Hope IT

Introduction to HTML - Week 2:

Objective:
* Recognize what browsers do, and that there are many of them.
* Learn the terms: Tags, Begin Tag, and End Tag.
* Create links between multiple web pages.
* Add audio and video links.
* Learn how to learn: https://www.w3schools.com/

Goal:
Expand your web site to have multiple pages, linking them together, and with other links on the Internet.

Browsers:
- Safari (Apple)
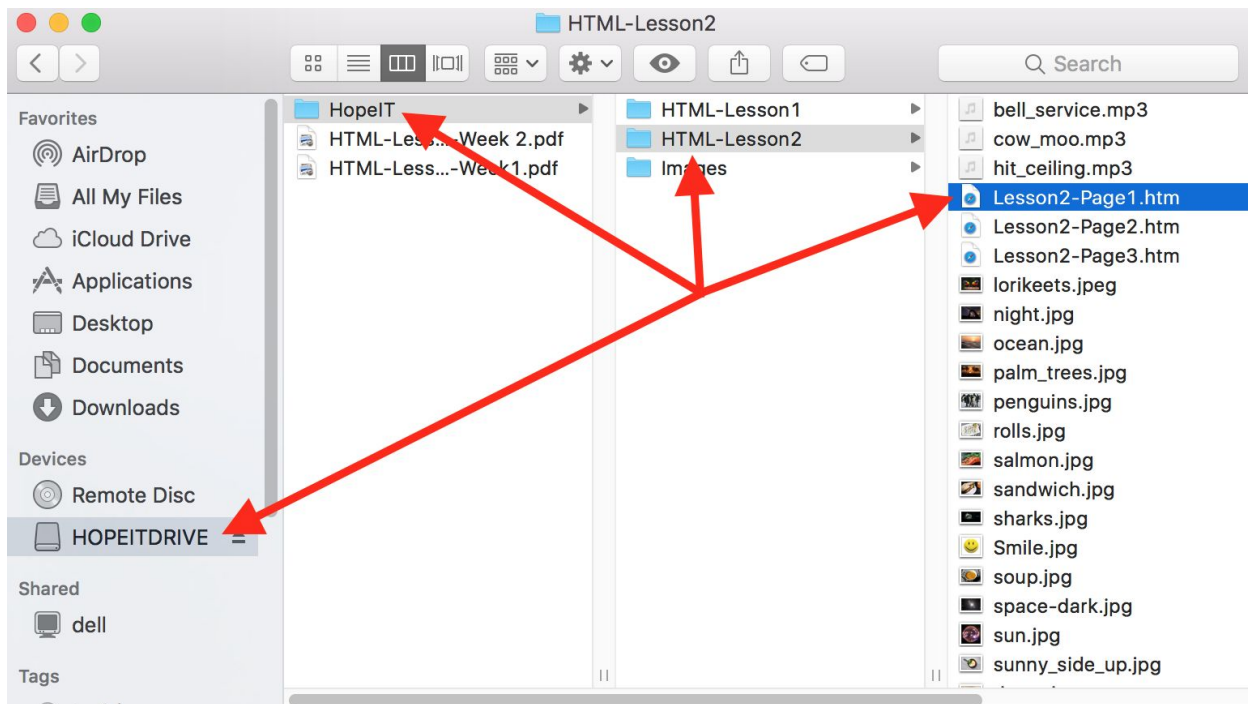- Chrome (Google)
- Internet Explorer (Microsoft)
- Firefox
- Opera

HTML Tags:
- h1, h2, p, img, head, body
- Looks like this: <h1>Hello World</h>

- Begin tag: <h1>
- End tag: </h1>

Do each step. Take your time, and explore. Try a few things that are not listed here.
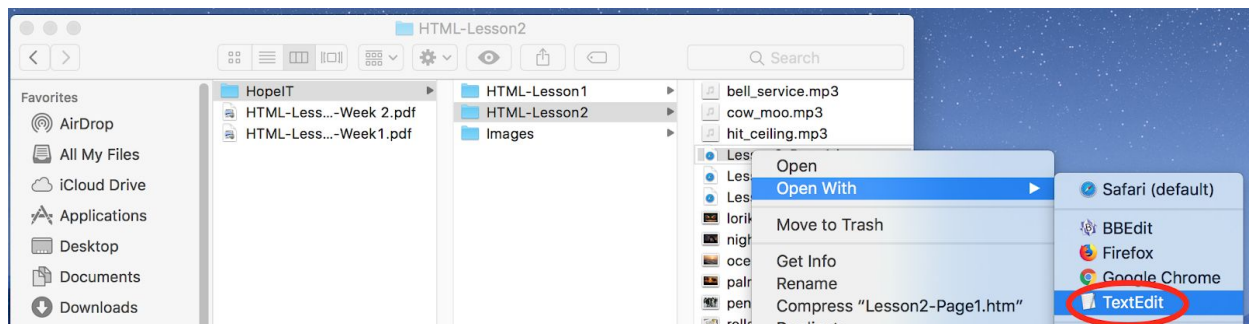
1. Open to the HTML-Lesson2 folder:
>   a) Open **Finder**.
>   b) Click **HopeITDrive (your flashdrive)** on the left-hand side.
>   c) Click the **HopeIT** folder
>   d) Click on **HTML-Lesson2** folder.
>   e) Notice there are 3 HTM files: Page 1, Page 2, and Page 3.
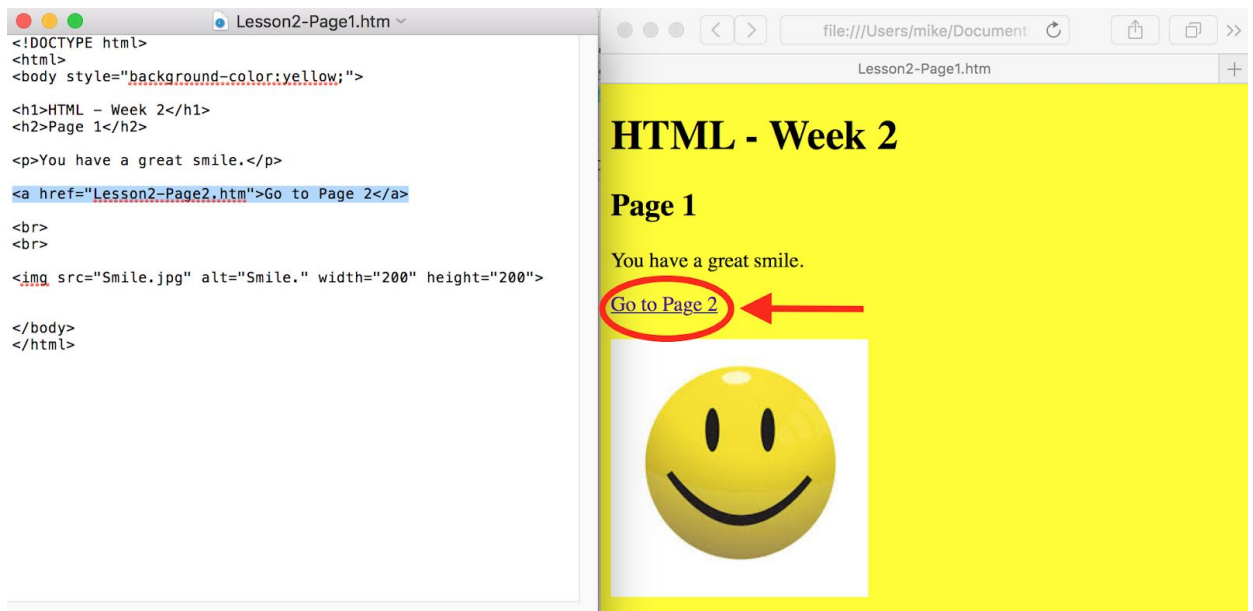>   e) Let's open the Page 1 HTM file. Double-click on the **Lesson2-Page1.htm** file

2. Let's look at this file:
   a. Let's see how Safari -- which is a browser -- presents this file. Double-click this HTM file.
   b. Also, open this file with TextEdit (see below to review how to right-click on the file and choose TextEdit.)

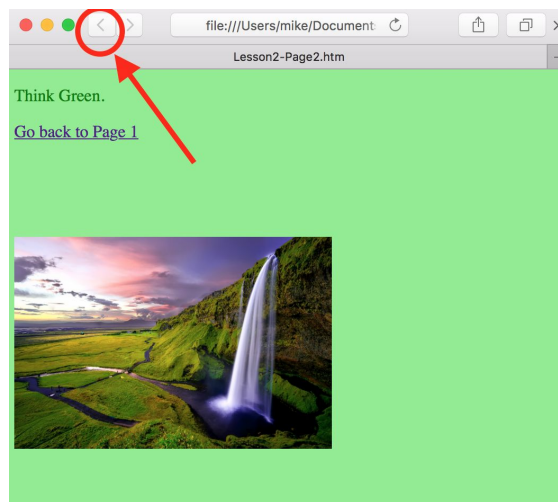   c. Place the 2 windows side-by-side as it's shown below.

3. Familiar and something new:
   a. This is very similar to what we saw in Lesson #1: `h1, h2, p, img`

   b. These are called tags. Each has a Begin Tag and an End Tag. They have to be the same. The End Tag is just a little different, as it has a "/" (backslash).

   c. Review:
      i. Begin Tag: `<h1>`
      ii. End Tag: `</h1>`

   d. Today we'll learn more tags.
      i. Notice there is a special tag that doesn't need an End Tag: **
** (This is a break. Adds a line.)
      ii. Let's focus on this new tag show below: **<a>** (called the anchor tag)

      ```
      <a href="Lesson2-Page2.htm">Go to Page 2</a>
      ```
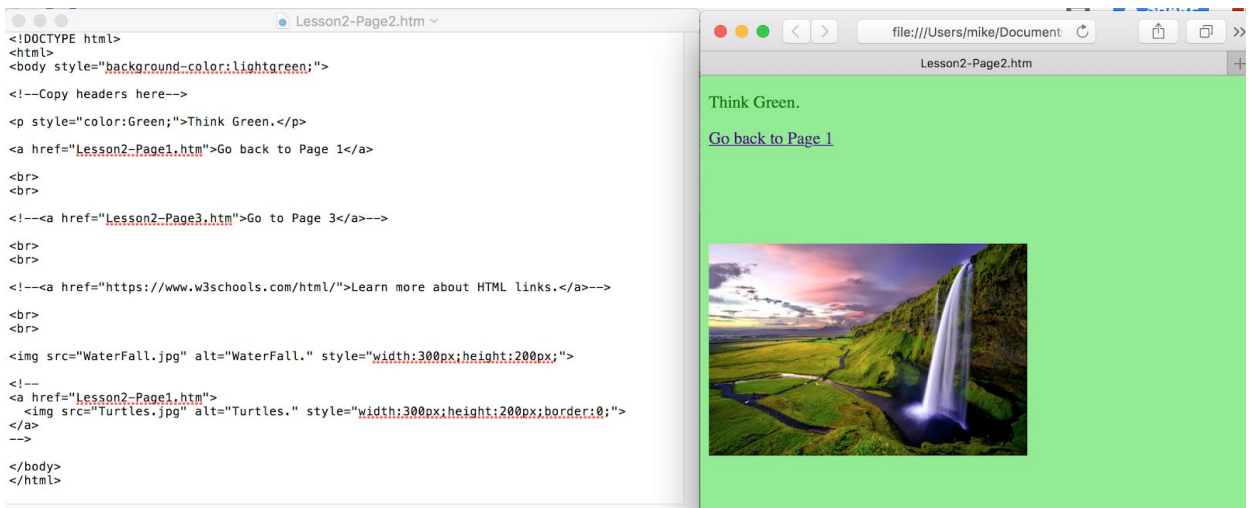
   e. Notice it points to the Page2 file, and adds some text "Go to Page 2". Let's click on it in Safari (see the red circle in the diagram above) and see what it does. Hopefully, you'll see Page 2 now, see below.

   f. And Safari -- like all browsers -- will allow you go to back to Page 1 (where you came from), see the red circle above. Try it...did you go back to Page 1?

-----Let's take a break --- Stretch and take a little walk --------------------------------

4. Let's open the **Lesson2-Page2.htm** file (see Step 1 if you need to review how to do that), and place that side-by-side with that web page in Safari, see below.

5. Let's review what we learned from last week: copy and paste.

   a. We can copy lines from one file, and paste them in another file. Let's try it.

   b. Let's copy the below text from our Lesson2-**Page1**.htm file….

   ```
   <h1>HTML - Week 2</h1>
   <h2>Page 1</h2>
   ```

   c. ...and paste it below the line shown below in the Lesson2-**Page2**.htm file.

   ```
   <!--Copy headers here-->
   ```

   d. Now change the text to make this know as "Page 2". Save and refresh. Did it work on Page 2?

   ```
   <h1>HTML - Week 2</h1>
   <h2>Page 2</h2>
   ```

6. Notice Page2 also has a "<a>" Tag, to go back to Page1, see below.

   ```
   <a href="Lesson2-Page1.htm">Go back to Page 1</a>
   ```

7. Let's alter the text "Go back to Page 1" to be "Return to Page 1", like below. Save your changes in TextEdit, and refresh your web page. Did it work?

   ```
   <a href="Lesson2-Page1.htm">Return to Page 1</a>
   ```

8. On Page 2, there's a line that told Safari to ignore, see below:

   ```
   <!--<a href="Lesson2-Page3.htm">Go to Page 3</a>-->
   ```

   a. These special ignore Begin and End tags are referred to as "Commented out" tags.
      i.   Begin tag: `<!--`
      ii. End tag: `-->`

b. Let's remove the **Commented Out / Ignore tags**, and see if they appear on the web page (after you save your TextEdit file and refresh your web page.)
  i. Do you see the link now to go to Page 3 (like below)? If so, click the link, and see if it works.
  ii. Do you see how it referenced Page 3?

c. Let's remove the 2nd **Commented Out tags**, and see if they appear on the web page (see below)

```
<!--<a href="https://www.w3schools.com/html/">Learn more about
   HTML links.</a>-->
```

  i. This is link goes outside of our 3 page web page, and goes to another web page.

  ii. Save your TextEdit file, and refresh your web page. Does the link work? How do you go back to your Page 2?

  iii. Can you change the web link to go to another web page you like? For example, change the link to be:
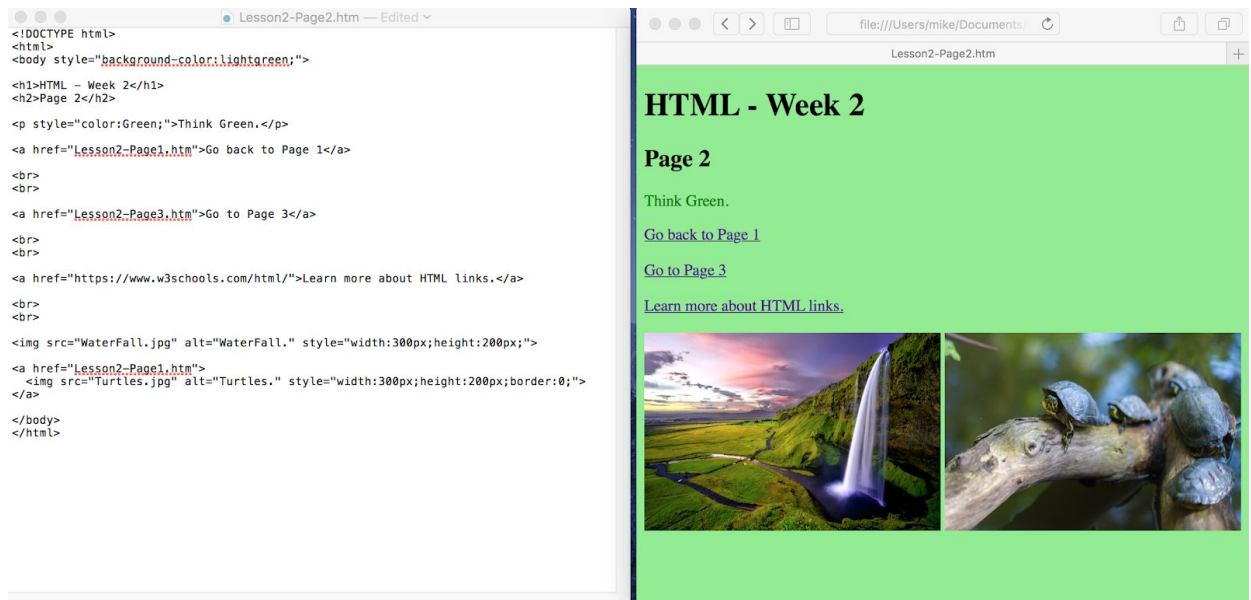
```
<a href="https://www.google.com">Learn more about HTML links.</a>
```

  And maybe we should change the text as well…

```
<a href="https://www.google.com">Do a Google search</a>
```

d. Let's remove the last **Commented Out tags**, and see if they appear on the web page (see below)

```
<!--
<a href="Lesson2-Page1.htm">
  <img src="Turtles.jpg" alt="Turtles."
  style="width:300px;height:200px;border:0;">
</a>
-->
```

```
<!DOCTYPE html>
<html>
<body style="background-color:lightgreen;">

<h1>HTML - Week 2</h1>
<h2>Page 2</h2>

<p style="color:Green;">Think Green.</p>

<a href="Lesson2-Page1.htm">Go back to Page 1</a>

<br>
<br>

<a href="Lesson2-Page3.htm">Go to Page 3</a>

<br>
<br>

<a href="https://www.w3schools.com/html/">Learn more about HTML links.</a>

<br>
<br>

<img src="WaterFall.jpg" alt="WaterFall." style="width:300px;height:200px;">

<a href="Lesson2-Page1.htm">
  <img src="Turtles.jpg" alt="Turtles." style="width:300px;height:200px;border:0;">
</a>

</body>
</html>
```

i. What page do you go to when you click on the Turtle picture? Can you see why?

ii. This shows you can place more than just text in the "<a>" tag, linking to another page.

iii. Just to check, does the Waterfall picture allow you to link to another page? Just look at the difference between the 2 image tags to see why they behave differently.

-----You're doing great. Take a break --- Stretch and take a little walk ----------------------------

9. Let's use Page 3 as a do-it-yourself exercise. Take your time, and make sure you can see why each part works. Ask for help if you get stuck.

   a. Open Lesson2-**Page3**.htm file both in Safari and TextEdit, and place the files side-by-side. (Review Steps 1 & 2 if you need.)

   b. Create a link back to Page 1. Under the below comment, create the link. If you need a hint, go to Step #5.

   ```
   <!-- Place a link here to go back to Page 1 -->
   ```

   c. Create a link back to Page 2 under the line below:

   ```
   <!-- Place a link here to go back to Page 2 -->
   ```

   d. Add a new image tag. Make this image tag link back to Page 2, under this line:

   ```
   <!-- Can you add an image in a link, to go to Page 2? -->
   ```

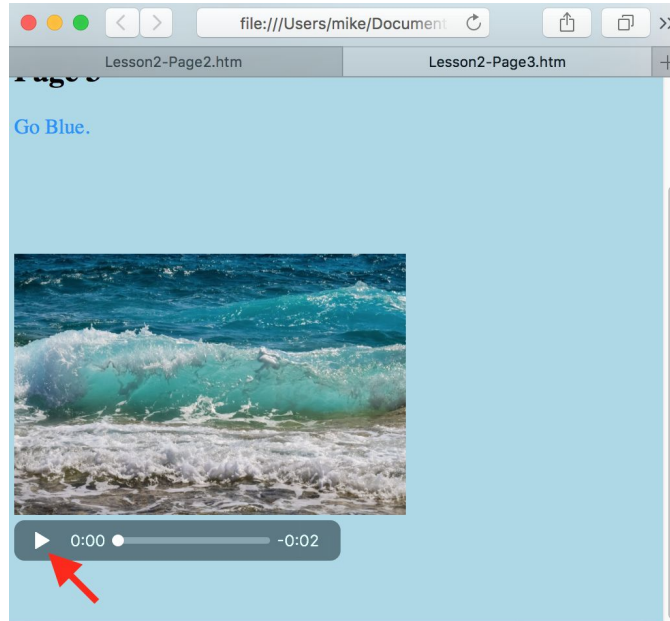10. Now let's learn how to create **audio links**. This is used to play music, add sound affects, or create pod casts.

   a. Find the next section of HTML tags. Find the below tag called "audio". Remove the commented out/ignore code, save the TextEdit file, and refresh your web page.

```
<!--
<audio controls>
  <source src="bell_service.mp3" type="audio/mpeg">
Your browser does not support the audio element.
</audio>
-->
```
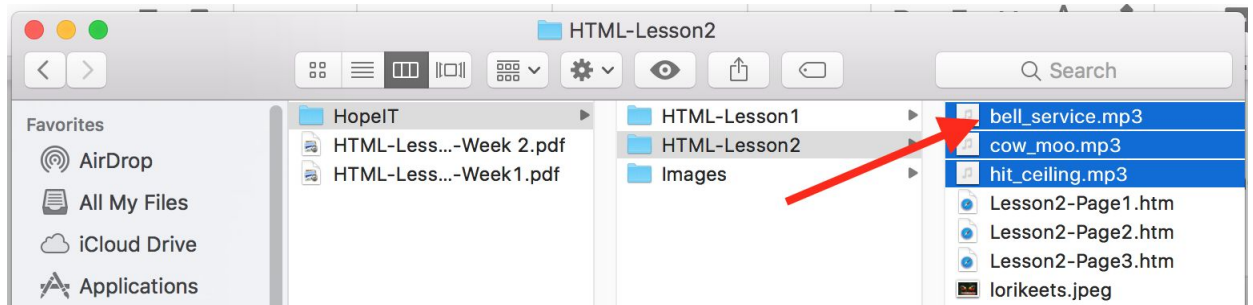
b. Do you see the controls to play sounds, like below? Click the play button (the white triangle) that the red arrow is pointing to.

c. Notice, this came from a file, called `bell_service.mp3`, see the audio tag again or step 11a. We can see that file in Finder, see below.

d. Can you copy and paste this audio tag, and create a 2nd audio tag?

e. Now, use the cow_moo.mp3 file in this 2nd audio tag. Save and refresh. Do you hear the cow once you click the play button?

f. You can even link your audio tag to an audio file on the Internet. To see this at work, remove the comment out tags for the audio tag below, and see how this would work.

```
<!--
<audio controls>
  <source
src="http://soundbible.com/mp3/Tyrannosaurus%20Rex%20Roar-SoundBi
ble.com-807702404.mp3" type="audio/mpeg">>
Your browser does not support the audio element.
</audio>
-->
```
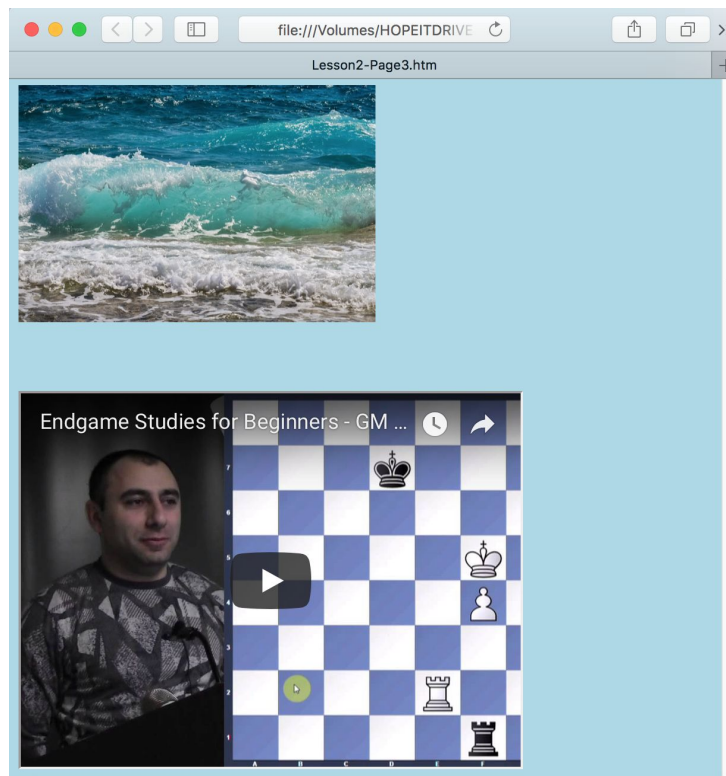
-----You're doing great. Take a break --- Stretch and take a little walk ----------------------------

12. Now let's learn about **video links**.

    a. Further down on Page 3, there's a commented out "iframe" tag. Remove the comment tags, and let's see this work.

```
<iframe width="420" height="315"
src="https://www.youtube.com/embed/qujS-6E_YYU">
</iframe>
```
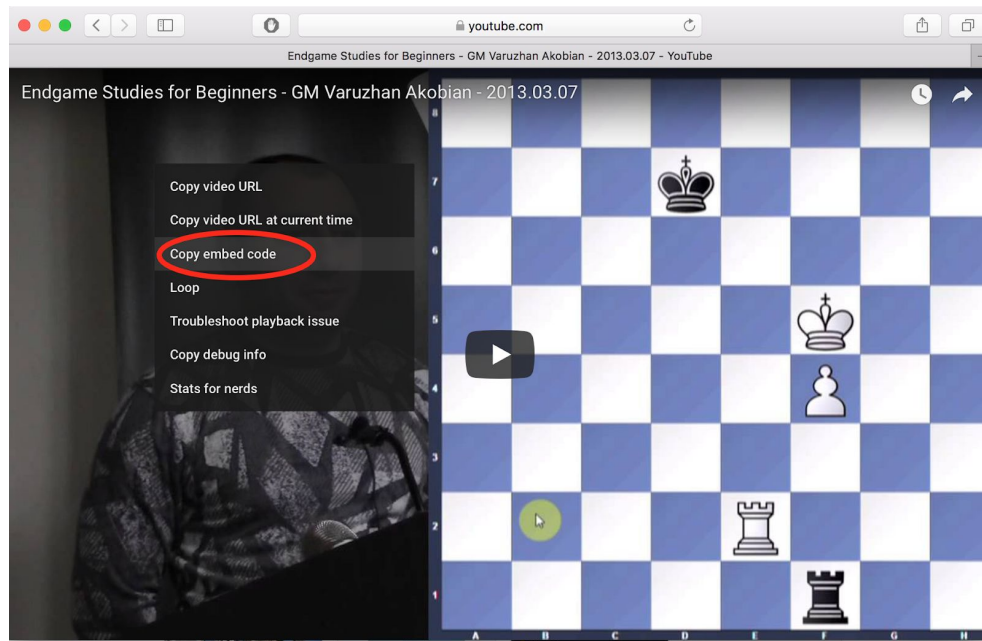
    b. After saving and refreshing your web page, the bottom of the page should look like something like below.

    c. Run the video to see if this works. (OK, now you know I like chess!)

    d. Now, let's learn how to add your own video to the page.

      i. Go to YouTube.com and find a video you are interested in. Below is the one I used:

          https://www.youtube.com/embed/qujS-6E_YYU

      ii. On the video, right click, and select the "Copy embed code", see the red circle below. This will copy the link for you.

iii. Then go to your TextEdit file, and paste what is copied. You'll see something like the below in your TextEdit file. Test it and see if that works.

<iframe width="1075" height="563" src="https://www.youtube.com/embed/qujS-6E_YYU" frameborder="0" allow="autoplay; encrypted-media" allowfullscreen></iframe>

e. Try to add a few more video links that you like.

-----Let's take a break --- Stretch and take a little walk ------------------------------

Take some time to reflect on a web page you would like to make. Here are a few things to consider:

1) Who do you want to communicate the information to?

2) What do you need to get your message across? Stories, background information, pictures, links, sounds/music, videos, etc?

3) How should this information be present? Remember, the most important thing should go first.

4) How should the information be split up? Separate pages?

-----You are done. Great job. Below is just some references. ------------------------------

 Note: Here are 3 Internet web sites to get free MP3 (audio) files.

free music:
https://www.jamendo.com/
https://www.melodyloops.com/music/

sound effects
https://www.zapsplat.com/