

MIAMI REGIONALS

CIT 273

CIT 273 HTML5 and CSS Practice

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Ks Ku

HTML, CSS and JavaScript

- HTML is for content.
- CSS is for format.
- JavaScript is for Dynamic portion.

New HTML5 Elements

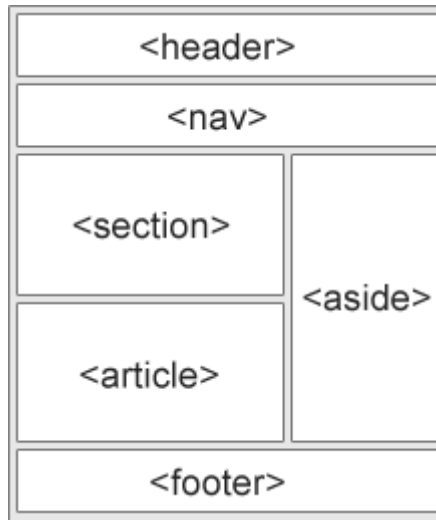
The most interesting new elements are:

- New semantic elements like `<header>`, `<footer>`, `<article>`, and `<section>`.
- New form control attributes like number, date, time, calendar, and range.
- New graphic elements: `<svg>` and `<canvas>`.
- New multimedia elements: `<audio>` and `<video>`.

Website Layout Using HTML5

HTML5 offers new semantic elements that define different parts of a web page:

Example of layout.



header	Defines a header for a document or a section
nav	Defines a container for navigation links
section	Defines a section in a document
article	Defines an independent self-contained article
aside	Defines content aside from the content (like a sidebar)
footer	Defines a footer for a document or a section
details	Defines additional details
summary	Defines a heading for the details element

Download files and organize them.

Download files and organize them.

- 1) Create “Module_3” folder under root folder.
- 2) Download below files and move them to “Module_3” folder.
 - Allegro.mp3
 - small.mp4
 - second.html
 - third.html
- 3) Create “images” folder inside “Module_3” folder
- 4) Download below image file(s) and move it/them to “images” folder.
 - man.jpg

“html5cssPractice.html”

1. Create “html5cssPractice.html”

- 1) Create “html5cssPractice.html” inside “Module_3” folder
- 2) Type basic html5 structure.

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

</head>
<body>
<header>

</header>
<nav>

</nav>
<section>

</section>
<aside>

</aside>
<footer>

</footer>
</body>
</html>
```

html5cssPractice.html

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

</head>
<body>
<header>

</header>
<nav>

</nav>
<section>

</section>
<aside>

</aside>
<footer>

</footer>
</body>
</html>
```

	<header>...</header>	City Gallery
London Paris Tokyo	<nav>.....</nav>	
This is for Section 1 World! U.S.A Japan India	<section > <article> ... </article> <article> ... </article>	
This is for Section 2 This is for article 1 London 5/25/2015 London is the capital city of England. It is the most populous city in the United S with a metropolitan area of over 13 million inhabitants. This is for article 2 Columbus 6/25/2015 Columbus is the capital city of Ohio. It is the most populous city in the United St metropolitan area. Standing on the OHIO River.	<aside>...</aside>	
This is for aside. Video example Audio example	<footer>...</footer>	
		Copyright © W3Schools.com

2. Add some (title and meta) information between `<head>....</head>` tag.

***Make sure that you save your file each time when you update.**

```
<!DOCTYPE html>
```

```
<html>
```

```
<head>
```

```
<title>HTML5 and CSS practice</title>
```

```
<meta charset="UTF-8">
```

```
</head>
```

```
<body>
```

```
...
```

3. Add header between <header>...</header>tag

```
<body>
```

```
<header>
```

```
<h1>Miami University</h1>
```

```
</header>
```

```
<nav>
```

```
</nav>
```

```
...
```

4. Add navigation link between <nav>...</nav> tag

```
<body>
<header>
<h1>Miami University</h1>
</header>
<nav>
  <h2>This is for Navigation </h2>
  <p><a href="html5cssPractice.html">Home Page</a>
  <a href="second.html">2nd Web Page</a>
  <a href="Third.html">3rd Web Page</a>
  </p>
</nav>
```

5. Add section and article between <section>...</section> tag

```
<section>
```

```
<h2>This is for Section </h2>
```

```
<article id="london">
```

```
<h3>This is for article 1</h3>
```

```
<h4>London</h4>
```

```
<datetime>5/25/2025</datetime>
```

```
<p>London is the capital city of England. It is the most populous  
city in the United Kingdom, with a metropolitan area of over 13  
million inhabitants.</p>
```

```
</article>
```

```
</section>
```

6. Add another article inside section>...</section>

```
<section>
```

```
<h2>This is for Section </h2>
```

```
<article id="london">
```

```
...
```

```
</article>
```

```
<article id="columbus">
```

```
<h3>This is for article 2</h3>
```

```
<h4>Columbus</h4>
```

```
<figure>
```

```

```

```
<figcaption>Fig1. I am Rocky .</figcaption>
```

```
</figure>
```

```
</article>
```

```
</section>
```

7. Add <aside>...</aside> - “How to add video and audio?”

<aside>

<h2>This is for aside.</h2>

<h3>Video example</h3>

<p><video width="320" height="300" controls>

<source src= "small.mp4" type="video/mp4">

Your browser does not support the video tag.

</video> </p>

<h3>Audio example</h3>

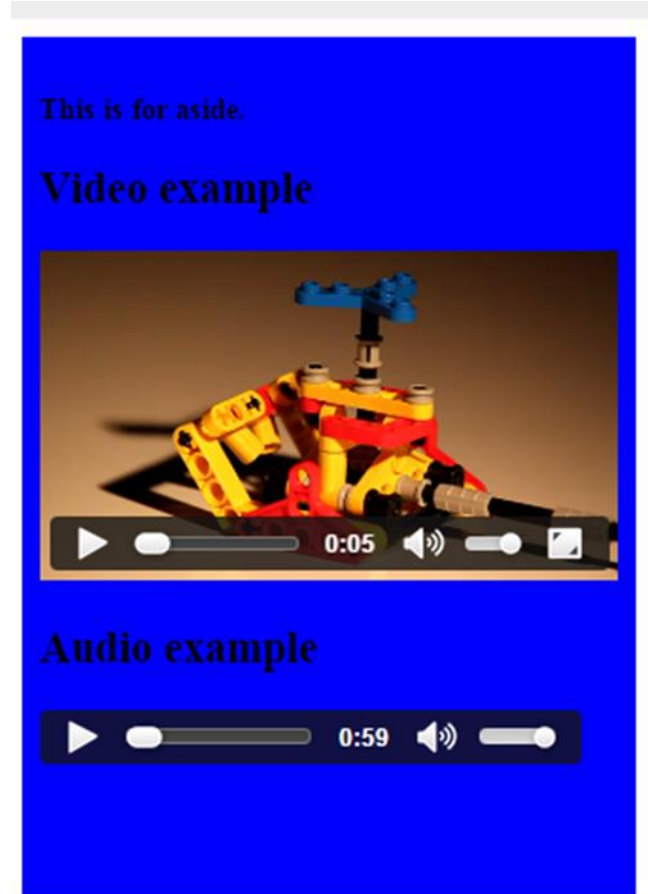
<p><audio controls>

<source src="Allegro.mp3" type="audio/mpeg">

Your browser does not support the audio element.

</audio></p>

</aside>



8. Add footer between <footer>...</footer> tag

```
<footer>
```

```
Copyright © MiamiOh.edu<br>
```

```
<p>Contact information:
```

```
<a href="mailto:someone@example.com">  
  someone@example.com</a>.</p>
```

```
</footer>
```

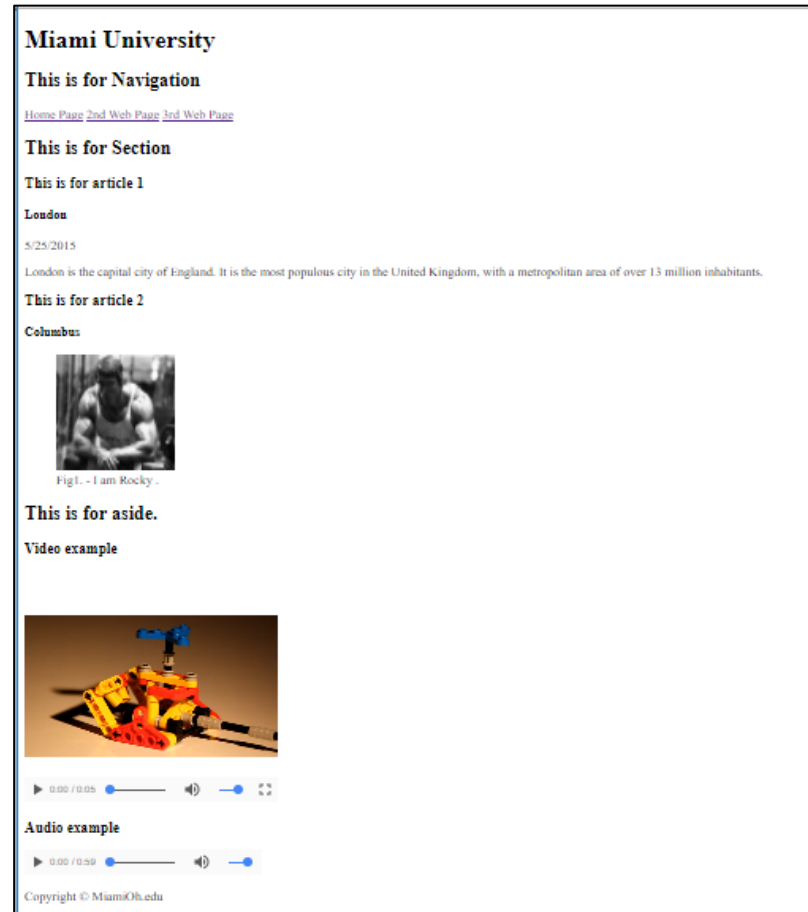
```
</html>
```

Mid checking point

HTML5 basic structure

***Make sure that you save your file each time when you update.**

http://cit-web.regionals.miamioh.edu/users/uniqueid/module_3/html5cssPractice.html



`<header>...</header>`

`<nav>.....</nav>`

`<section >`
`<article>`

...

`</article>`
`<article>`
...

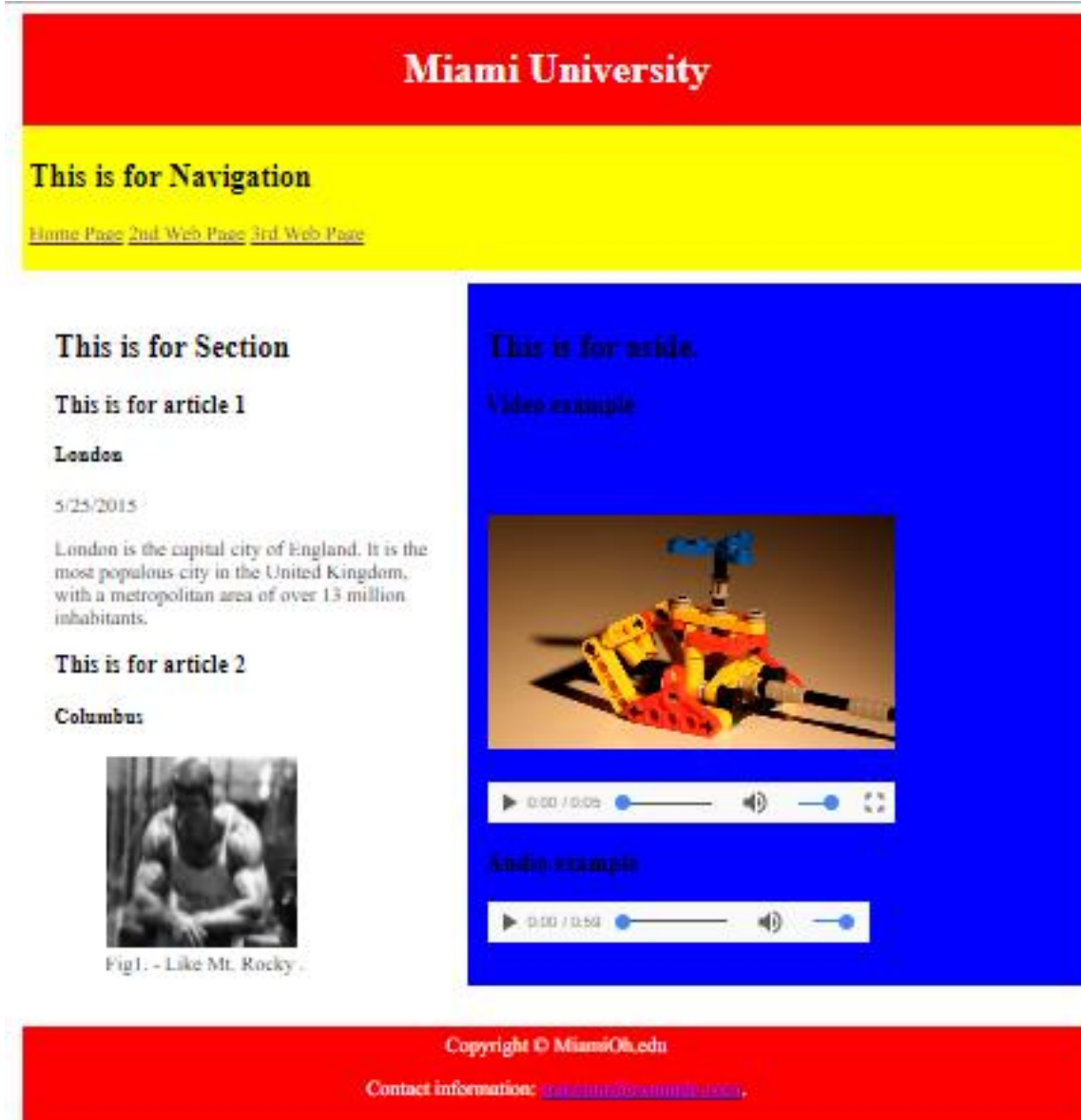
`</article>`

`<aside>...</aside>`

`<footer>...</footer>`



We will format the web page like below using css.



9. Link “html_5.css” file in <head>....</head> tag

We will create the file from next step. You may have css inside html. However, using link with independent css file will be more useful.

*We are using relative path.

```
<!DOCTYPE html>
<html>
<head>
<title>HTML5 and CSS practice</title>
<meta charset="UTF-8">

<link rel="stylesheet" type="text/css" href="html_5.css">

</head>
<body>
...
```

10. Save “html5cssPractice.html”

Save “html5cssPractice.html” and close it.

From next section, we will create “html_5.css” for format information of “html5cssPractice.html”.

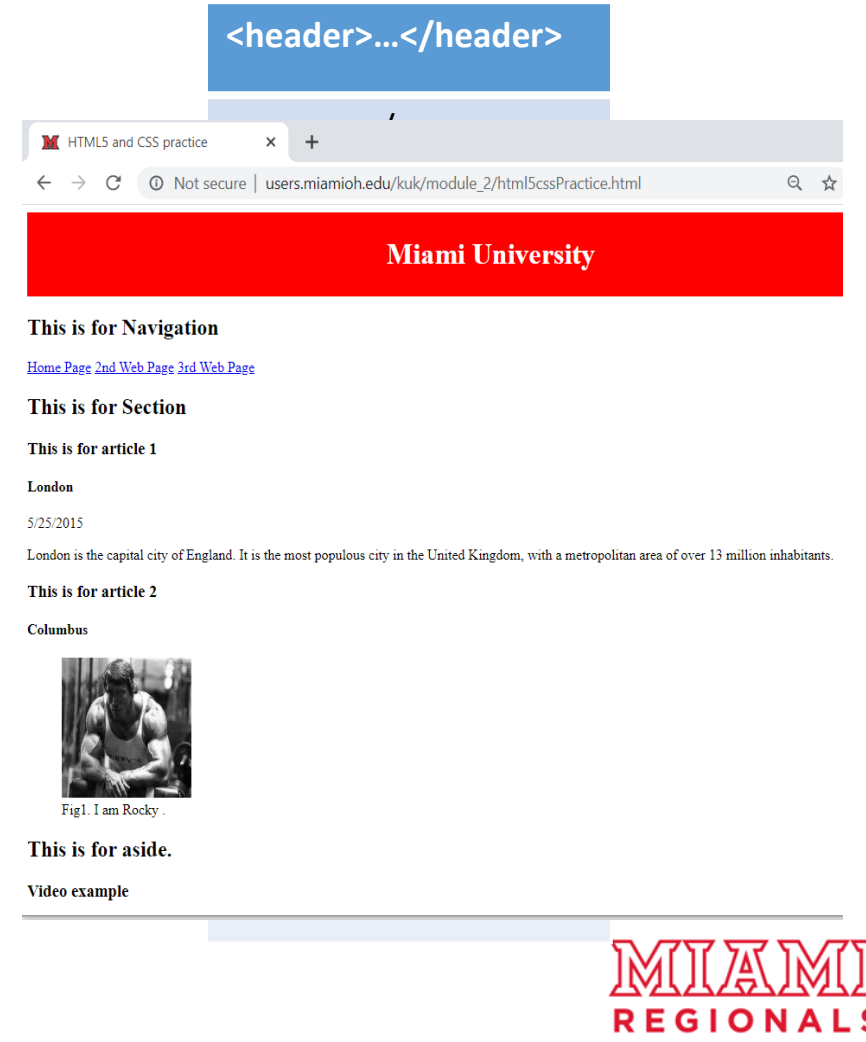
“html_5.css”

CSS is for web page format.

1. Create “html_5.css”

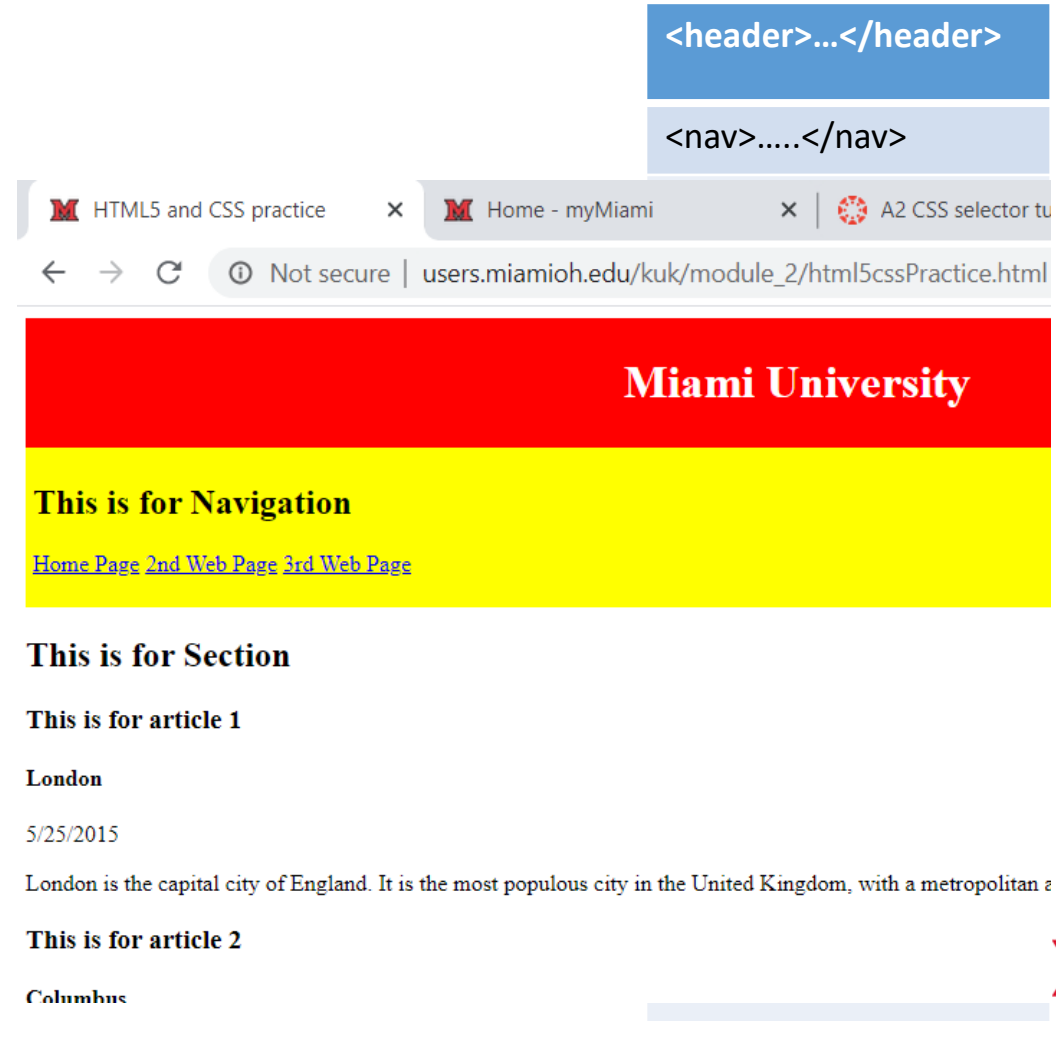
- 1) Create “html_5.css” inside “Module_3” folder. The file extension is .css and it is linked to previous html file.
- 2) We are using HTML5 built-in tags as **Selectors**. It means, css will apply “header” format to <header>...</header> on all linked html files.
- 3) Add format information for <header> and check the result.
- 4) Make sure that you have : between attribute and value and ; at the end of line.
- 5) **Make sure that you save your file each time when you update.**

```
header {  
    background-color:red;  
    color:white;  
    text-align:center;  
    padding:5px;  
}
```



2. Add format information for nav

```
nav {  
    background-color:yellow;  
    padding:5px;  
}
```

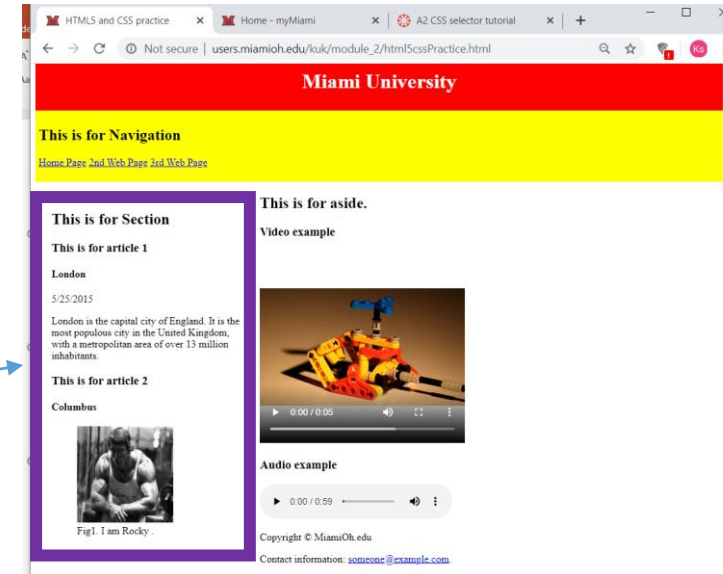


3. Add format for section

Using margin, padding, width and float, all section will move to left and the rest will move to right side. To get proper size, you have to try several times.

***Make sure that you save your file each time when you update.**

```
section {  
  padding:15px;  
  margin: 10px 10px 10px 10px;  
  width: 300px;  
  float: left;  
}
```



```
<header>...</header>
```

```
<nav>.....</nav>
```

```
<section >  
<article>
```

```
...
```

```
</article>
```

```
<article>
```

```
...
```

```
</article>
```

```
<aside>...</aside>
```

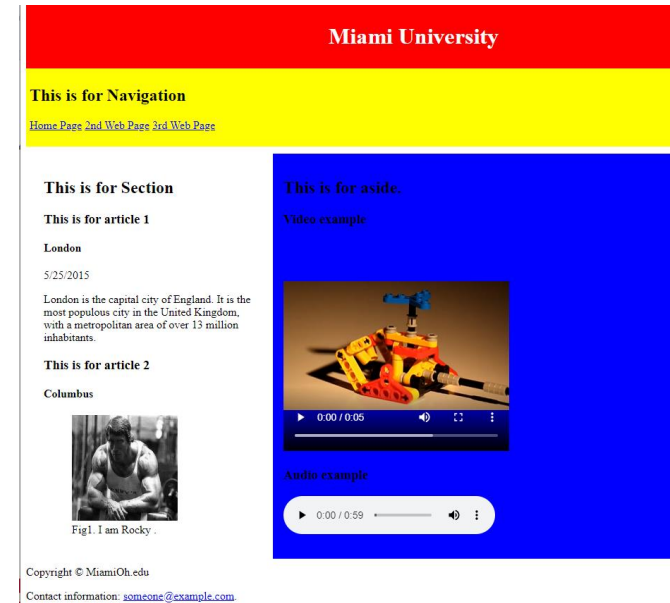
```
<footer>...</footer>
```

4. Add format for aside

Apply below format for `<aside> ...</aside>`.

***Make sure that you save your file each time when you update.**

```
aside{  
  background-color:blue;  
  padding:15px;  
  margin:10px 0px 10px 350px;  
}
```



`<header>...</header>`

`<nav>.....</nav>`

`<section >
<article>`

`...
</article>`

`<article>`

`...
</article>`

`<aside>...</aside>`

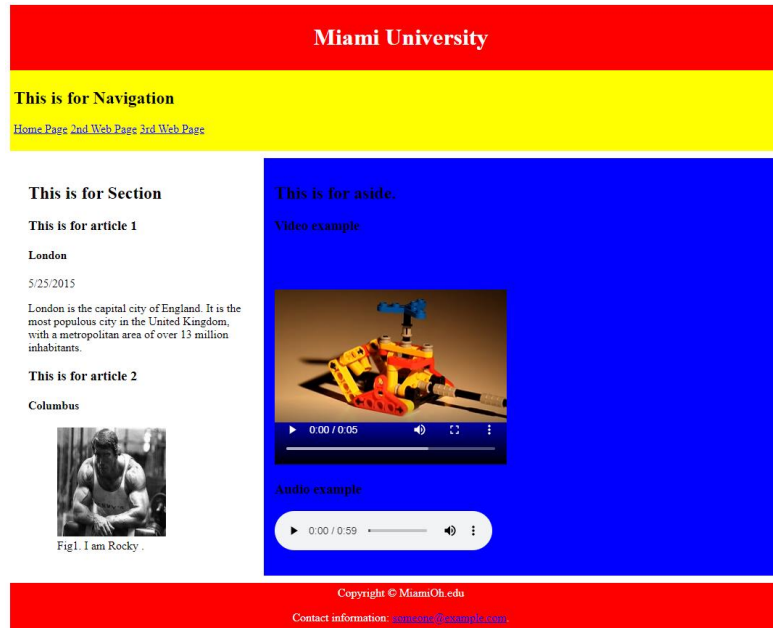
`<footer>...</footer>`



5. Add format for footer

Apply below format for <footer>
...</footer>.

```
footer {  
    background-color:red;  
    color:white;  
    clear:both;  
    text-align:center;  
    padding:5px;  
}
```



<header>...</header>

<nav>.....</nav>

<section >
<article>

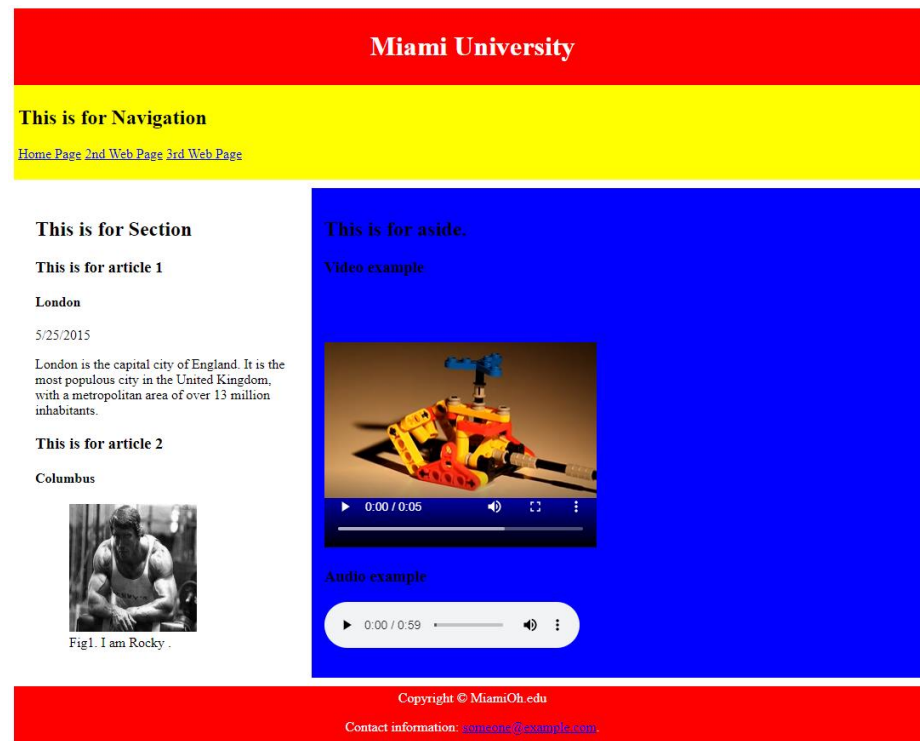
...
</article>
<article>
...
</article>

<aside>...</aside>

<footer>...</footer>

Mid checking point

- 1) This should be your current web page.
 - 2) From next section, we will apply a layout with `<div> ...</div>`
- *Make sure that you save your file each time when you update.**



“Jello Layout”

Applying a layout with `<div> ...</div>`

1. Add <div> tag inside “html5cssPractice.html”

- 1) Opening tag <div id =“allcontent”>should be after <body>.
- 2) id =“allcontent” will work like a selector in the css file. We may use <div class =“allcontent”> instead. If we use id, the name should be unique. If we use class, you may use same names at several locations to apply same format together.
- 3) Closing tag </div> should be between </footer> and </body>

***Make sure that you save your file each time when you update.**

```
<!DOCTYPE html>
<html>
...
<body>
<div id="allcontent">
<header>
...
</footer>
</div>
</body>
</html>
```

```
<!DOCTYPE html>
<html>
...
<body>
<div id="allcontent">
<header>...</header>
```

```
<nav>.....</nav>
```

```
<section >
<article>
```

```
...
</article>
<article>
...
</article>
```

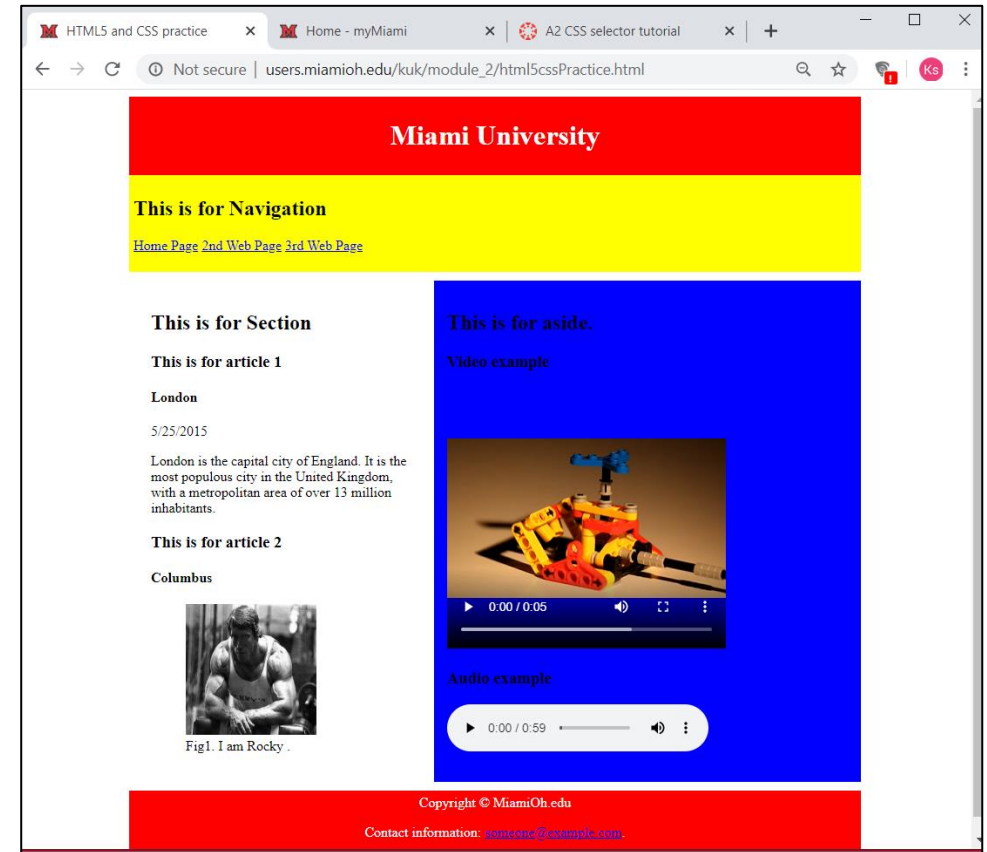
```
<aside>...</aside>
```

```
<footer>...</footer>
</div>
</body>
</html>
```

2. Add format for <div id ="allcontent"> ...</div> inside “html_5.css”

- 1) We will use selector div for <div> tag. Then we should indicate the name.
- 2) Since we use id, we should use “#id_name”. If we use class, we should “.class_name”.
- 3) Add below codes at the end of “html_5.css”. Save it. Then check (refresh) your web page.
- 4) To see the result properly, maximize your Web browser and check it. It will be have same left and right margin. → we call this layout as “Jello” layout.
- 5) ***Make sure that you save your file each time when you update.**

```
div#allcontent{  
width: 840px;  
margin-left:auto;  
margin-right:auto;  
}
```



Jello layout:

1. Put `<div id =“ ”> ....</div>` in HTML.
 2. Set certain width from CSS.
 3. Set auto margin in left and right.
- browser will give auto margin and put the content in the center.

“html5cssPractice”

...

`<body>`

`<div id="allcontent">`

`<header>`

`<h1>City Gallery</h1>`

`</header>`

...

...

`<footer>`

Copyright © W3Schools.com

`</footer>`

`</div>`

`</body>`

...

Set overall area with
`<div id="allcontent">...</div>` in
“html5cssPractice.html”

“html_5.CSS”

...

`footer {`

`background-color:black;`

`color:white;`

`clear:both;`

`text-align:center;`

`padding:5px;`

`}`

`div#allcontent{`

`width: 840px;`

`margin-left:auto;`

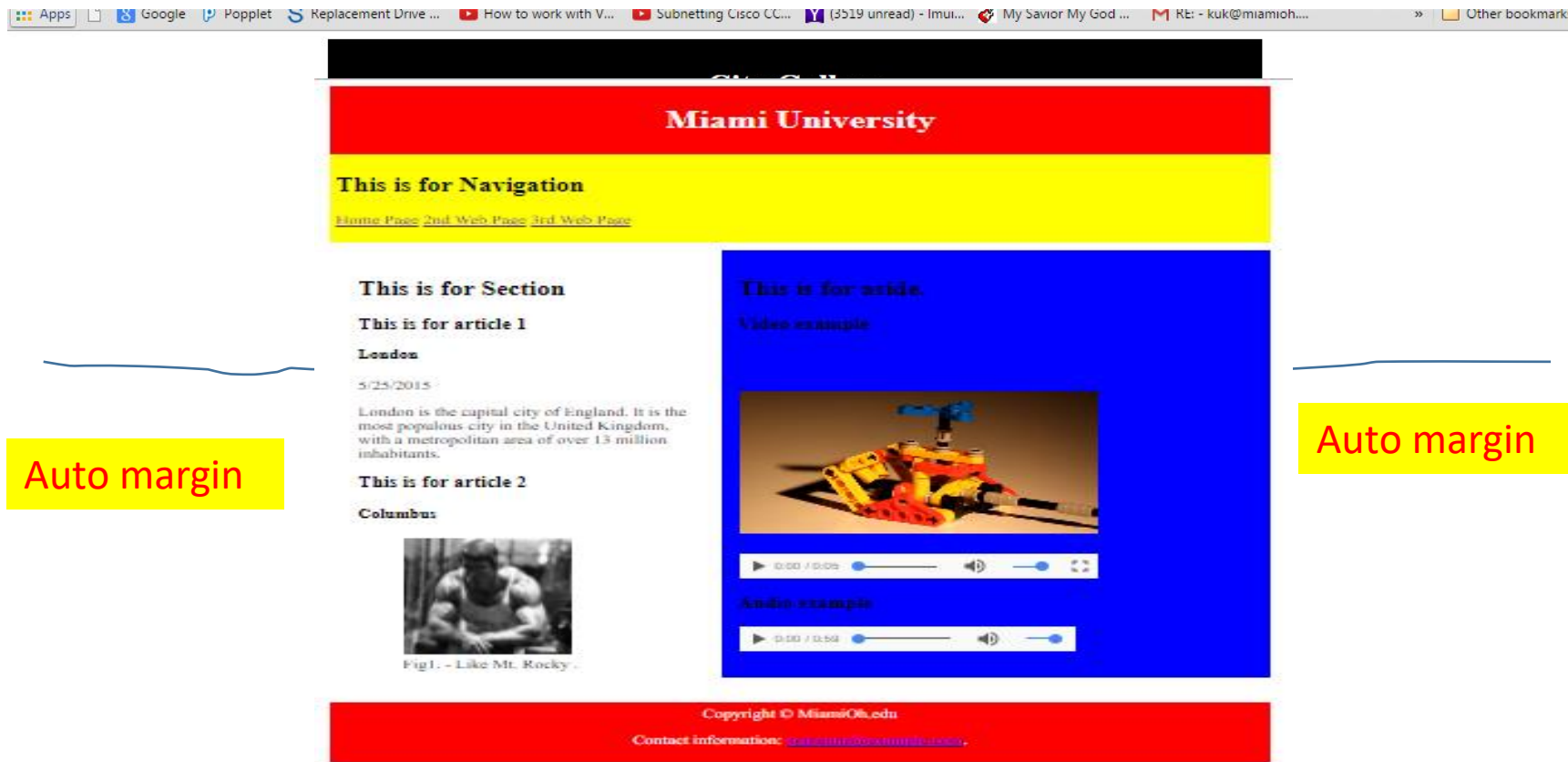
`margin-right:auto;`

`}`

Add `div#allcontent{...}` at
the end of “html_5.css”

Final result for “html5cssPractice.html”

→ Browsers will give auto margin and put the content in the center.



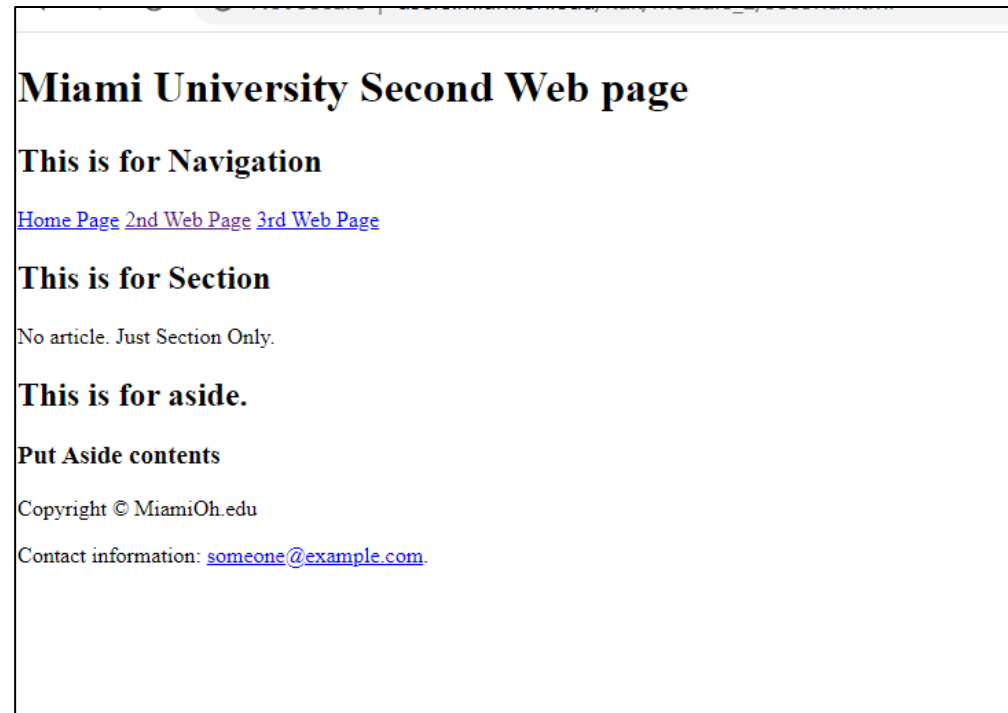
Applying “html_5.css” to multiple HTML files

1. Check “second.html”

1). Make sure that you have downloaded “second.html” and moved it inside “Module_2” folder.

2) Open a web browser and go to

http://cit-web.regionals.miamioh.edu/users/uniqueid/module_3/second.html



2. Apply “html_5.css” to “second.html”

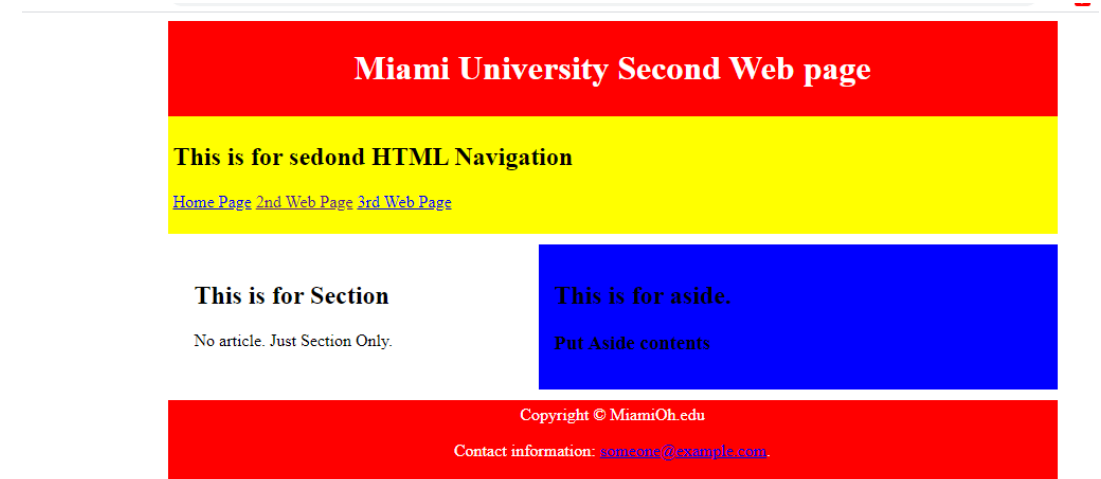
- 1). Open “second.html” (with notepad++ or any text editor you are using.)
- 2) Add <link ... > tag. “second.html” has the same structure.
- 3) Make sure to save it.
- 4) Check (refresh) your “second.html”

http://cit-web.regionals.miamioh.edu/users/uniqueid/module_3/second.html

```
<!DOCTYPE html>
<html>
<head>
<title>Second HTML</title>
<meta charset="UTF-8">
```

```
<link rel="stylesheet" type="text/css" href="html_5.css">
```

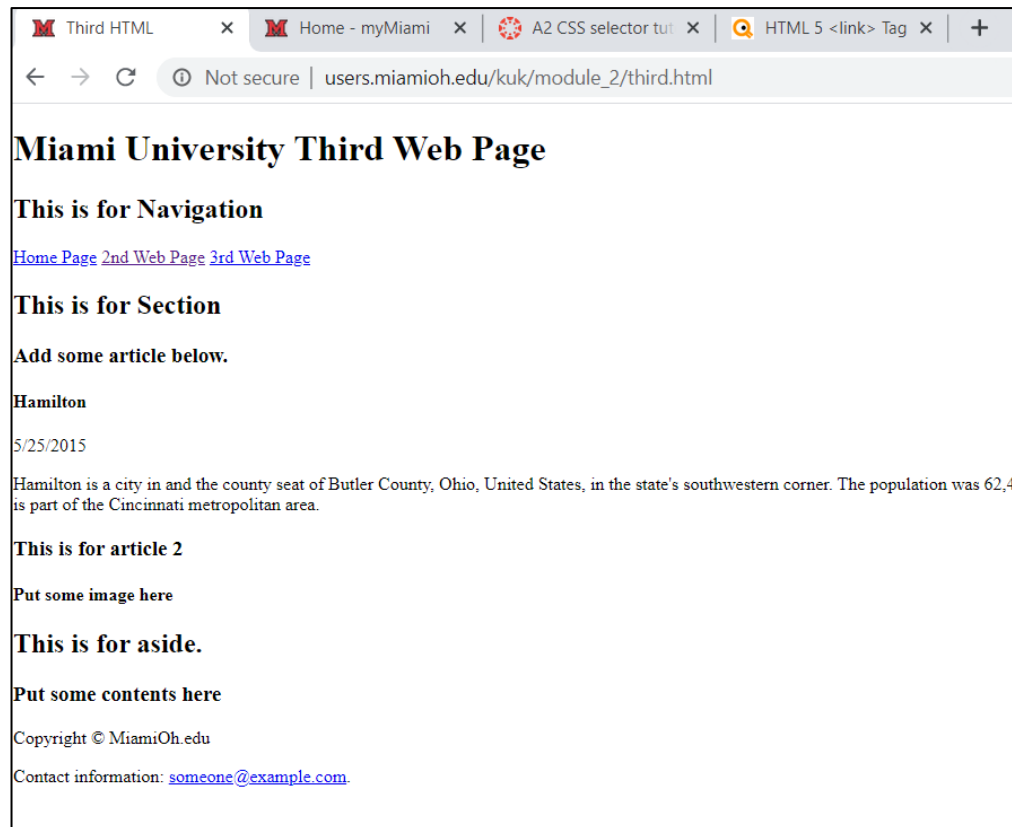
```
</head>
<body>
<div id="allcontent">
...
...
</html>
```



3. Check “third.html”

- 1). Make sure that you have downloaded “third.html” and moved it inside “Module_2” folder.
- 2) Open a web browser and go to

http://www.users.miamioh.edu/your_ID/module_2/third.html



4. Apply “html_5.css” to “third.html”

- 1). Open “third.html” (with notepad++ or any text editor you are using.)
- 2) Add <link ... > tag. “third.html” has the same structure.
- 3) Make sure to save it.
- 4) Check (refresh) your “third.html”

http://cit-web.regionals.miamioh.edu/users/uniqueid/module_3/third.html

```
<!DOCTYPE html>
<html>
<head>
<title>Thrid HTML</title>
<meta charset="UTF-8">
```

```
<link rel="stylesheet" type="text/css" href="html_5.css">
```

```
</head>
<body>
<div id="allcontent">
...
...
</html>
```



Submit “Module_3” folder URL.

Submit your “Module_3” folder URL. NOT a web page but a folder so that I can see all other files inside the folder. It should be similar like below:

http://cit-web.regionals.miamioh.edu/users/uniqueid/module_3

The END