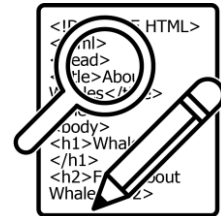


## Assignment 6 Edit an HTML Document

Each TechnoKids project is divided into separate assignments. An assignment is an activity that takes about 20 minutes to complete.

The code that has the basics of creating your web page is in the HTML code editor.



Open the file in the web browser. The page looks like.

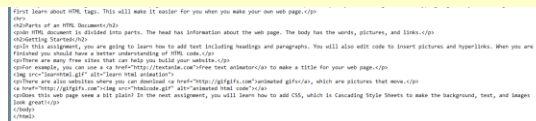
- Open the **HTML5** folder.
- Open the *Sample File* folder.
- **Right click** the *index* file. From the menu, click *Open with*. Choose a browser.

Keep the web browser open.



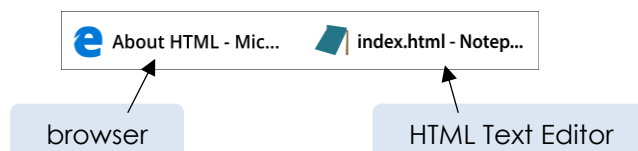
Students begin to create their own web page by editing a sample HTML document provided in the TechnoHTML Resource folder.

- Click the *Sample File* folder.
- **Right click** the *index.html* file. From the menu, click *Open with* or another browser.

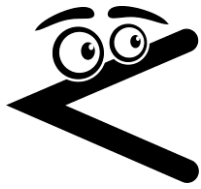


If the file is not in the browser, choose Another App. Select More Apps, and then choose Notepad. Click OK.

- Use the taskbar to toggle back and forth between the browser and HTML Text Editor.



## Look at the Code in the HTML Document



The first line **<!DOCTYPE HTML>** tells the web browser the file is an HTML document.

The second line is **<html>** and the bottom line is **</html>**. All code must go between these tags.

- ▷ Look at the HTML document:

The body has the text, pictures, and links.

```
<!DOCTYPE HTML>
<html>
<head>
<title>About HTML</title>
</head>
<body>
<h1>Learning How to Build a Web Page</h1>

<p>You are going to learn how to build a web page.</p>
<p>When you are learning how to build a web page it takes time. It is often difficult to have patience, as you want to get started typing right away. It is a good idea to first learn about HTML tags. This will make it easier for you when you make your own web page.</p>
<hr>
<h2>Parts of an HTML Document</h2>
<p>An HTML document is divided into parts. The head has information about the web page. The body has the words, pictures, or
<h2>Getting Started
<p>In this assignment, you will learn how to edit code to insert code.</p>
<p>There are many things you can do with HTML code.</p>
<p>For example, you can use the <img> tag to insert a picture into your web page.</p>

<p>There are also pictures that move. You can use the  tag to insert a moving picture into your web page.</p>
<p>Does this web page seem a bit plain? In the next assignment, you will learn how to add CSS, which is Cascading Style Sheets to make the background, text, and images look great!</p>
</body>
</html>
```

The head has information about the web page.

Step by step instructions with illustrations help beginners learn HTML code.

## Edit the Title in the Head

A web page is divided into parts. The **<head>** **</head>** tells the web browser information about the web page. Edit the title in the head.



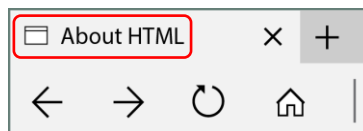
- ▷ Look at the source code that has the title:

```
<head>
<title>About HTML</title>
</head>
```

- ▷ Now look at the taskbar. Notice the browser button reads **About HTML** which is the page title. Click *About HTML*.



- ▷ Now look in the web browser window. Notice that the page tab reads **About HTML**.



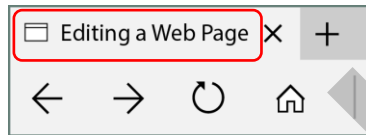
- ▷ Toggle back to the index.html document.



- ▷ Change the title from *About HTML* to: **<title> Editing a Web Page </title>**
- ▷ Select Save from the File menu.
- ▷ Toggle back to the browser.



- ▷ Click *Refresh*  or press **F5** on the keyboard to reload the web page with the changes.



- ▷ Look at the taskbar button. It has also changed. Toggle back to the index.html document. You should be looking at the source code.



## Edit the Heading and Insert a Subheading in the Body

The code to display text, pictures, and links goes in the body of the html document between the `<body>` `</body>` tags.

Heading tags are used to create headings and subheadings. The main heading should use a `<h1>` tag. A subheading should use a `<h2>` tag. A sub-subheading should use a `<h3>` tag.

There are six heading tags: `<h1>` `<h2>` `<h3>` `<h4>` `<h5>` `<h6>`. Each has a different font size, with h1 being the largest and h6 being the smallest.

- ▷ Edit a heading and add a subheading:
  - Add text to the main heading: **`<h1>Learning How to Build a Web Page is Fun</h1>`**
  - Add a new subheading:
    - Look half way down the document.
    - Position the cursor before the paragraph  
**`<p>There are many free sites that can help you build your website.</p>`**  
Press ENTER.
    - In the blank space, type **`<h2>Helpful Websites</h2>`**
- ▷ Select Save from the File menu.

- ▷ Toggle to the browser.  
Click Refresh or press F5 on the keyboard.

Students edit the code in Notepad, then view the changes in a browser to get instant feedback.



## Add a New Paragraph to the Body

The tags `<p>` and `</p>` are used to create paragraphs. Most tags are written in pairs with opening and closing tags (with a few exceptions). Add your own paragraph using HTML.

- ▷ Toggle back to the *index.html* document.
- ▷ Add your name to the HTML document:
  - Near the top of the page, position the cursor at the end of the `</h1>` tag. Press ENTER.
  - In the blank space, type `<p> Edited by Student Name </p>`.
- ▷ Save the changes and then view them in the browser.



## Add a Line Break to Force Text to a New Line



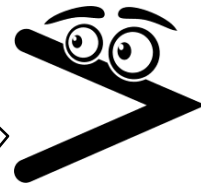
To have text move to a new line in a word processing document you would press the ENTER key. To do the same thing in an HTML document, you need to add a break or `<br>`. This tag is not written in pairs; no end tag is needed.

- ▷ Toggle back to the *index.html* document.
- ▷ Add a line break:
  - Position the cursor at the end of the sentence *When you are learning how to build a web page it takes time*. Press ENTER.
  - Type `<br>`
- ▷ Save the changes and then view them in the browser.



## Create a Horizontal Rule to Divide the Content

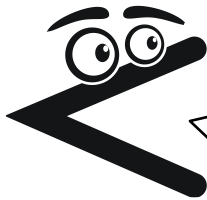
You can add a line or *horizontal rule* `<hr>` to the web page. This is used to divide the content into themes or topics. Similar to the line break `<br>` it does not have a closing tag.



- ▷ Toggle back to the *index.html* document.
- ▷ Add a horizontal rule:
  - Look near the bottom of the document.
  - Position the cursor before the paragraph `<p> Does this web page seem a bit plain?` Press ENTER.
  - In the blank space, type `<hr>`.
- ▷ Save the changes. View them in the browser.



## Replace a Picture



You can add images to a web page. You must know the picture name and picture type to write the code. As well, the picture should be placed in the same location as the *index.html* file.

``

- ▷ Examine the image tag:

``

**IMG SRC** stands for *image source*. An image is any picture on the web page.

**htmlfaces.gif** is the filename of the picture. Notice the name of the picture is one word and has no capitals.

Also, notice that the file type is a **gif**. When you add a picture to a web page you must include the file type with the name.

**ALT** stands for *alternate*. The code places alternate text onto the web page while the picture is loading. This text should describe the image.

*Why use alternate text?*  
Screen readers read the alt text for people with visual impairments.

- ▷ Toggle back to the *index.html* document.

There are several pictures in the Sample File folder where the *index.html* file is located. Replace *htmlfaces* with *htmlcomputer*.



- ▷ Edit the tag: `` with

``

- ▷ Save the changes and view them in the browser.



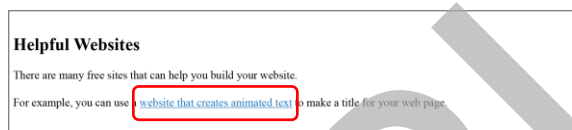
## Edit Text in a Hyperlink



Hyperlinks are used to connect web pages together. A hyperlink can be text or a picture. Edit the text used for the hyperlink.

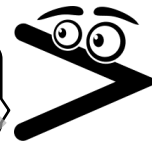
```
<a href="http://www.domain.com">Text that is a hyperlink.</a>
```

- ▷ Look at the hyperlink below the *Helpful Websites* heading. Change the words *free text animator*.
- ▷ Toggle back to the index.html document.
- ▷ Edit the tag: `<a href="http://textanim.com">website that creates animated text</a>`
- ▷ Save the changes and view them in the browser.



## Edit HTML Code

Use what you have learned to continue to edit the web page.



### HTML Code Challenge:

- ☐ Add a new subheading using `<h2> </h2>`.
- ☐ Add a new paragraph using `<p> </p>`.
- ☐ Move text to a new line using `<br>`.
- ☐ Insert a horizontal rule to separate paragraphs using `<hr>`.
- ☐ There is a picture named dev. Change the picture `htmlcod`.
- ☐ Add the word **free** to the hyp

Optional activities challenge students.

- ▷ Save the changes. View them in the browser.

## Close Open Programs

## Assignment 7 Edit the Style of an HTML Document

Next, students learn about CSS, or Cascading Style Sheets, to produce a professional, consistent design for their web pages.

are used to create a document. It for page elements. For and size of ALL



using CSS:

and link to it. This method is ideal if you have all web pages can reference the same

- **Head:** You can put the style information in the head of the html file. This method is best if you have only one web page or you have unique styles for a web page in your site. When you are learning it can be easier if all source code is in one place. For this reason, you will use this method to make your web page.
- **Body:** You can put the style information in the body. This method should only be used when you want to change the appearance of a single item on the web page. You will explore how to use this method in this activity.

To build a web page you need to understand how to set the design of HTML tags. To prepare for this task, you are going to edit CSS in a web page. Instructions explain how to adjust the style of the body, headings, paragraph, horizontal rule, and images.

### View a Web Page and its Source Code

- ▷ Open the *HTML5* folder. Open the *CSS Sample* folder.
- ▷ **Right click** the *index* file. From the menu, click *Open with*. Choose a browser.

Keep the web browser open.



The pictures are placed using the image tag <img>

The text is written using the paragraph tag <p>

**About CSS**

CSS stands for Cascading Style Sheet. It sets the style of a document. The body of an HTML document contains the text, images, and links. The head of the document contains style information that tells the web browser about the appearance of each element.

HTML uses angle brackets < > to surround tags. In CSS you use curly brackets { } to surround tags.

To set the style of an element you write the tag name, opening curly bracket, attribute, color, value, semi colon. Once all the attributes are listed, you add a closing curly bracket.

It looks like this: tag { attribute: value; attribute: value; }

or p { font-family: georgia; color: blue; }

**About Colors**

You can set the color of the background or text. You can use a color name such as red, blue, white, or green. To find a color name visit [HTML Color Names](#).

The CSS code to set the background color of the web page look like this: body {background-color: aliceblue;}

The CSS code to set the font color of a paragraph look like this: p {color: navy;}

dodgerblue	aliceblue	darkviolet	lavender	magenta
pink	lime	palegreen	orange	peachpuff

The page title is made using the heading tag <h1>

The section titles are made using the heading tag <h2>



You are now going to open the index file in Notepad or another HTML Text Editor. This program will let you edit the code.

- ▷ Click the *CSS Sample* folder in the taskbar to view it again.
- ▷ **Right click** the *index* file. From the menu, click *Open with*. Choose *Notepad* or another HTML Text Editor.

## View the CSS

Look at the head. The appearance of each element is listed between **<style type="text/css" media="screen">** and **</style>**.



- ▶ Look at the CSS in the head:

```
<style type="text/css" media="screen">
body {
  width: 800px;
  background-color: white;
  margin: auto;
}
h1 {
  font-family: verdana;
  font-size: 100%;
  color: red;
  text-align: center;
  padding: 5px;
}
h2 {
  font-family: georgia;
  font-size: 100%;
  color: blue;
  text-align: left;
}
p {font-family: arial;
font-size: 100%;
color: black;
text-align: left;
line-height: 100%;
}
hr {
  width: 400px;
  color: green;
  background-color: green;
  height: 5px;
}
img {
  float: left;
  padding: 5px;
}
table {
  font-family: arial;
  font-size: 100%;
  color: black;
  text-align: left;
}
td {
  padding: 5px;
}
</style>
```

```
h1 {
  font-family: verdana;
  font-size: 100%;
  color: red;
  text-align: center;
  padding: 5px;
}
```

The h1 style tells the web browser how to show the heading 1 <h1> tag. In this example, all h1 headings will be written using a Verdana font, have a normal font size of 100%, and will appear red, centered, with 5 pixels of space around the letters.

- ▶ View the web page. Read the first four paragraphs about CSS.



## Set the Color of an Element using Words



You can set the color of the background or text. You can use a color name such as red, blue, white, or green. Try it!

- ▶ Look at the web page. The web page background is white. The page heading or h1 tag is red. All the subheadings or h2 tags are blue and the text in the paragraphs or p tags are black. The horizontal rule or line is green. Plus, there is one word in the About Colors paragraph that is a different color.
- ▶ View the source code.

```
body { background-color: white;
width: 800px;
margin: auto;
}

h1 { font-family: verdana;
font-size: 100%;
color: red;
text-align: center;
padding: 5px;
}

h2 { font-family: georgia;
font-size: 100%;
color: blue;
text-align: left;
}

p { font-family: arial; font-
size: 100%;
color: black;
}
```

- ▶ Can you see the color green in the style sheet?

Included in this project are resources listing HTML and CSS tags for easy reference.



➤ In the head, edit the color of each element using words:

- o body background from white to **beige**
- o heading 1 from red to **olive**
- o heading 2 from blue to **orange**
- o paragraph from black to **brown**
- o horizontal rule from green to **coral**

Keep the semi colon ; after the color word.

➤ Save the changes.

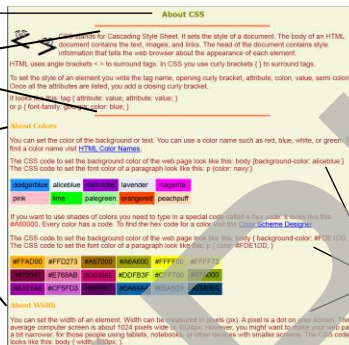
➤ Toggle to the browser and refresh  the page to view

Heading 1 or **h1** is olive.

All horizontal rules or **hr** are coral.

All Heading 2 or **h2** are orange.

The **body** background is beige.



```
body { background-color: beige;
width: 800px;
margin: auto;
}

h1 { font-family: verdana;
font-size: 100%;
color: olive;
text-align: center; padding:
5px;
}

h2 { font-family: georgia;
font-size: 100%;
color: orange;
text-align: left;
}

p { font-family: arial; font-size:
100%;
color: brown;
text-align: left;
line-height: 100%;
}

hr { width: 400px;
color: coral;
background-color: coral;
height: 5px;
}
```

All paragraphs or **p** are brown.

➤ Toggle to the HTML source code.

➤ Experiment with changing the elements using color words.

To view more color names, click [HTML Color Names](#).

darkviolet   lime   magenta   orangered   gold  
lavender   pink   palegreen   peachpuff   cornsilk

## Set the Color of an Element using Hex Codes



If you want to use specific shades of color, you will need to type in a hex code. It looks like this **#8BB381**. Every color has a hex code.

➤ In the head, edit the color using hex codes:

- o background - **#ECFD95**
- o heading 1 - **#03406A**
- o heading 2 - **#0A64A4**
- o paragraph - **black**
- o horizontal rule

To view more hex codes click [Color Scheme Designer](#).

➤ Save the document

Following pages have been removed from this excerpt.

```
body { background-color: #ECFD95;
width: 800px;
margin: auto;
}

h1 { font-family: verdana;
font-size: 100%;
color: #03406A;
text-align: center; padding:
5px;
}

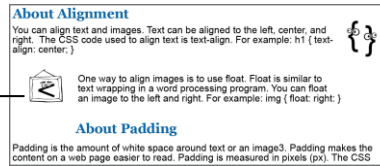
h2 { font-family: georgia;
font-size: 100%;
color: #0A64A4;
text-align: left;
}

p { font-family: arial; font-size:
100%;
color: black;
text-align: left;
line-height: 100%;
}

hr { width: 400px;
color: #A101A6;
background-color: #A101A6;
height: 5px;
}
```

- ▷ Save the changes and then view them in the browser.

Padding creates space around an element.



- ▷ Use your skills to set the padding.

## Edit CSS



Checklists guide student exploration and provide extra challenges.

Use what you have learned to continue to edit the style of the web page.

## Explore CSS:

- ☐ **Delete** the body style **margin: auto;**

What happens to the web page when this code is removed?

**The web page is no longer centered on the screen and is aligned to the left.**

Re-add the body style **margin: auto;**

## CSS Challenge:

- ☐ Set the body background color to **lightblue**
- ☐ Set the width of the body to **600px**
- ☐ Set the font family of the h1 tag to **tahoma**
- ☐ Set the font size of the h2 tag to **140%**
- ☐ Set the color of the h2 tag to **#290671**
- ☐ Set the text alignment of the h2 tag to **center**
- ☐ Set the line height of the paragraph to **130%**
- ☐ Set the padding for the image to **15px**

## DIFFICULT CSS Challenge:

- ☐ Change the font family of ONE word in the body to **impact**.
- ☐ Change the line height of ONE paragraph in the body to **200%**.

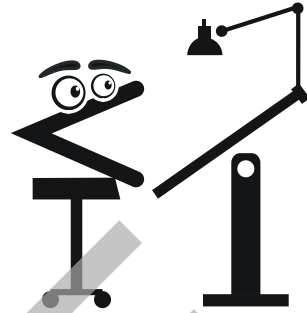
- ▷ Save the changes and then view them in the browser.

## Close Open Programs

## Assignment 8 Plan a Web Page

You are now going to make your own web page. To make this web page you need to:

- ☐ Pick a topic. Choose something you know a lot about.
- ☐ Record three interesting facts about the topic.
- ☐ Find three websites about the topic.
- ☐ Find three pictures about the topic and save them in an HTML folder.



If you need inspiration there are three sample web pages in the *Web Pages* folder. They were created using the assignments and extension activities in this project.

### Web Page Planner

Use this *Web Page Planner* to keep track of the resources you have collected about your topic.

**Topic:**

**Information:**

Write down three interesting facts about your topic.

- 
- 
- 

Before beginning to create their own web pages, students complete a planner.

**Pictures:**

Save three pictures about your topic. When you save them make sure the filename is one word, with no capitals or spaces. Write down the name of the picture in the space below. Include the file type such as jpg or gif (For example: *computer.jpg*).

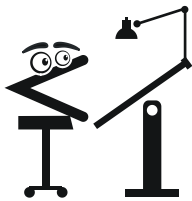
- 
- 
- 

**Websites:**

Find three excellent websites about your topic. Write down the URL in the space below.

- http://
- http://
- http://

## How to Save Pictures to the HTML Folder



You will need three pictures for your web page. Below are instructions on how to save pictures from the Internet. You will place all your pictures into an **HTML** folder. Be sure to save the pictures as one word, with no capitals or spaces.

### Copyright and Images

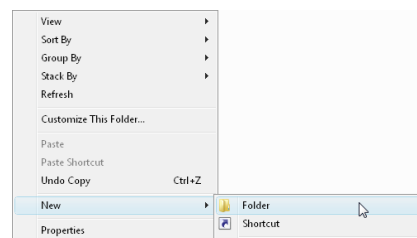
You need to save images for use in your web page. However, it is important to know that you cannot just take any image you want. Some pictures need to be purchased to use them. Those will often have a watermark or a company name printed on them covering part of the picture. Other pictures may have a note describing how they can be used while others are free with no limitations on use. These are often called royalty-free.

Copyrighted pictures posted online may have a copyright © symbol on the image with the date or name of the owner. This is a way of identifying who took the picture. If you want to use a copyrighted picture to complete your school work, in most cases you can. However, when you insert the picture into your work you should not remove the copyright symbol.

Most search engine can filter images to quickly find those that you can use by license or usage rights. Before saving a picture check to make sure you can use it in your school work.

### Make an HTML folder for Pictures

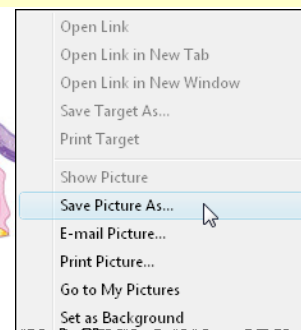
- Go to the place where you save your work. Right click the mouse.
- From the menu, point to New. Now select Folder from the submenu.
- To name the folder, type **HTML** and press ENTER. If you make a mistake, right click on the folder and select Rename.
- Close the window by clicking



### Save Pictures to the HTML folder

- Open a web browser.
- Use the Internet to find a picture.
- Right click on the image and select **Save image as** from the list.
- Select the HTML folder.
- Type in a filename that is **one word, with no spaces or capitals**.
- Click Save.
- RECORD THE FILENAME AND FILE TYPE (jpg or gif) ON YOUR PLANNING SHEET.
- Repeat the above steps to save two more pictures.

Students search the Internet for information, pictures, and websites to be included in their web pages.



## Unit 3 Skill Review Start an Avalanche Web Page

Start a web page with information about avalanches.

1. Open Notepad or another HTML Text Editor.
2. Create the structure of the HTML document.

```
<!DOCTYPE HTML>  
<html>  
  <head>
```

Skill Reviews are activities for students to practice their coding skills.

3. Add
4. Add the heading **Natural Disasters and Avalanches** to the body using `<h1> </h1>`

5. Add the following paragraph to the body using `<p> </p>`

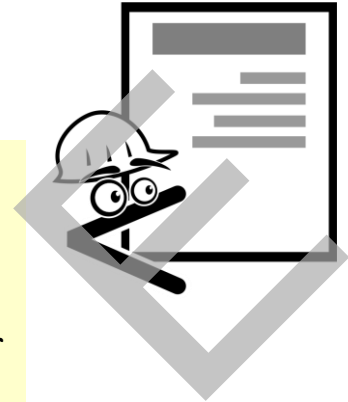
*This web page provides information about the causes of avalanches, their threat to humans, and what can be done to minimize this hazard. Read to find out what clues nature provides to indicate that an avalanche is about to happen!*

6. Save the file to your student folder: **DO NOT SAVE OVER TOP OF YOUR WEB PAGE!**

You do not want to save over top of your web page. For this reason, you are going to save your work into a new folder called avalanches AND to be EXTRA SAFE you are going to call the file index2.html (instead of index.html).

- a. **IMPORTANT!** Create a subfolder called **avalanches**.
  - b. Inside the avalanches folder save the file as **index2.html**.
7. View the web page in a web browser:
    - a. **KEEP YOUR SOURCE CODE OPEN.**
    - b. Go to the avalanches folder you just created.
    - c. **Right click** the index2 file. From the menu, click Open with. Choose a browser.

For the paperless classroom, each assignment, review, skill review, and extension activity in the TechnoKids Student Workbook is also included as a digital file.



8. Add style to the head.

```
<style type="text/css" media="screen">

</style>
```

9. Format the style of the body.

```
body { background-color: #A6E4EA;
width: 600px;
margin: auto;
}
```

10. Format the style of heading 1.

```
h1 { font-family: impact;
font-size: 220%;
color: #055C64;
}
```

11. Use your skills to format the style of the paragraph. Set at least two attributes.

- ☐ font-family      ☐ font-size  
☐ color              ☐ line-height

Color Options:

- |   |                                       |
|---|---------------------------------------|
| <input type="checkbox"/> dark blue #001448  | <input type="checkbox"/> midnightblue |
| <input type="checkbox"/> dark brown #542800 | <input type="checkbox"/> your choice  |

12. Save the changes to your work.

13. View the web page in a web browser.

## Natural Disasters and Avalanches

This web page provides information about the causes of avalanches, their threat to humans, and what can be done to minimize this hazard. Read to find out what clues nature provides to indicate that an avalanche is about to happen!

## Extension Activity 2: Format Lists

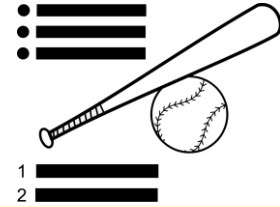
Want to list items?

You can! Follow the instructions to create lists using these tags.

`<ul> </ul>` creates an **u**nordered list or bulleted list

`<ol> </ol>` creates an **o**rdered list or numbered list

`<li> </li>` identifies an item in a list



Extension Activities at the end of sessions provide optional enrichment challenges.

1. Open the HTML5 folder.
2. Open the *Baseball* folder.
3. Right click the *index.html* file. Select *Open with* – choose a browser.
4. Right click the *index.html* file. Select *Open with* – Notepad or another HTML Text Editor.

Create an **u**nordered list using the tag `<ul>`:

5. ☐ Type the open tag `<ul>` before the list of player names.  
☐ In front of each player name type `<li>`  
☐ At the end of each player name type `</li>`  
☐ Type the close tag `</ul>` after the list of player names.

```
<ul>
<li>Mickey Mantle</li>
<li>Babe Ruth</li>
<li>Willie Mays</li>
<li>Yogi Berra</li>
<li>Jim Thorpe</li>
<li>Lou Gehrig</li>
<li>Sammy Sosa</li>
<li>Derek Jeter</li>
</ul>
```

6. Save the changes and view them in the browser.  
Notice how the font is default and the bullets are discs.

Over the history of baseball, some great names stand out. Here is a list of some of the big names of baseball over time:

- Mickey Mantle
- Babe Ruth
- Willie Mays
- Yogi Berra
- Jim Thorpe
- Lou Gehrig
- Sammy Sosa
- Derek Jeter