as a web page.



HTML Syntax

Syntax means a set of rules for a structure. Syntax includes letters or symbols that are used to start and end programming commands. Each type of programming language has its own syntax.





Opening and Closing Tags

A tag is an HTML "command" that tells the browser to perform some action:

Opening Tag → `<html>`

Closing Tag → `</html>`

In HTML, most elements have both an opening tag (shown in green) and a closing tag (shown in red). The closing tags begin with a forward slash /.

Tags are closed in reverse order. First opened is last closed.

The HTML tags that surround the actual content of a page are collectively known as **markup**. Markup is not visible when the page is viewed in a browser.



Basic HTML Document

In this course, we will demonstrate HTML documents with tan colored boxes.

```
<!DOCTYPE html>  
<html>  
<head>  
</head>  
<body>  
</body>  
</html>
```

This document contains all the required components of a functional web page. Every new web page starts with these codes.

We'll start having fun designing our own web pages very soon, but first we have to go over a few basic components of this skeleton page, beginning with the DOCTYPE.

DOCTYPE



A DOCTYPE declaration must be specified on the first line of each HTML document:

```
<!DOCTYPE html>
```

The DOCTYPE tells the web browser which version of HTML the page is written in. In this class, we will be using 'HTML5', which is the current industry standard.



The `<html>` Element

Immediately following the DOCTYPE declaration is the `<html>` element:

```
<html>
```

The `<html>` element tells the browser that the page will be formatted in HTML.

The `<head>` and `<body>` Elements



```
<head>
```

```
</head>
```

```
<body>
```

```
</body>
```

The `<head>` element surrounds all the special “behind the scenes” elements of a web document. Most of these elements do not get displayed directly on the web page.

The `<body>` element surrounds all the actual content (text, images, videos, links, etc.) that will be displayed on our web page.

Just as with a person, the head always belongs on top of the body.

Lowercase Letters



Code is best written in all lowercase letters-with the exception of the word DOCTYPE. There is no need to capitalize the first letter as in standard sentence structure.

```
<!DOCTYPE html>  
<HTML>  
<HEAD>  
</HEAD>  
<BODY>  
</BODY>  
</HTML>
```

VS

```
<!DOCTYPE html>  
<html>  
<head>  
</head>  
<body>  
</body>  
</html>
```



Nesting Elements

When we write HTML code, we must take care that elements are properly nested (codes within codes):

```
<html>  
<head>  
</head>  
<body>  
</body>  
</html>
```

Nesting means that an element is completely contained within another element.

It is a good practice to indent nested elements to make your code easier to read.



Line Breaks and Spaces

Browsers ignore line breaks and spaces. We can take advantage of this fact by placing blank lines and indents in our code to make it easier to organize and read:

```
<!DOCTYPE html>
<html>
<head>
</head>
<body>
</body>
</html>
```

VS

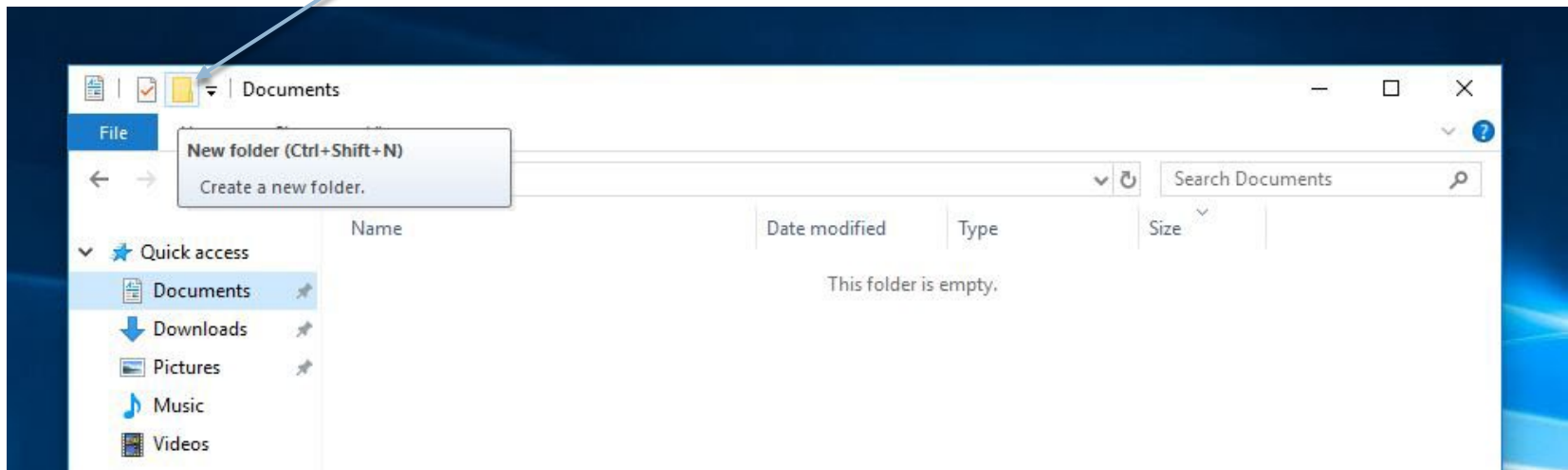
```
<!DOCTYPE html>
<html>
  <head>
  </head>
  <body>
  </body>
</html>
```

It is a good practice to indent nested elements to make your code easier to read.

Create a Web Design folder



Web pages need to be stored in the same folder on your computer in order to work correctly with one another. Create a new folder in Documents called Web Design.

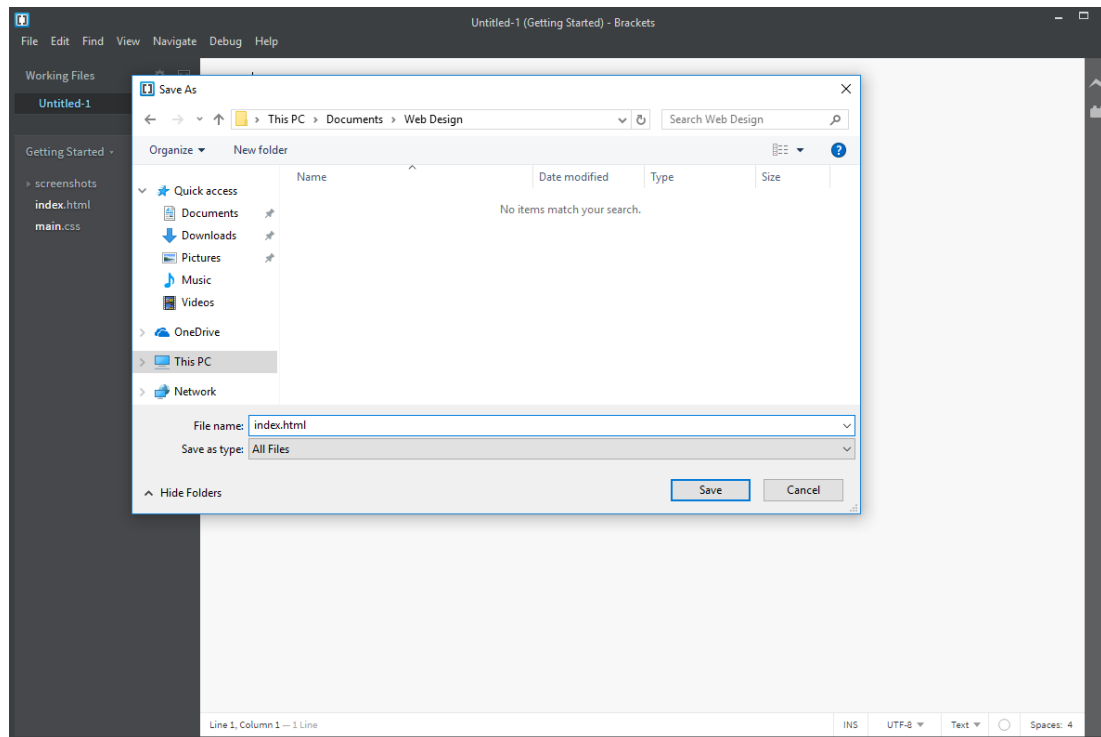


Open up the File Explorer. Click on Documents on the left side. Now create a New Folder by clicking the yellow button in the top left corner. Name the new folder Web Design.

Creating an HTML Document



To create a new HTML document, open up Brackets, go to File, New. Then go to File, Save. Find Web Design folder and name the file “index.html”:



Never use Microsoft Word or other word processing applications to create or edit web documents. These programs add extra characters to the file which can interfere with the web page displaying correctly.



Create HTML Document

In Brackets, type in the required tags-DOCTYPE, html, head, and body. Make sure the closing tags are included in order. Indent nested tags.

The screenshot shows the Brackets code editor interface. The title bar indicates the file path: C:/Users/admin/Documents/Web Design/index.html (Getting Started) - Brackets. The menu bar includes File, Edit, Find, View, Navigate, Debug, and Help. The left sidebar shows the 'Working Files' panel with 'index.html' selected, and a 'Getting Started' section with 'screenshots', 'index.html', and 'main.css'. The main editor area displays the following HTML code:

```
1 <!DOCTYPE html>
2 <html>
3   <head>
4
5   </head>
6   <body>
7
8   </body>
9 </html>
```

The status bar at the bottom shows 'Line 9, Column 8 — 9 Lines', 'INS', 'UTF-8', 'HTML', and 'Spaces: 4'.



Add Title Tag

Now add the nested `<title>` `</title>` tags into the `<head>`. Type your first and last name inside the title.

A screenshot of the Brackets code editor. The window title is "C:/Users/admin/Documents/Web Design/index.html (Getting Started) - Brackets". The menu bar includes "File", "Edit", "Find", "View", "Navigate", "Debug", and "Help". The left sidebar shows "Working Files" with "index.html" selected, and "Getting Started" with "screenshots", "index.html", and "main.css". The main editor area shows the following HTML code:

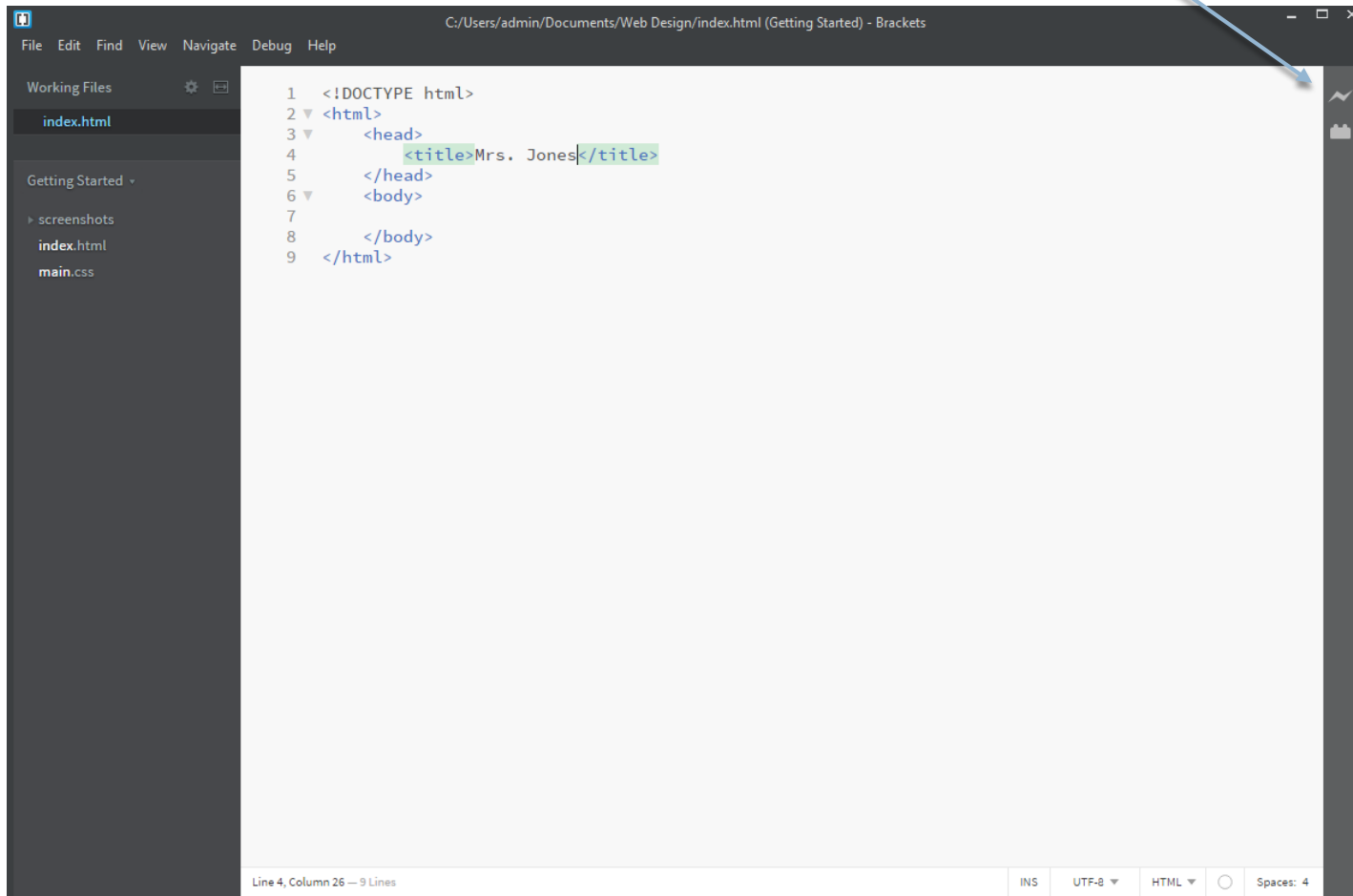
```
1 <!DOCTYPE html>
2 <html>
3   <head>
4     <title>Mrs. Jones</title>
5   </head>
6   <body>
7
8   </body>
9 </html>
```

The `<title>` and `</title>` tags and the text "Mrs. Jones" are highlighted in green. The status bar at the bottom indicates "Line 4, Column 26 — 9 Lines", "INS", "UTF-8", "HTML", and "Spaces: 4".

Save and Preview



Save the file by using either File, Save, or Ctrl s. Now use the Live Preview button in Brackets to view the page in a browser.





View in Browser

Live Preview will open up a browser window. You should see the title in the tab in the top left corner.



Create a Second HTML Document



In Brackets, create second HTML Document by repeating the process. File, New. Save as page2.html. Add required tags, and nest a title within the head.

A screenshot of the Brackets code editor interface. The window title is "C:/Users/admin/Documents/Web Design/page2.html (Getting Started) - Brackets". The menu bar includes "File", "Edit", "Find", "View", "Navigate", "Debug", and "Help". On the left, the "Working Files" sidebar shows "index.html" and "page2.html" (selected). Below it, the "Getting Started" sidebar shows "screenshots", "index.html", and "main.css". The main editor area contains the following HTML code:

```
1 <!DOCTYPE html>
2 <html>
3   <head>
4     <title>Page 2</title>
5   </head>
6   <body>
7
8   </body>
9 </html>
```

The code is formatted with indentation. The status bar at the bottom indicates "Line 4, Column 22 — 9 Lines", "INS", "UTF-8", "HTML", and "Spaces: 4".

3 S's for Debugging



Any errors you may find in your code are related to the 3 S's:

- Spelling
- Spacing
- Syntax

Things like `hmtl` instead of `html`, `scr` instead of `src`, and forgetting a `<>` or `“”` will really mess up your code.

If your page doesn't display the way you thought it would, check these three things.

Brackets will help by showing code in red if something is wrong.