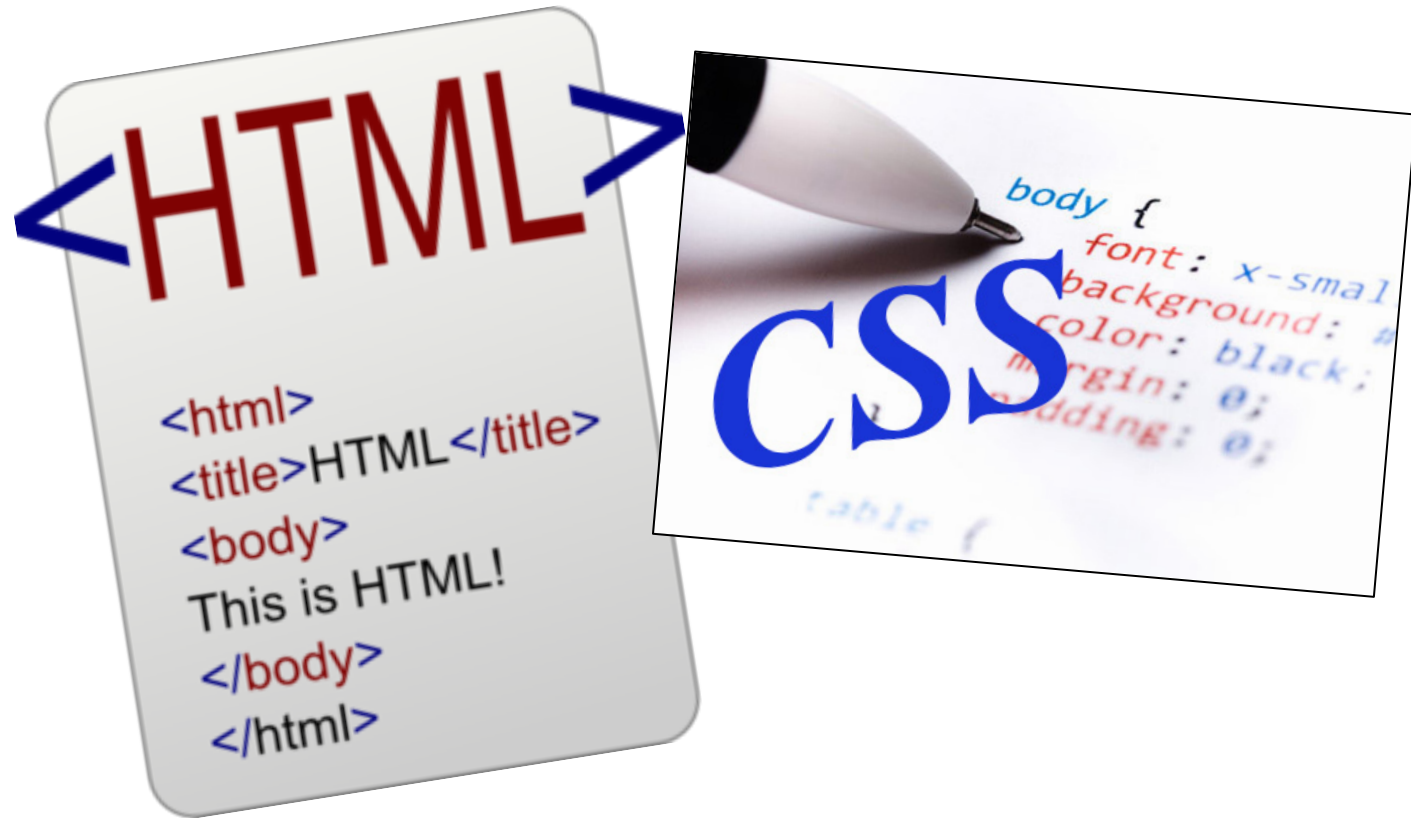


Introduction to HTML and CSS



Introduction

- In this workshop, we will be learning about the languages of the internet:
- HTML
 - We will spend most of our time becoming familiar with HTML
- CSS
 - We will take a quick look at what CSS is and how it works

What is HTML?

- HTML is a *markup* language. It actually stands for Hypertext Markup Language.
- A markup language is used to format plain text.
- Every internet page that you see is composed with HTML.
- Your browser reads the HTML and then *renders* the page into what you see.

HTML *Tags*

- HTML uses *tags*
- *Tags* are keywords enclosed with angle brackets
- These are angle brackets: <>
- Here is an example of an HTML tag: <body>
- In HTML, tags usually come in pairs
 - there are opening tags: <body>
 - And there are closing tags: </body>

HTML *Elements*

- In HTML, everything from the opening to the closing tags are called HTML *elements*
- For example, regular text is enclosed with paragraph tags
 - Paragraph tags look like this:
 - `<p>`
 - `</p>`
 - Text between an opening and a closing paragraph tag would be an element
 - E.g.:
 - `<p> This is a paragraph. </p>`

Let's Make an HTML Document

- An HTML document can be created in a simple text editor.
 1. Open up “TextWrangler” on the Mac.
 2. Create a new document
 3. Start off by declaring the document as an HTML document by typing “<!DOCTYPE html>” (without the quotations)
 4. Next, put in an opening HTML tag: <html>
 5. Don't worry if this is confusing. Just go with the flow for now. We'll look back and analyze what we've done in just a minute!

Let's Make an HTML Document (cont'd)

6. Type in an opening *body* tag:

```
<body>
```

7. We want to write a simple paragraph which will display in a web browser. So: type in an opening *paragraph* tag:

```
<p>
```

8. Next, write a few sentences that you would like to communicate to the world. Whatever you would like.

Let's Make an HTML Document (cont'd)

9. Then, enclose your paragraph with a **closing** *paragraph* tag:

`</p>`

10. Put in a closing *body* tag:

`</body>`

11. Finally, enter a closing *html* tag:

`</html>`

12. Save your document to the desktop.

TextWrangler will know to save your document with the extension “.html”.

Open Your First Web Page!

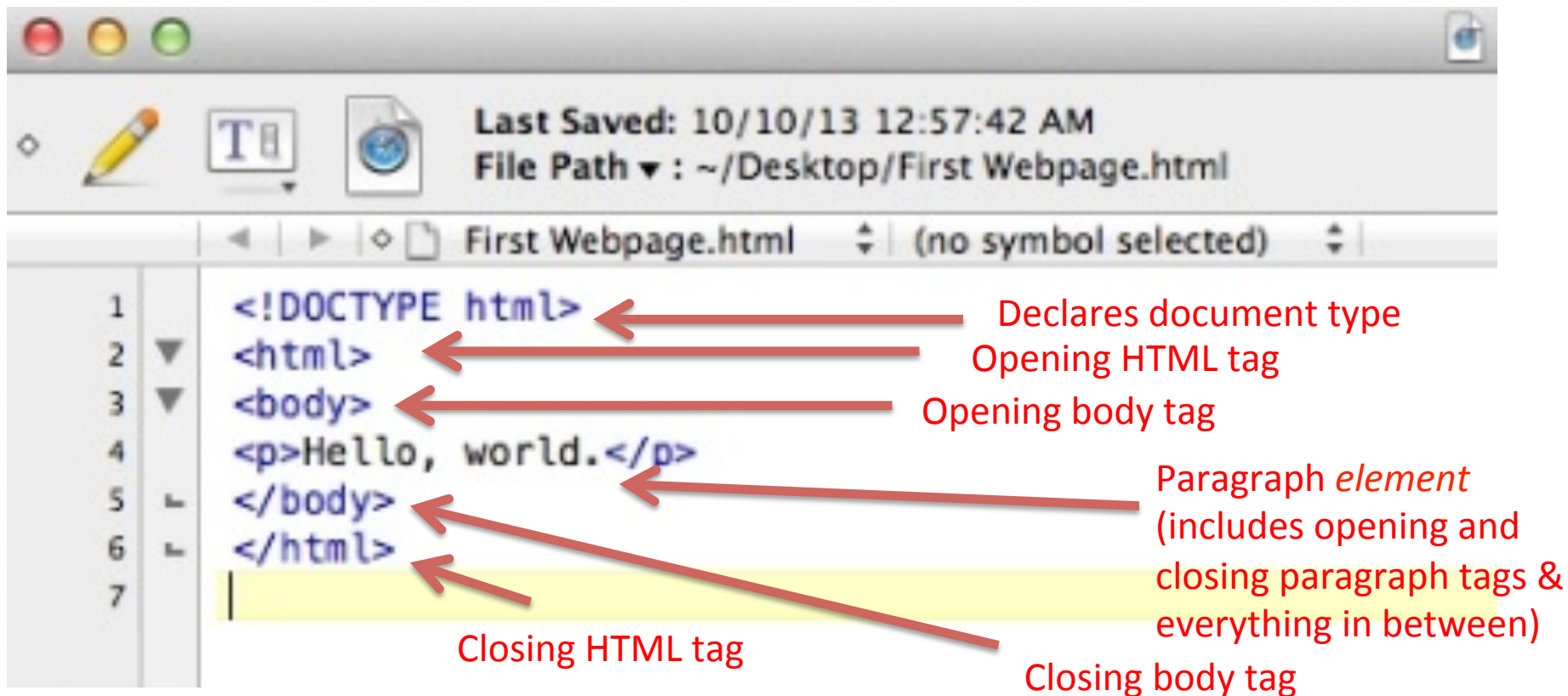
- Double click on your HTML file on the desktop.
- Safari will open it and display it as a web page!

Congrats!

You have created your first web page!!!

Let's Take a Look

- Right click on your document, and choose “Open with”
- Select TextWrangler
- Here's what we've got:



Add an Image

- In HTML, adding an image is easy.
- Open your document
- Insert the following into the code
 - ``
 - Now, search for an image that you like on Google Images.
 - Right click on an image you like, and select “Copy Image Address”.
 - Paste it between the quotation marks in the img tag.

Add an Image (cont'd)

- Save and close the HTML document.
- Now, open it in your web browser, and you will see your image!

Add an Image (cont'd)

- Here's how it works:

Note: image tags are one of the rare tags that do not have closing tags

img stands for "image"

src stands for "source"

Put the web address between the quotations

```

```

Everything goes between the brackets

Adding Hyperlinks

- Let's make another HTML element – a link!
- Let's make one word in our paragraph link to another webpage. (Feel free to add in more text if you like between the <p> tags.)
 - In your html document, pick a word that you would like to link to
 - The <a> tag is used to make a link.
 - We put the <a> tags around the word that we want to become a link

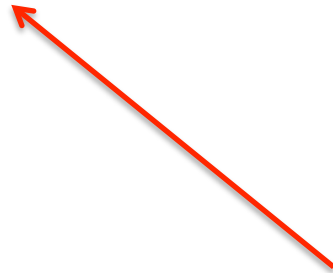
Adding Hyperlinks (cont'd)

- We also put in the *href attribute*. An HTML *attribute* modifies an HTML element. In this case, it tells the browser where to go when the link is pressed.
- The code will look something like this:
 - `Word`
 - The opening `<a>` tag contains the attribute. The closing tag is a regular closing tag. Note how the tags sandwich the word to be linked.

Adding Hyperlinks (cont'd)

- Now, find a web address, or URL, that you want to link the word to. Paste it into the quotes. For example, my code will look like:

```
<p>Hello, <a href="http://en.wikipedia.org/wiki/World">world</a>.</p>
```



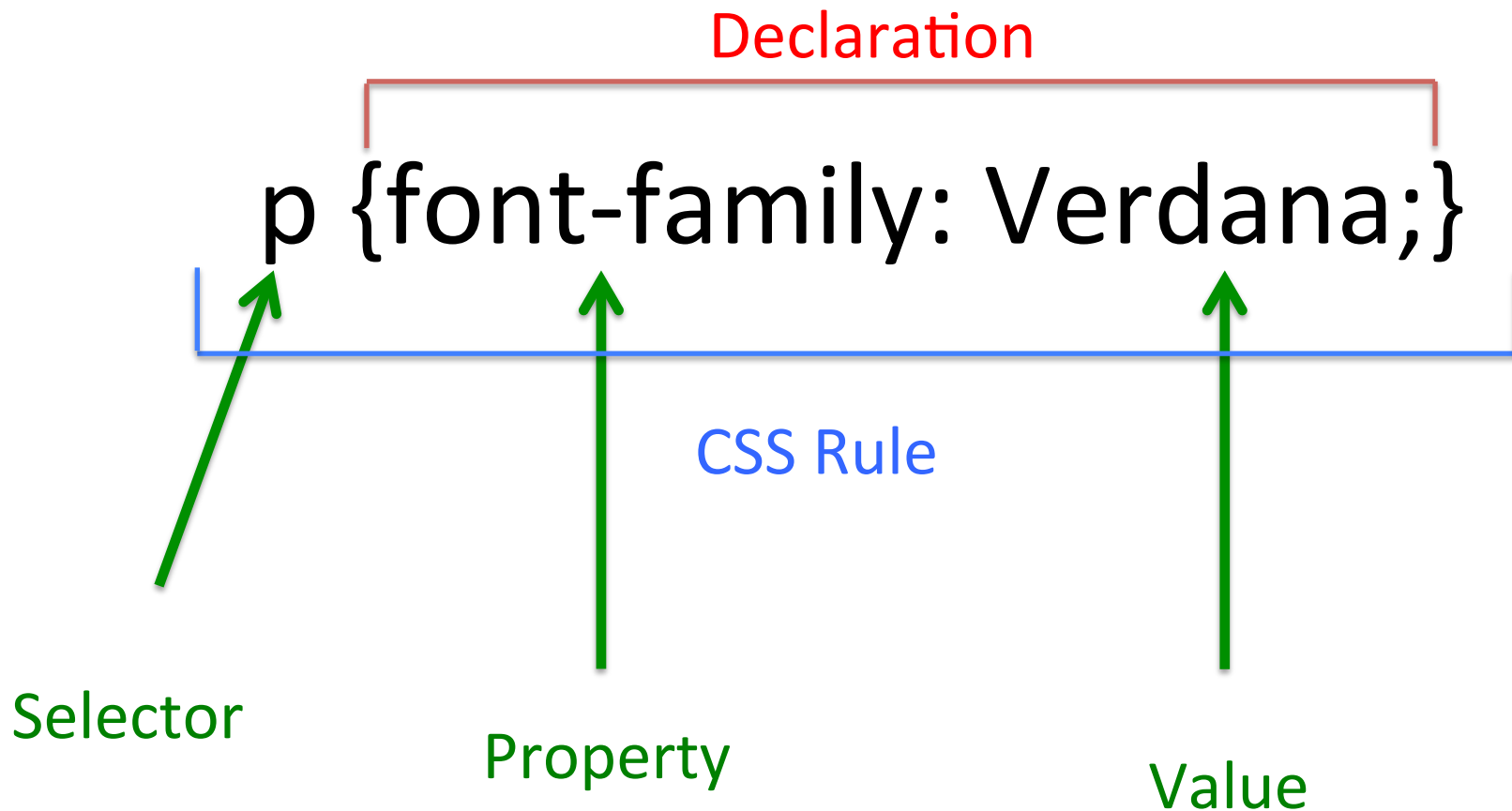
Note: The <a> tags are surrounding the word that will be a link. In turn, the <p> tags are surrounding the <a> tags.

CSS

- CSS Stands for **C**ascading **S**tyle **S**heets.
- CSS is a *Style Sheet Language*.
- Let's check out this link for an example of what CSS can do:
 - <http://www.csszengarden.com>
- HTML structures the content of the page. CSS adds the *style*.

CSS Syntax

- Here are the parts of a CSS rule:



How to Use CSS with HTML

You can add CSS to an HTML document in three ways:

- *Inline CSS*
 - You put the CSS directly into the HTML → (NOT SO USEFUL WAY)
- *An internal style sheet*
 - The CSS is put into the HTML document at the beginning, and applies to the whole document → (OK WAY)
- *An external style sheet*
 - The CSS is in a separate document that is linked to the HTML document → (BEST WAY)

How to Use CSS with HTML (cont'd)

While external style sheets are the most effective, they can be a little more complicated. To make things easier, today we will use an internal style sheet.

Where to Put CSS

- Add some `<head>` tags to your HTML document. Add them right after the opening `<html>` tag, and before the opening `<body>` tag.
- `<Head>` tags are used to put information into the HTML document that include information about the page, but do not show up within the body of the document
- Next, put some `<style>` tags in between the `<head>` tags. We will then put some CSS in between the `<style>` tags!

Where to Put CSS (cont'd)

– Like this:

```
<head>
```

```
<style>
```

CSS GOES HERE

```
</style>
```

```
</head>
```

Let's Try Some CSS:

Change the Font

- Change the font to Verdana

```
<head>
```

```
  <style>
```

```
    p { font-family: Verdana;}
```

```
  </style>
```

```
</head>
```

Change the Font Size

- Great! Now try this code and see the font size increase!

```
<head>
  <style>
    p {
      font-family: Verdana;
      font-size:36px;
    }
  </style>
</head>
```


Change the Background Color

- For a last look at what CSS can do, add this code in to change the background color of the body.

```
<head>
  <style>
    p {
      font-family: Verdana;
      font-size: 36px;
    }

    body {
      background-color: blue;
    }
  </style>
</head>
```

Congrats!

- You’ve just made some great new friends – HTML and CSS.
- For more information, check out these great websites:
 - <http://www.codecademy.com>
 - <http://www.w3schools.com>
 - <http://html.net>