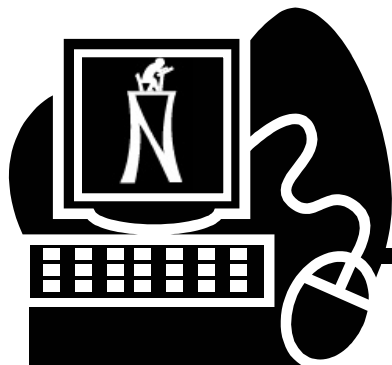


Advancing the Effective
Use of Technology in Education

NISD Technology Services



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HTML: Essentials



**Auxiliary & Classified Staff
Campus Administrators
District Administrators
Professional Staff
Teachers**

Introduction

HTML stands for **H**yper**T**ext **M**arkup **L**anguage. It is a very simple programming language that is used in Web pages. All Web browsers (Netscape, Internet Explorer, Opera, Firefox, etc.) read HTML and display a Web page according to the instructions in the HTML, although a particular page may look different when viewed with different browsers.

Netscape Composer and all other Web authoring programs – including Dreamweaver and Microsoft FrontPage – create HTML code when you use them to make a Web page. So, why should you learn HTML if an authoring program can write it for you? There are three reasons:

1. HTML gives you a much better understanding of how the authoring programs work, along with the ability to make the authoring software do **exactly** what you want it to do.
2. With HTML, you can add special effects that aren't included in Web authoring programs, such as image slideshows, text effects, scrolling messages, etc.
3. HTML sets you free from authoring software! With nothing more than a simple text editor like Microsoft Notepad, you can create simple Web pages in minutes.

Course Contents

This session will cover the following:

- Using Notepad to open and save an HTML file
- Using Internet Explorer to find, display and Refresh an HTML file
- Creating a basic Web page with the four basic tags
- Using basic text formatting tags
- Using page formatting tags
- Editing HTML in Dreamweaver Code View

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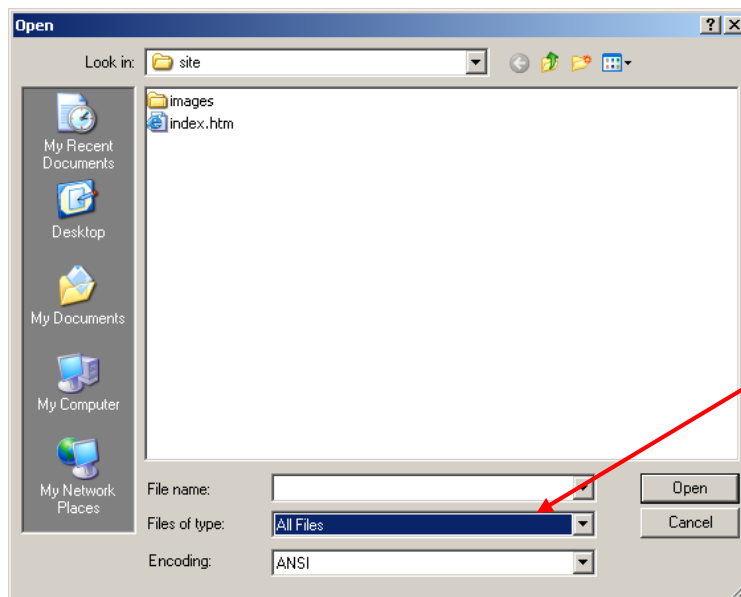
Microsoft Notepad

Notepad is Microsoft's text editing program. It is like a very basic word processor, with very few features. This actually works to our advantage in HTML editing, as there are no distracting tools such as automatic text "correction" to interfere with writing HTML.

Opening a Web Page with Notepad

To open a Web page in Notepad

1. Click File
2. Choose Open



3. Make sure to select **All Files** under **Files of type:**, or you will not be able to see anything but text files.
4. Browse to the file and click .

Saving a Web Page with Notepad

1. Click **File**
2. Select **Save As**
3. Give the file a name ending with **.htm**

Examples:

index.htm home.htm main.htm

4. Be sure to select **All Files** under **Save as type:**.

Other Word Processors

Word processors, such as Microsoft Word, Microsoft Wordpad, and other programs can be used to create HTML, as long as you save your HTML files as **text**. If you save in any other format, the Web browser will probably have difficulty reading your Web page. Remember that the filenames should end with the **.htm** extension to ensure that browsers recognize your files as Web pages.

Tags

Tags are the building blocks of Web pages. Although there are a large number of HTML commands (known as tags), we'll focus on just 12 of them for now. With these 12, you can create a basic homepage.

What are tags?

"Tags" are just the cute name for commands in HTML. Tags aren't so hard to use, as long as you follow a few simple rules. Donald St. John of CNET laid out five rules for tags which should help you understand them better:

1. Tags are always surrounded by angle brackets (less-than/greater-than characters), as in **<head>**.
2. Most tags come in pairs and surround the material they affect. They work like a light switch: the first tag turns the action on, and the second turns it off (There are some exceptions. For instance, the **
** tag creates a blank line and doesn't have an "off switch." Once you've made a line break, you can't unmake it.).
3. The second tag--the "off switch"--always starts with a forward slash. For example, you turn on bold with ****, shout your piece, and then go back to regular text with ****.
4. First tag on, last tag off. Tags can be nested, so when you start a tag within another tag, you have to close that inner tag before closing the outer tag. For instance, the page will not display properly with the tags in this order:

```
<head><title>Your text</head></title>
```

The correct order is:

```
<head><title>Your text</title></head>
```


The Dirty Dozen

Foundation Tags	Text Formatting	Page Formatting	Other
<html>	<p> (paragraph)	<h> (heading)	 (image)
<head>	 (line break)	<hr> (horiz. rule)	<a> (anchor)
<title>		<center>	
<body>		 & (lists)	
Plus a few more...			
	 (bold)		
	<i> (italics)		
			

The first four tags could be called "foundation" tags, because, like the foundation of a house, they need to be there, even though you usually don't notice them. Just get in the habit of starting a Web page by putting them in.

The Foundation Tags

```
<html>
<head>
<title>
<body>
```

<html>...</html>

This tag goes at the very top and the very bottom of every Web page, regardless of how long or short it is. When typed, it will look like this:

```
<html>
```

[Your entire Web page goes here]

```
</html>
```

<head>...</head>

This tag goes right below the first half of the **<html>** tag and gives you a place to put information about the Web page, such as title (see below), editor's notes, etc.

```
<html>
```

```
<head>
```

[information about the Web page]

```
</head>
```

<title>...</title>

The **<title>** tag places the title of your Web page up at the very top of the screen.

```
<html>
<head>
<title>Ms. Ruiz's Class Page</title>
</head>
```

<body>...</body>

This tag follows the **</head>** tag and contains the main part of homepage.

```
<html>
<head>
<title>Ms. Ruiz's Class Page</title>
</head>
<body>
[The main part of the homepage goes here]
</body>
</html>
```

Use **Notepad** to try out the four tags we've just covered. Follow these steps:

1. Open Notepad.
2. Type in the following:

```
<html>
<head>
<title>
Ms. Ruiz's Class Page
</title>
</head>
<body>
Ms. Ruiz's Third Grade Class
</body>
</html>
```

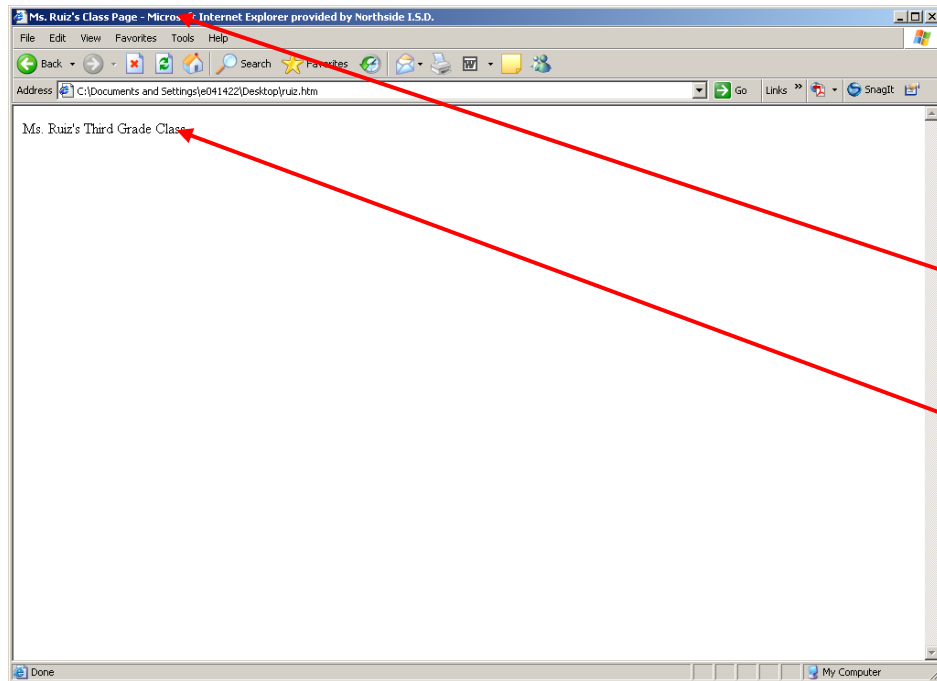
3. Click **File**, then select **Save As**.
4. Select **All Files** under **Save as type**.
5. Save it on your Desktop, as **ruiz.htm**.

Now view your new page in Internet Explorer

1. Open Internet Explorer.
2. Click **File** and choose **Open**.
3. Click the **Browse** button.

- Browse to your new Web page and click the **Open** button. Don't close Explorer after you're done. You'll need it later.

Your new page should look something like this:



Page title

Text you typed
("Ms. Ruiz's
Third Grade
Class")

Background Colors



Hexadecimal color charts can be found on the Web. Try using a search engine with the search words:

hexadecimal
color chart

The **<body>** tag can be modified by the **bgcolor** attribute to set the background color of the Web page. The colors are in a six-character, hexadecimal format. The first two characters are the **red** value, the second two are the **green** value, and the last two characters represent the **blue** value. Therefore,

```
<body bgcolor="#FF0000">
```

would give a red background, with the red set at maximum value (FF), and the green and blue both set to zero (00). Here are some sample colors, with their hexadecimal values:

RED #FF0000	YELLOW #FFFF00	BLUE #0000FF
GREEN #00FF00	ORANGE #FF6600	PURPLE #FF00FF
BLACK #000000	WHITE #FFFFFF	GRAY #666666




Independent Practice: Background Colors

Add a background color to your page by modifying the <body> tag.

1. Change the body tag to read:

```
<body bgcolor="#CCCCCC">
```

2. **Save** your page.
3. Go to Internet Explorer and click the **Refresh Button** () to see the changes.
4. Leave Internet Explorer open.

Basic Tags for Formatting Text

<p> (Paragraph)

This tag has only one required part. It goes at the beginning of any paragraph you wish to put in your homepage. It starts the new paragraph with a carriage return (empty line). If you wish, you can use a </p> at the bottom of the paragraph, but it isn't mandatory.

```
<p>
```

```
It was a dark and stormy night...
```

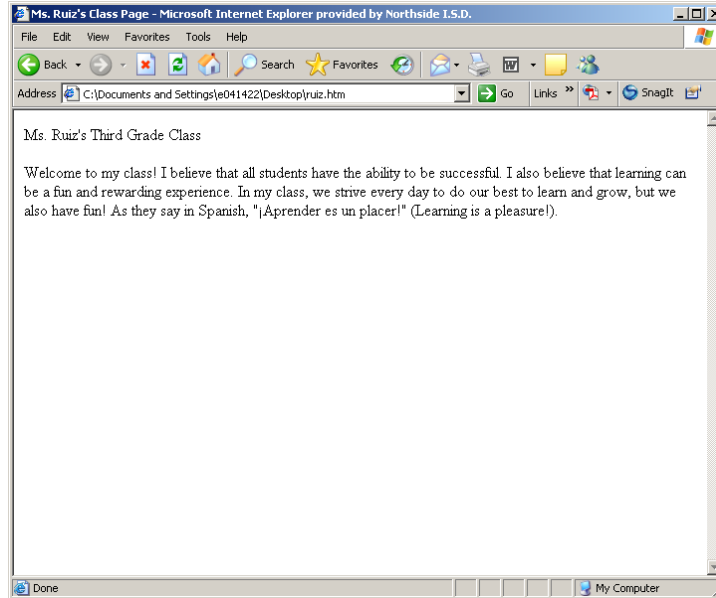
Let's add a paragraph to your Web page.

1. Type a <p> tag in the body of the page, below the line "Ms. Ruiz's Third Grade Class." See the example below. New HTML is in **red**, while existing code is shown in **pink**.

```
<body>
Ms. Ruiz's Third Grade Class
<p>
</body>
</html>
```

1. Below the <p> tag, insert the text provided by your instructor (filename is ruiz.txt).
2. Insert a second <p> tag, below the text you just added.
3. **Save** your page and **Refresh** it in Internet Explorer.

Your page will probably look something like this:



 (Break)

Another one of the tags that is used by itself instead of in pairs, **
** starts a new line anywhere you want it in a Web page. It does not, however, insert a blank line. It's perfect for putting in some short lines of text, each on its own line (instead of in a paragraph), or for inserting some blank space into the homepage to separate two things (though you may need more than one **
** for this).

1. Add the following text below the second paragraph tag (**<p>**) in your document.

```
Ms. Ruiz<br>
Colonies North Elementary School<br>
9915 Northampton<br>
San Antonio, TX 78230<br><br>
(210) 397-1700<br>
<br>
```

2. **Save** your page and **Refresh** it in Internet Explorer to observe the changes. Note that using two breaks after the Zip code gives a blank line between the address and phone number.



Two breaks
(**
**) will
create a blank
line.

Page Formatting Tags

<h1>...</h1> , etc. (Heading)

The Heading tags make text larger and insert blank lines above and below the headings. Headings come in six sizes, ranging from <h1> (the largest) to <h6> (the smallest). Your browser will automatically create a blank line above and below a Heading.

In your Web page, we'll modify the single line of text that we typed at the beginning ("Ms. Ruiz's Third Grade Class") to learn more about Headings.

1. Add the **Heading** and **Break** tags to change the first line of text to match the example below.

```
<body>
<h2>Ms. Ruiz's<br>
Third Grade Class</h2>
<p>
Welcome to my class! I believe...
```

2. Add the following **Heading** tags and text above the **Paragraph** tag.

```
<h3>Aprender es un placer</h3>
```

3. **Save** your page and **Refresh** it in Internet Explorer to see the changes you've made.

<hr> (Horizontal Rule)

This tag inserts a horizontal line (called a Horizontal Rule) into a Web page. It's useful for dividing sections of a homepage. You can use <hr> to insert a line with the same width as the Web page, or you can set the width of the horizontal rule. HTML lets you control the width of an <hr> in two ways, either by percentage of space it occupies, or by a fixed number of pixels. This gives you three options for an <hr>:

<hr>	This <hr> spans the full width of whatever space it is placed in.
<hr width="75%">	Sets the width to a percentage of the available space. If the Web page was 600 pixels wide this <hr> would have a width of 450 pixels.
<hr width="550">	Sets the <hr> to a fixed width -- in pixels. This <hr> is 550 pixels wide.

<center>...</center>

This tag changes the alignment of whatever is between its two parts to “center.” It can be used to center justify text, headings, images, tables and a variety of other things. Let’s use it to center the headings created in the last example.

1. Add the **<center>** tags and the **<hr>** tag to center the heading of your page, as shown in the example below.

```
<center>
<h2>Ms. Ruiz’s<br>
Third Grade Class</h2>
<h3>Aprender es un placer</h3>
<hr width=“90%”>
</center>
<p>
Welcome to my class! I believe...
```

2. **Save** your page and **Refresh** it in Internet Explorer to see the changes to the heading.

... and <i>...</i>

These two tags change the font style to **bold** (****) or to *italic* (**<i>**). You can, of course, use both at once to change text to **bold italic**. You can also use **<i>** with the **<h>** tag to have an italicized heading. Just use “**first on, last off**” to remember how to use more than one tag at once. If you wanted to make the words ***Colonies North Elementary School*** appear in both bold and italics at the same time, you could type:

```
<b><i>Colonies North Elementary School</i></b>
```

but not:

```
<b><i>Colonies North Elementary School</b></i>
```

Now, let’s use the **** and **<i>** tags in our Web page!

1. Use the **** tag to bold the words **Colonies North Elementary School** (at the bottom of the page).
2. Use the **<i>** to italicize the Spanish line in the page Heading (**Aprender es un placer**).
3. **Save** your page and **Refresh** in Internet Explorer to preview it.

Special Characters

HTML allows you to insert special characters into your code. These will produce symbols and letters that aren't part of the standard alphabet. All special characters begin with an ampersand (&) and end with a semicolon (;). All special characters have a numeric value to tell the Web browser what to display, and an alphabetic code that can be used, while most have just the numeric value. For example, you can create the copyright symbol with:

© or **©**

Here are a few commonly-used special characters:



For a more complete list of special characters, try the following search in a search engine:

html special characters

<u>Character</u>	<u>Numeric</u>	<u>Alphabetic</u>	
	 	 	Non-breaking space
©	©	©	
“	"	"	Quotation mark
¡	¡	¡	Spanish inverted exclamation
¿	¿	¿	Spanish inverted question mark
á	á	á	Spanish accented a (lower case)
é	é	é	Spanish accented e (lower case)
í	í	í	Spanish accented i (lower case)
ó	ó	ó	Spanish accented o (lower case)
ú	ú	ú	Spanish accented u (lower case)
ñ	ñ	ñ	Spanish n with tilde (lower case)
•	•	•	Bullet
π	π	π	Pi symbol

Insert special characters into your Web page

1. Insert an inverted exclamation mark (**¡** or **¡**) at the beginning of the Spanish expression in the Heading.
2. Insert quotation marks (**"** or **"**) at the beginning and end of the Spanish expression.

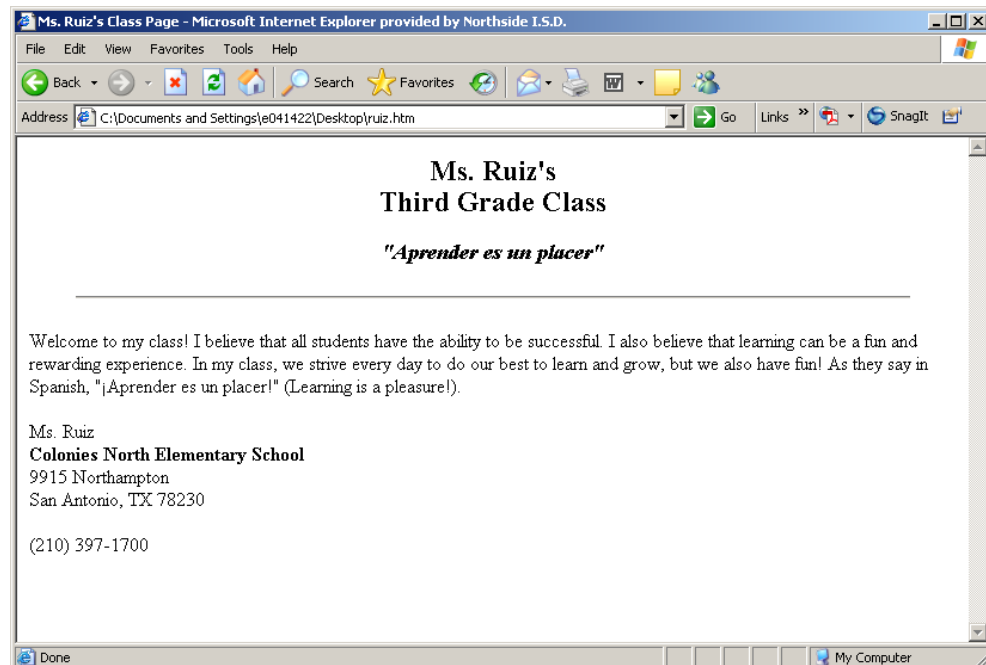
Complete HTML code for the Web page:

```

<html>
<head>
<title>
Ms. Ruiz's Class Page
</title>
</head>
<body bgcolor="#FFFFFF">
<center>
<h2>Ms. Ruiz's<br>
Third Grade Class</h2>
<h3><i>"Aprender es un placer"</i></h3>
<hr width="90%">
</center>
<p>
Welcome to my class! I believe that all students have the ability to be successful. I also
believe that learning can be a fun and rewarding experience. In my class, we strive every
day to do our best to learn and grow, but we also have fun! As they say in Spanish,
&#34;&#161;Aprender es un placer!&#34;; (Learning is a pleasure!).
<p>
Ms. Ruiz<br>
<b>Colonies North Elementary School</b><br>
9915 Northampton<br>
San Antonio, TX 78230<br><br>
(210) 397-1700<br>
<br>
</body>
</html>

```

It should look something like this:

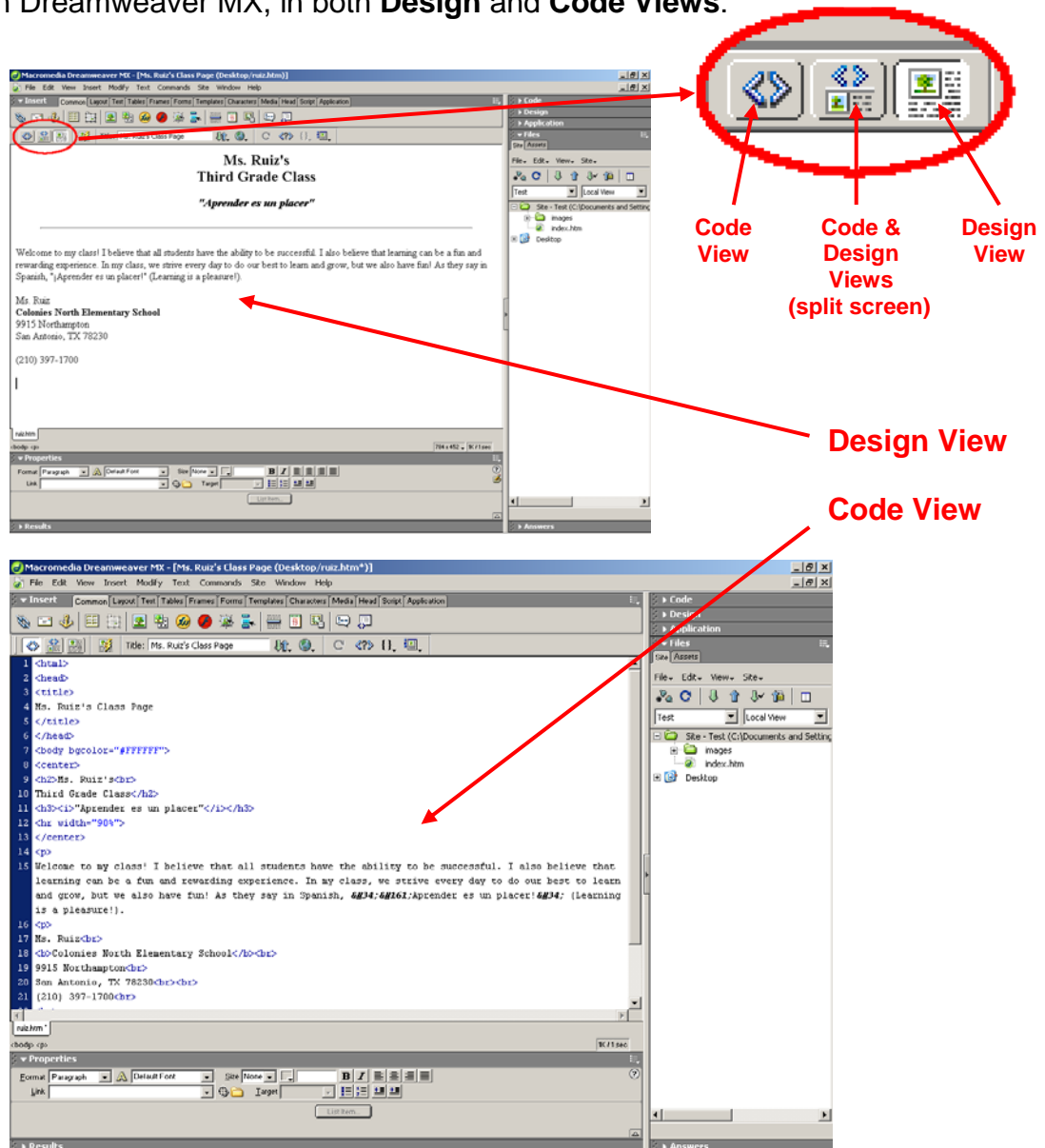


Editing HTML in Dreamweaver's Code View

One of the best reasons for learning some HTML is that you can better understand how the authoring programs work. Knowledge of HTML also gives you the ability to make the authoring software do **exactly** what you want it to do. This can save you a lot of frustration and time.

Macromedia Dreamweaver produces very easy-to-read, easy-to-edit HTML code. It is also very easy to “toggle” back and forth between Dreamweaver’s **Code View** and the default **Design View**. HTML in Dreamweaver is edited just like HTML in Notepad.

Let’s look at Dreamweaver. Here is the page we’ve made, as it would appear in Dreamweaver MX, in both **Design** and **Code Views**:



List of HTML Tags Covered in this Manual

<html>...</html>	HTML – Placed at the very top and at the very bottom of every HTML document.
<head>...</head>	Head – Defines the Head of the document, which contains the Title.
<title>...</title>	Title – Page title that appears at the very top of the browser window.
<body>...</body>	Body – The main part of the Web page.
<p>	Paragraph – Inserts a blank line at the top of the paragraph.

	Break – Line break (carriage return).
<h1>...</h1>, etc.	Heading – Ranges from <h1> (the largest), to <h6> (the smallest). Creates a blank line above and below the heading.
<hr>	Horizontal Rule – A horizontal line. It can be set to any width, either as a percentage of available space, or in pixels.
<center>...</center>	Center – Center justifies text or objects.
...	Bold – Changes text to bold-face.
<i>...</i>	Italics – Italicizes text.

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