

# HTML 5 Sections

**HTML**



**Bok, Jong Soon**

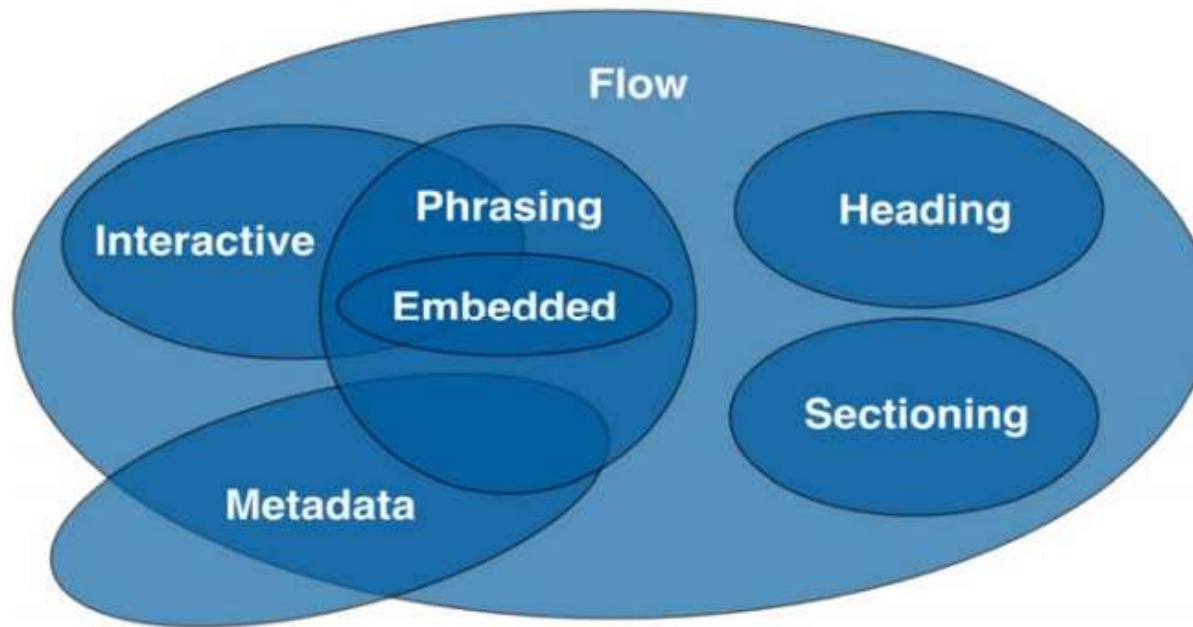
**javaexpert@nate.com**

**<https://github.com/swacademy/HTML5>**

# Contents Model

| Contents Model | Element |
|----------------|---------|
|                |         |

- A normative description of what content must be included as children and descendants of the element.



## Contents Model – Metadata content

- Is content that sets up the presentation or behavior of the rest of the content, or that sets up the relationship of the document with other documents, or that conveys other "out of band" information.
- **base, command, link, meta, noscript, script, style, title**

# Contents Model – Flow content

- Most elements that are used in the *body* of documents and applications.
- `a`, `abbr`, `address`, `map`, `area`, `article`, `aside`, `audio`, `b`, `bdo`, `blockquote`, `br`, `button`, `canvas`, `cite`, `code`, `command`, `datalist`, `del`, `details`, `dfn`, `div`, `dl`, `em`, `embed`, `fieldset`, `figure`, `footer`, `form`, `h1` ~ `h6`, `header`, `hgroup`, `hr`, `i`, `iframe`, `img`, `input`, `ins`, `kbd`, `keygen`, `label`, `map`, `mark`, `math`, `menu`, `meter`, `nav`, `noscript`, `object`, `ol`, `output`, `p`, `pre`, `progress`, `q`, `ruby`, `samp`, `script`, `section`, `select`, `small`, `span`, `strong`, `style[scoped]`, `sub`, `sup`, `svg`, `table`, `textarea`, `time`, `ul`, `var`, `video`, `wbr`
- `text`

## Contents Model – Sectioning content

- Is content that defines the scope of *headings* and *footers*.
- **article, aside, nav, section**

# Contents Model – Heading content

- Defines the header of a section.
- **h1**, **h2**, **h3**, **h4**, **h5**, **h6**

```
<!-- Heading Content, (Head) -->
```

**Hello,World**

**Hello,World**

**Hello,World**

**Hello,World**

**Hello,World**

**Hello,World**

# Contents Model – Phrasing content

- Is the text of the document, as well as elements that mark up that text at the intra-paragraph level.
- `a`, `abbr`, `map`, `area`, `audio`, `b`, `bdo`, `br`, `button`, `canvas`, `cite`, `code`, `command`, `datalist`, `del`, `dfn`, `em`, `embed`, `i`, `iframe`, `img`, `input`, `ins`, `kbd`, `keygen`, `label`, `map`, `mark`, `math`, `meter`, `noscript`, `object`, `output`, `progress`, `q`, `ruby`, `samp`, `script`, `select`, `small`, `span`, `strong`, `sub`, `sup`, `svg`, `textarea`, `time`, `var`, `video`, `wbr`
- `text`

## Contents Model – Embedded content

- Is content that imports another resource into the document, or content from another vocabulary that is inserted into the document.
- `audio`, `canvas`, `embed`, `iframe`, `img`, `math`, `object`, `svg`, `video`



## Contents Model – Interactive content

- Is content that is specifically intended for user interaction.
- `a`, `audio[controls]`, `button`, `details`, `embed`, `iframe`, `img[usemap]`, `input`, `keygen`, `label`, `menu`, `object[usemap]`, `select`, `textarea`, `video[controls]`

# Semantic Markup Benefits

- Based on research (Opera, Google studies on commonly used **div** *class* and *id* names)
- Cleaner, less verbose markup (replace **div** and **span** elements with meaningful elements)
- Machine readable:
  - Search engines
  - Syndication
- Linking and sharing

# <body>

body

Attributes

.

- Defines the document's body.
- Differences Between HTML 4.01 and HTML5
  - All layout attributes is removed from HTML5.
  - All layout attributes is *deprecated* in HTML 4.01.

x

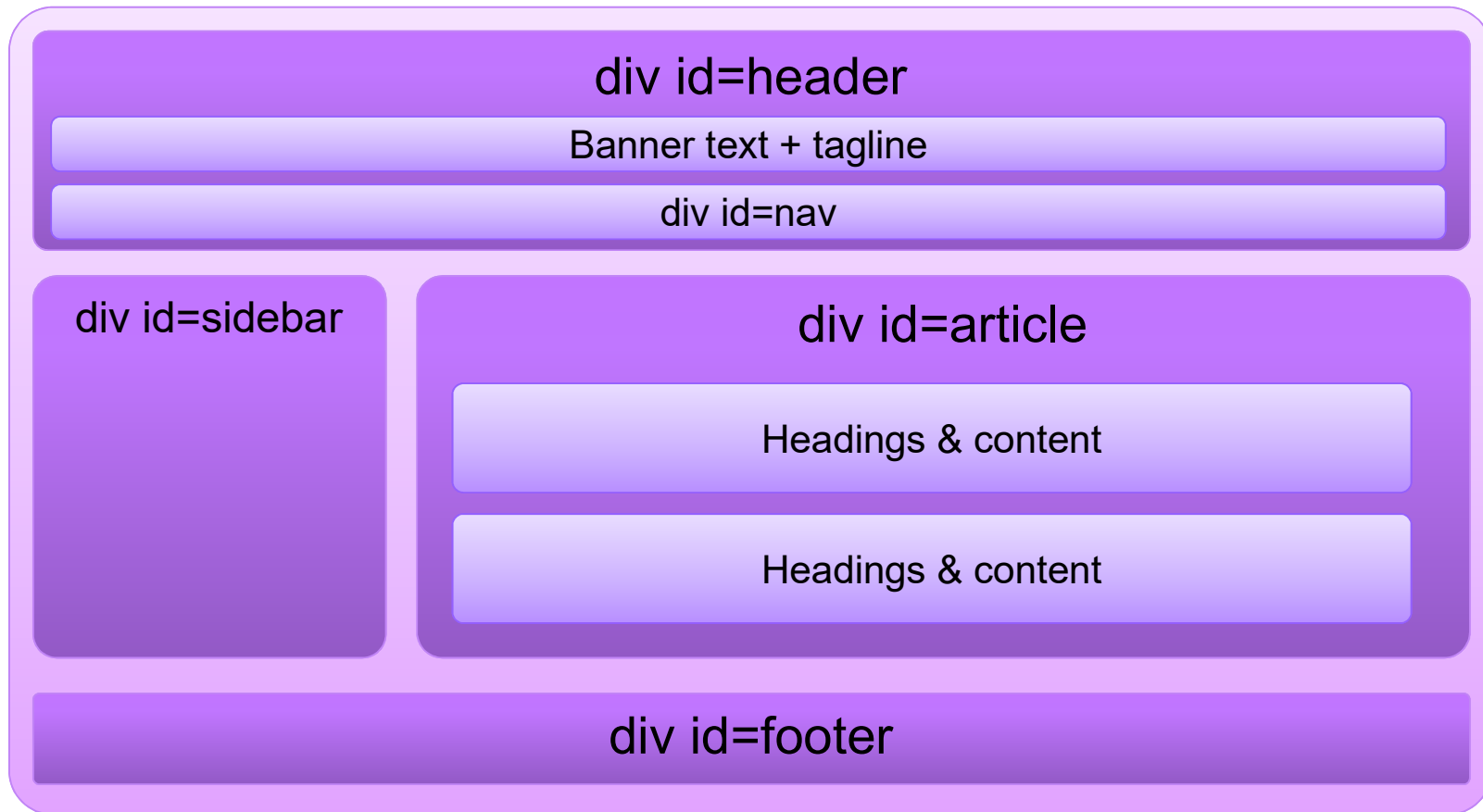
- **alink**, **background**, **bgcolor**, **link**, **text**, **vlink**

# Typical HTML Page Structure

```
1 <div id="header">
2   <h1>Tales of Woe</h1>
3   <p class="tagline">The never ending saga continues...</p>
4   <div id="nav">
5     <h2>Navigation</h2>
6     <ul>
7       <li><a href="one.html">Page One</a></li>
8       <li><a href="two.html">Page Two</a></li>
9       <li><a href="three.html">Page the Third</a></li>
10    </ul>
11  </div>
12 </div>
13 <div class="article">
14   <h2>The Stagnant Staircase</h2>
15   <p>It was a dark and stormy night...</p>
16 </div>
17 <div id="footer">
18   <p>©2010 In Your Nightmares Productions.</p>
19 </div>
```

div id

# How HTML 4-style structure might look

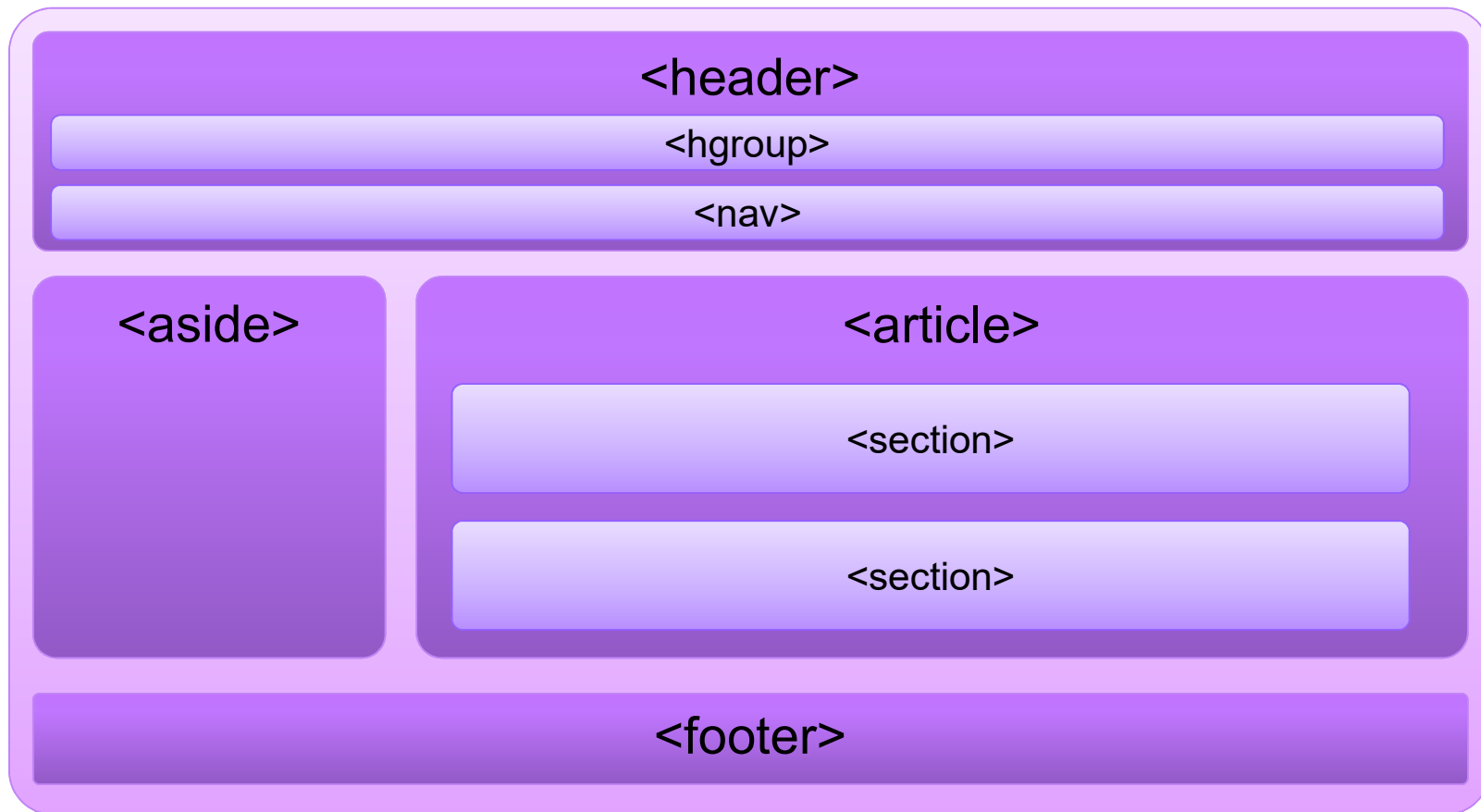


# Typical HTML5 Page Structure

```
1 <header>
2   <hgroup>
3     <h1>Tales of Woe</h1>
4     <h2>The never ending saga continues...</h2>
5   </hgroup>
6   <nav>
7     <h2>Navigation</h2>
8     <ul>
9       <li><a href="one.html">Page One</a></li>
10      <li><a href="two.html">Page Two</a></li>
11      <li><a href="three.html">Page the Third</a></li>
12    </ul>
13  </nav>
14 </header>
15 <article>
16   <h2>The Stagnant Staircase</h2>
17   <p>It was a dark and stormy night...</p>
18 </article>
19 <footer>
20   <p>©2010 In Your Nightmares Productions.</p>
21 </footer>
```

HTML 5 header, nav, article, footer

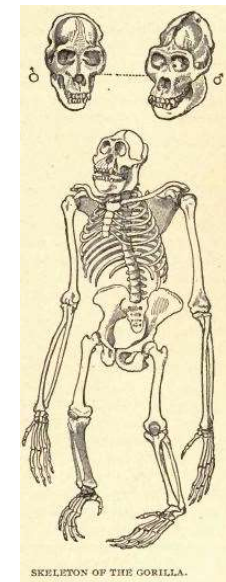
# Structural elements in HTML5



# Sectioning off headings

```
<section>
  <h1>Homininae</h1>
  <section>
    <h1>Gorillini</h1>
    <section>
      <h1>Gorilla gorilla</h1>
      <section>
        <h1>Gorilla gorilla gorilla</h1>
        <h1>Gorilla gorilla diehli</h1>
      </section>
      <h1>Gorilla beringei</h1>
      <section>
        <h1>Gorilla beringei beringei</h1>
        <h1>Gorilla beringei graueri</h1>
      </section>
    </section>
  </section>
  <section>
    <h1>Hominini</h1>
    <section>
      <h1>Pan</h1>
      <section>
        <h1>Pan troglodytes</h1>
        <section>
          <h1>Pan troglodytes troglodytes</h1>
```

```
      <h1>Pan troglodytes verus</h1>
      <h1>Pan troglodytes vellerosus</h1>
      <h1>Pan troglodytes schweinfurthii</h1>
    </section>
    <h1>Pan paniscus</h1>
  </section>
</section>
</section>
<section>
  <h1>Homo</h1>
  <section>
    <h1>Homo sapiens</h1>
    <section>
      <h1>Homo sapiens sapiens</h1>
    </section>
  </section>
</section>
</section>
```





# Sectioning results:

## Homininae

### Gorillini

Gorilla gorilla

Gorilla gorilla gorilla

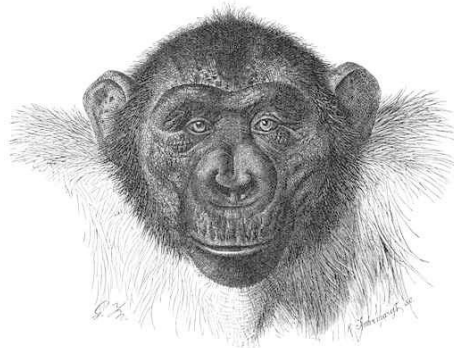
Gorilla gorilla diehli

Gorilla beringei

Gorilla beringei beringei

Gorilla beringei graueri

### Hominini



## Pan

Pan troglodytes

Pan troglodytes troglodytes

Pan troglodytes verus

Pan troglodytes vellerosus

Pan troglodytes schweinfurth

ii

Pan paniscus

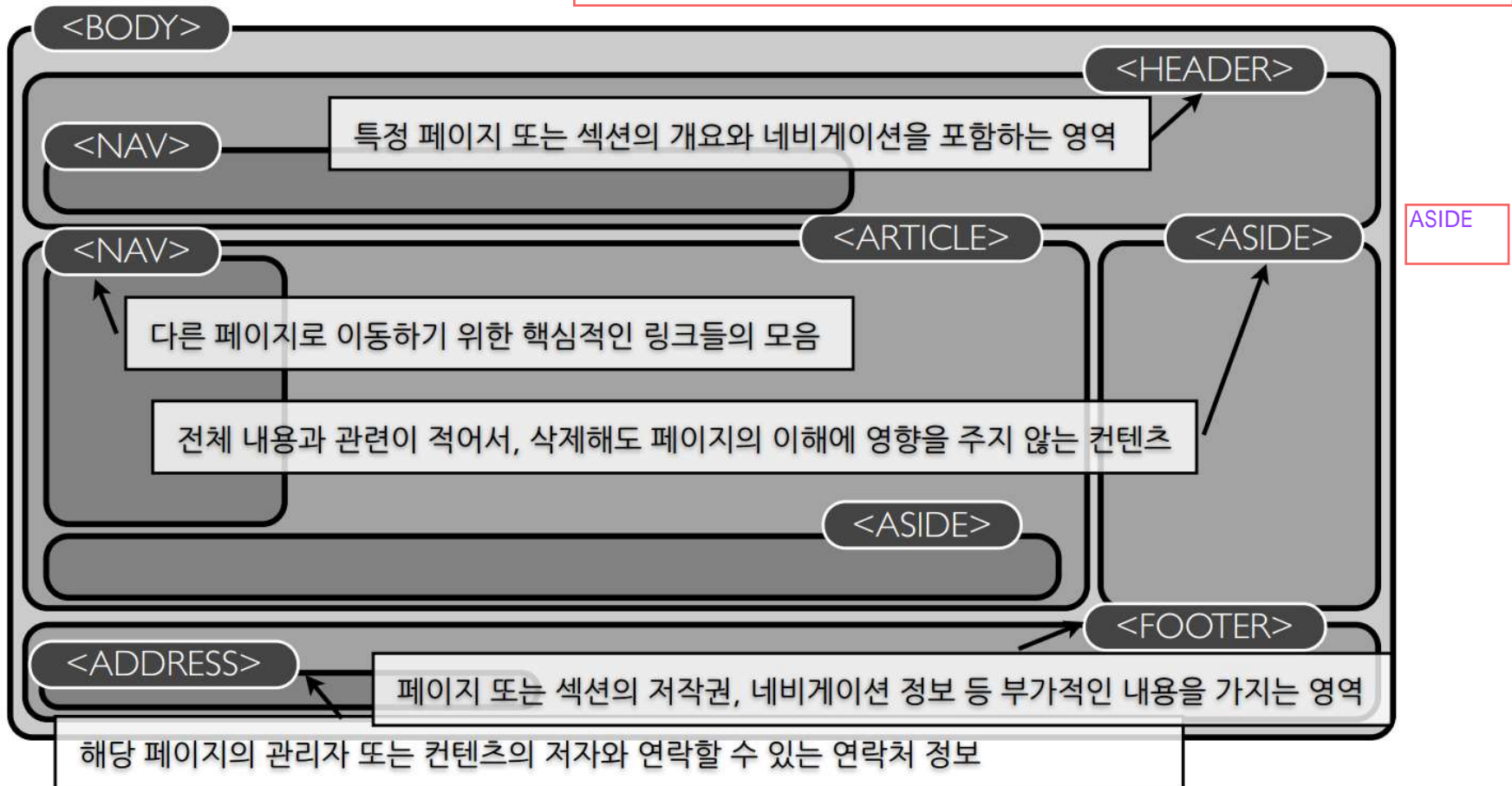
## Homo

Homo sapiens

Homo sapiens sapiens

# HTML Sections

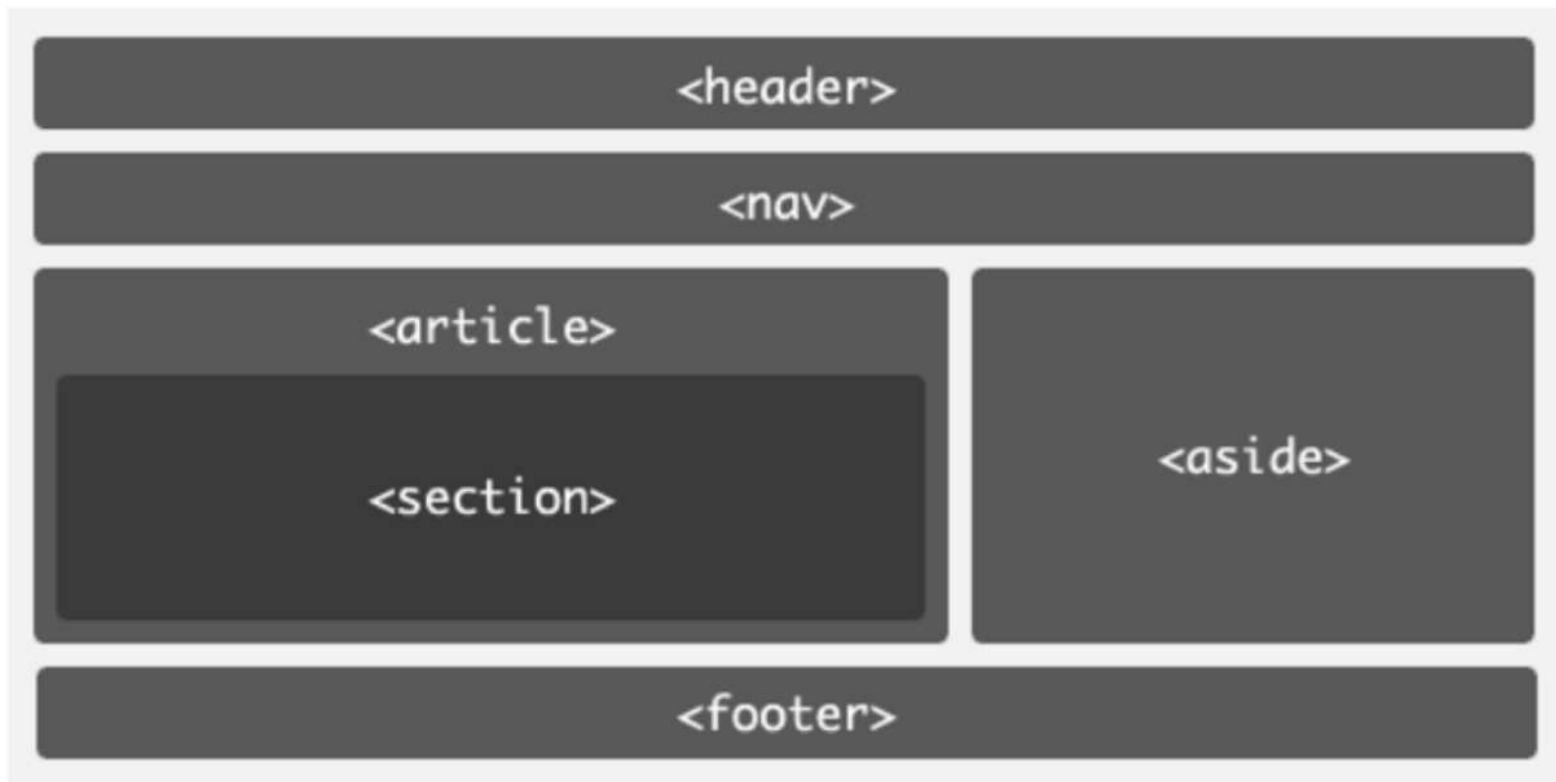
<HEADER>  
, <NAV>  
<ARTICLE>  
<FOOTER>  
,





# HTML Sections (Cont.)

## HTML 5 - Introduces New Elements



## HTML Sections (Cont.)

The div elements can be replaced with the new elements: header, nav, section, article, aside, and footer.

```
<body>
  <header>...</header>
  <nav>...</nav>
  <article>
    <section>
      ...
    </section>
  </article>
  <aside>...</aside>
  <footer>...</footer>
</body>
```

## <article>

- Specifies independent, self-contained content.
- Should make sense on its own and it should be possible to distribute it independently from the rest of the site.
- Potential sources for the <article> element:
  - Forum post
  - Blog post
  - News story
  - Comment

## <article> (Cont.)

```
1 <article>
2   <h1>Internet Explorer 9</h1>
3   <p>Windows Internet Explorer 9 (abbreviated as IE9) was released to
4     the public on March 14, 2011 at 21:00 PDT.....</p>
5 </article>
```

```
1 <article>
2   <header>
3     <h1>The Very First Rule of Life</h1>
4     <p><time datetime="2009-10-09">3 days ago</time></p>
5     <link href="?comments=0">
6   </header>
7   <p>If there's a microphone anywhere near you, assume it's hot and
8     sending whatever you're saying to the world. Seriously.</p>
9   <p>...</p>
10  <footer>
11    <a href="?comments=1">Show comments...</a>
12  </footer>
13 </article>
```

## <header>

- Specifies a header for a document or section.
- Should be used as a container for introductory content or set of navigational links.
- Can have several **<header>** elements in one document.
- Cannot be placed within a **<footer>**, **<address>** or another **<header>** element.



# <header>

```
1 <article>
2   <header>
3     <h1>Internet Explorer 9</h1>
4     <p><time pubdate datetime="2011-03-15"></time></p>
5   </header>
6   <p>Windows Internet Explorer 9 (abbreviated as IE9) was released to
7   the public on March 14, 2011 at 21:00 PDT.....</p>
8 </article>
```

## <section>

- Defines sections in a document, such as chapters, headers, footers, or any other sections of the document.

```
1 <section>
2   <h1>WWF</h1>
3   <p>The World Wide Fund for Nature (WWF) is....</p>
4 </section>
```

## <section> (Cont.)

```
1 <article>
2   <header>
3     <h1>Apples</h1>
4     <p>Tasty, delicious fruit!</p>
5   </header>
6   <p>The apple is the pomaceous fruit of the apple tree.</p>
7   <section>
8     <h1>Red Delicious</h1>
9     <p>These bright red apples are the most common found in many
10    supermarkets.</p>
11  </section>
12  <section>
13    <h1>Granny Smith</h1>
14    <p>These juicy, green apples make a great filling for
15    apple pies.</p>
16  </section>
17 </article>
```

## <nav>

- Defines a set of navigation links.
- Not all links of a document must be in a **<nav>** element.
- Is intended only for major block of navigation links.

```
1  <nav>
2    <a href="/html/">HTML</a> |
3    <a href="/css/">CSS</a> |
4    <a href="/js/">JavaScript</a> |
5    <a href="/jquery/">jQuery</a>
6  </nav>
```

## <aside>

- Defines some content aside from the content it is placed in.
- The aside content should be related to the surrounding content.

```
1 <p>My family and I visited The Epcot center this summer.</p>
2
3 <aside>
4   <h4>Epcot Center</h4>
5   <p>The Epcot Center is a theme park in Disney World, Florida.</p>
6 </aside>
```

## <h1> ~ <h6>

- Are used to define HTML headings.
- **<h1>** defines the most important heading.
- **<h6>** defines the least important heading.

```
1 <h1>This is heading 1</h1>
2 <h2>This is heading 2</h2>
3 <h3>This is heading 3</h3>
4 <h4>This is heading 4</h4>
5 <h5>This is heading 5</h5>
6 <h6>This is heading 6</h6>
```

h1의 크기

h2의 크기

h3의 크기

h4의 크기

h5의 크기

h6의 크기

## <h1> ~ <h6> (Cont.)

- Differences Between HTML 4.01 and HTML5
  - The **align** attribute is *deprecated* in HTML 4.01, and is not supported in HTML5.
  - Use CSS to align elements.

## <footer>

- Defines a footer for a document or section.
- Should contain information about its containing element.
- A footer typically contains the author of the document, copyright information, links to terms of use, contact information, etc.
- You can have several **<footer>** elements in one document.

```
1 <footer>
2   <p>Posted by: Hege Refsnes</p>
3   <p>Contact information: <a href="mailto:someone@example.com">
4     someone@example.com</a>.</p>
5 </footer>
```



## <address>

- Defines the contact information for the author/owner of a document or an article.
- The text in the <address> element usually renders in *italic*.
- Will typically be included along with other information in a <footer> element.

## <address> (Cont.)

```
1 <address>
2 Written by <a href="mailto:webmaster@example.com">Jon Doe</a>.<br>
3 Visit us at:<br>
4 Example.com<br>
5 Box 564, Disneyland<br>
6 USA
7 </address>
```

*Written by [Jon Doe](mailto:Jon.Doe).  
Visit us at:  
Example.com  
Box 564, Disneyland  
USA*

```
1 <footer>
2   <address>
3     For more details, contact
4       <a href="mailto:js@example.com">John Smith</a>.
5     </address>
6     <p><small>© copyright 2038 Example Corp.</small></p>
7   </footer>
```

# Lab1 : HTML4-style Layout

## ■ Web Browsers

- Edge, Firefox, Google Chrome, Opera, Safari

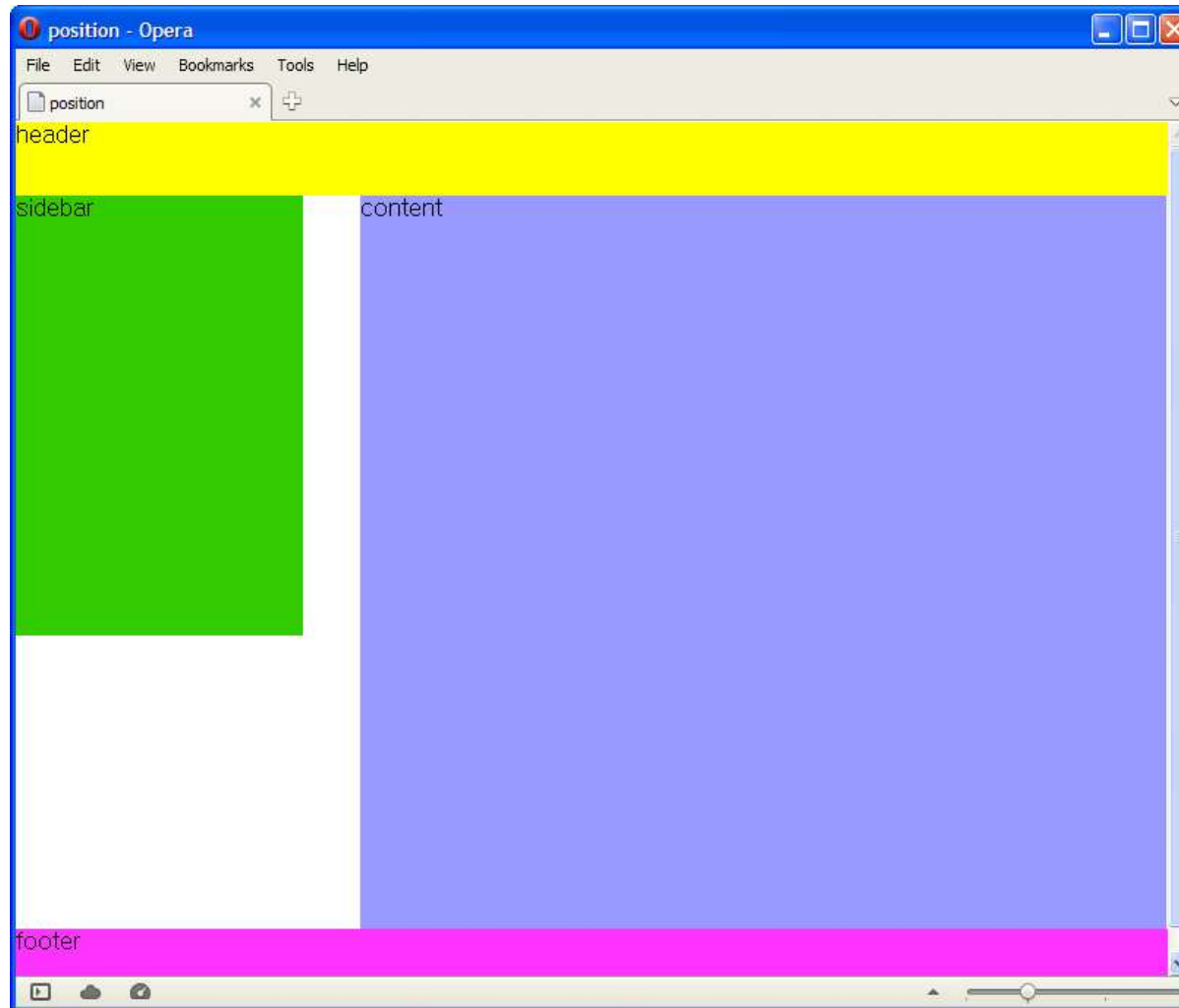
## ■ Text Editors

- Visual Studio Code, Notepad++, Editplus, etc...

## ■ Files

- position.html

# Lab1 : position.html



# Lab1 : Validating

Validation results - Opera

File Edit View Bookmarks Tools Help

Validation results

Web validator.nu

Search with Google

### Validation results

Validator Input

File Upload  Choose...

Encoding As set by the server/page

Schemas

Preset None

Parser Automatically from Content-Type

XMLNS Filter

☐ Be lax about HTTP Content-Type

☐ Show Image Report

☐ Show Source

☐ Show Outline

Validate

Group Messages

1. Info: The Content-Type was `text/html`. Using the HTML parser.
2. Error: Almost standards mode doctype. Expected e.g. `<!DOCTYPE html>`.  
From line 1, column 1; to line 1, column 121  
`<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN" "http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd"><html`
3. Info: XHTML 1.0 Transitional doctype seen. Appendix C is not supported. Proceeding anyway for your convenience. The parser is still an HTML parser, so namespace processing is not performed and `xml:*` attributes are not supported. Using the schema for HTML 4.01 Transitional + IRI / XHTML 1.0 Transitional + IRI.

There were errors.

Total execution time 38 milliseconds.

[About this Service](#) • [Simplified Interface](#)

## Lab2 : Division Tag

### ■ Web Browsers

- Edge, Firefox, Google Chrome, Opera, Safari

### ■ Text Editors

- Visual Studio Code, Notepad++, Editplus, etc...

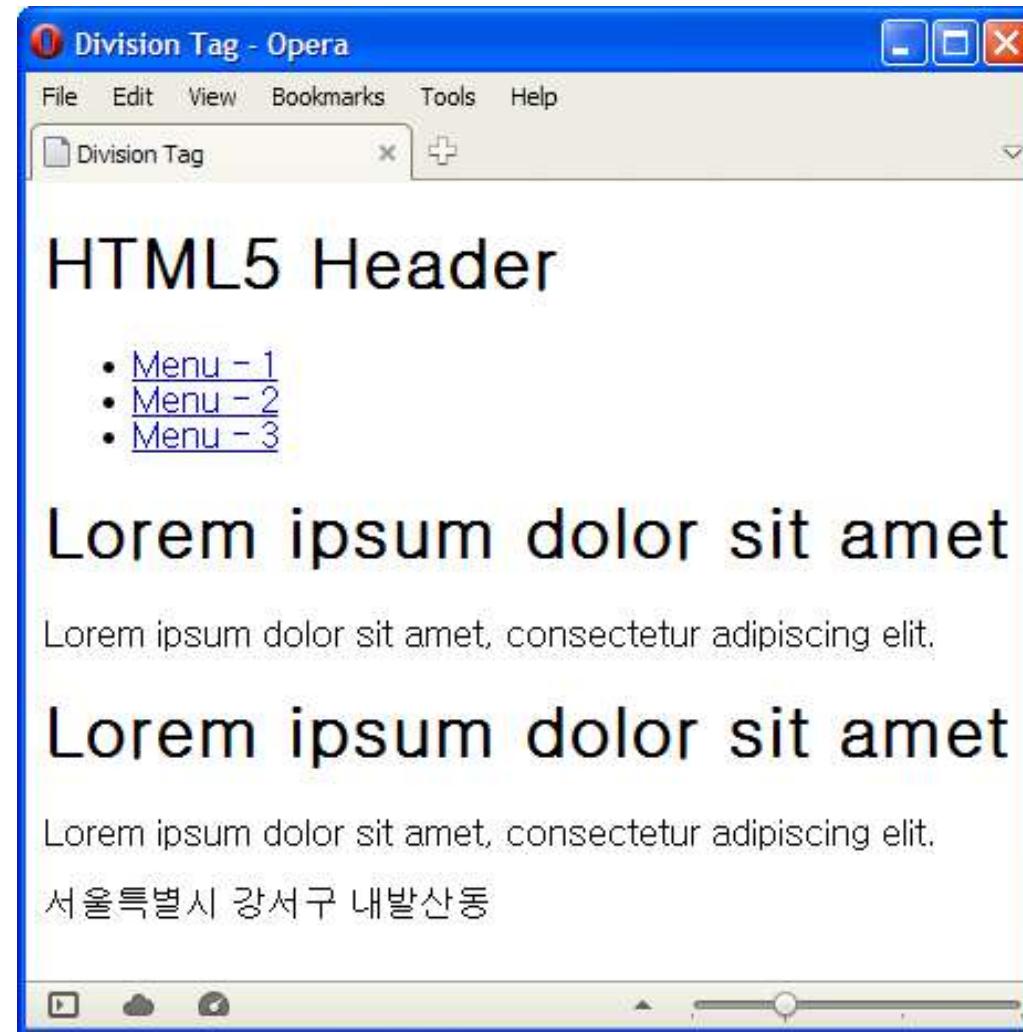
### ■ Files

- div.html

# Lab2 : div.html

```
1 <!DOCTYPE html>
2 <html>
3 <head>
4   <title>Division Tag</title>
5 </head>
6 <body>
7   <div>
8     <h1>HTML5 Header</h1>
9   </div>
10  <div>
11    <ul>
12      <li><a href="#">Menu - 1</a></li>
13      <li><a href="#">Menu - 2</a></li>
14      <li><a href="#">Menu - 3</a></li>
15    </ul>
16  </div>
17  <div>
18    <div>
19      <h1>Lorem ipsum dolor sit amet</h1>
20      <p>Lorem ipsum dolor sit amet, consectetur adipiscing elit.</p>
21    </div>
22    <div>
23      <h1>Lorem ipsum dolor sit amet</h1>
24      <p>Lorem ipsum dolor sit amet, consectetur adipiscing elit.</p>
25    </div>
26  </div>
27  <div>
28    <span>서울특별시 강서구 내발산동</span>
29  </div>
30 </body>
31 </html>
```

## Lab2 : Result





# Lab3 : Learning New HTML5 Sections I

## ■ Web Browsers

- Edge, Firefox, Google Chrome, Opera, Safari

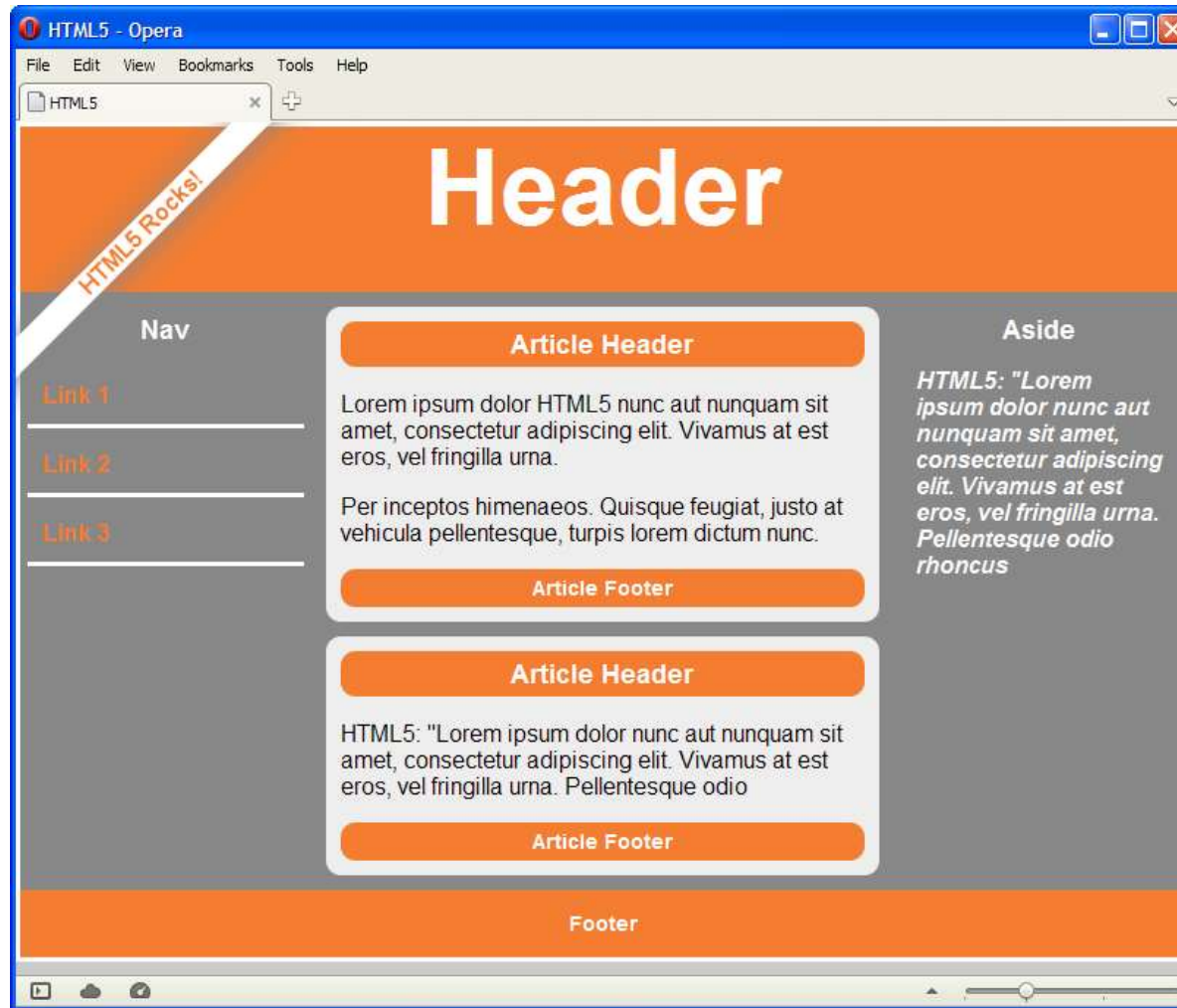
## ■ Text Editors

- Visual Studio Code, Notepad++, Editplus, etc...

## ■ Files

- sample.html
- html5.css

# Lab3 : Result



# Lab4 : Learning New HTML5 Sections II

## ■ Web Browsers

- Edge, Firefox, Google Chrome, Opera, Safari

## ■ Text Editors

- Visual Studio Code, Notepad++, Editplus, etc...

## ■ Files

- sample1.html
- style1.css
- bg.jpg
- bg2.png

# Lab4 : Result



# Lab5 : Learning New HTML5 Sections III

## ■ Web Browsers

- Edge, Firefox, Google Chrome, Opera, Safari

## ■ Text Editors

- Visual Studio Code, Notepad++, Editplus, etc...

## ■ Files

- sample2.html
- style2.css
- road1.jpg
- road2.jpg
- bg3.jpg
- line.gif

# Lab5 : Result

**제주 올레 - Opera**

File Edit View Bookmarks Tools Help

제주 올레


## 제주 올레

### 제주 올레 7코스


외돌개를 출발하여 법환포구를 경유해 월평포구까지 이어진 해안올레. 올레인들이 가장 아끼고 **자연생태길**인 **'수봉로'**를 만날 수 있다. **수봉로**는 세 번째 코스 개척 시기인 2007년 12월, 올레지기인 '김수봉'님이 염소가 다니던 길에 직접 삽과 곡괭이만으로 계단과 길을 만들어서 사람이 걸어도닐 수 있도록 한 길이다.

**패스포트 스탬프 확인 장소**  
시작 외돌개 제주 올레 안내소  
중간 강정 올레 쉼터  
종점 월평 송이 슈퍼

**난이도 : 상** 총 16.4km(4~5시간)  
수봉로는 언덕길이고 일강정 바닷올레에서 서건도 사이 바윗길이 험한 편이다.



수봉로 언덕을 넘자마자 다시 만나게 되는 바다.



# Lab6 : Learning New HTML5 Sections IV

## ■ Web Browsers

- Edge, Firefox, Google Chrome, Opera, Safari

## ■ Text Editors

- Visual Studio Code, Notepad++, Editplus, etc...

## ■ Files

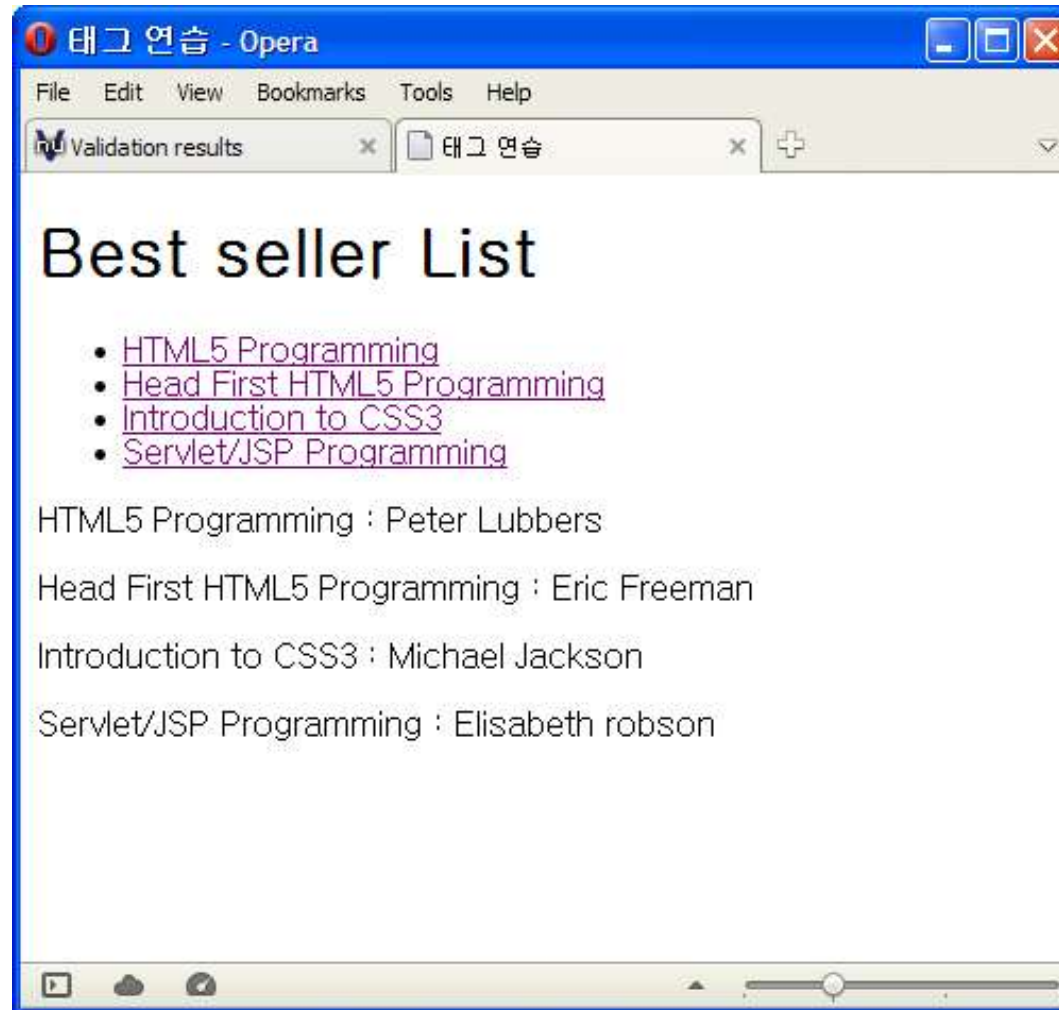
- sample3.html

# Lab6 : sample3.html

```
1 <!DOCTYPE html>
2 <html>
3   <head>
4     <title> 태그 연습 </title>
5     <meta charset="utf-8">
6   </head>
7   <body>
8     <section id="content">
9       <header>
10        <h1>Best seller List </h1>
11      </header>
12      <nav id="mainList">
13        <ul>
14          <li><a href="#>HTML5 Programming</a></li>
15          <li><a href="#>Head First HTML5 Programming</a></li>
16          <li><a href="#>Introduction to CSS3</a></li>
17          <li><a href="#>Servlet/JSP Programming</a></li>
18        </ul>
19      </nav>
20      <article>
21        <p>HTML5 Programming : Peter Lubbers</p>
22        <p>Head First HTML5 Programming : Eric Freeman</p>
23        <p>Introduction to CSS3 : Michael Jackson</p>
24        <p>Servlet/JSP Programming : Elisabeth robson</p>
25      </article>
26    </section>
27  </body>
28 </html>
```



# Lab6 : Result



# Lab7 : Semantic Tag

## ■ Web Browsers

- Edge, Firefox, Google Chrome, Opera, Safari

## ■ Text Editors

- Visual Studio Code, Notepad++, Editplus, etc...

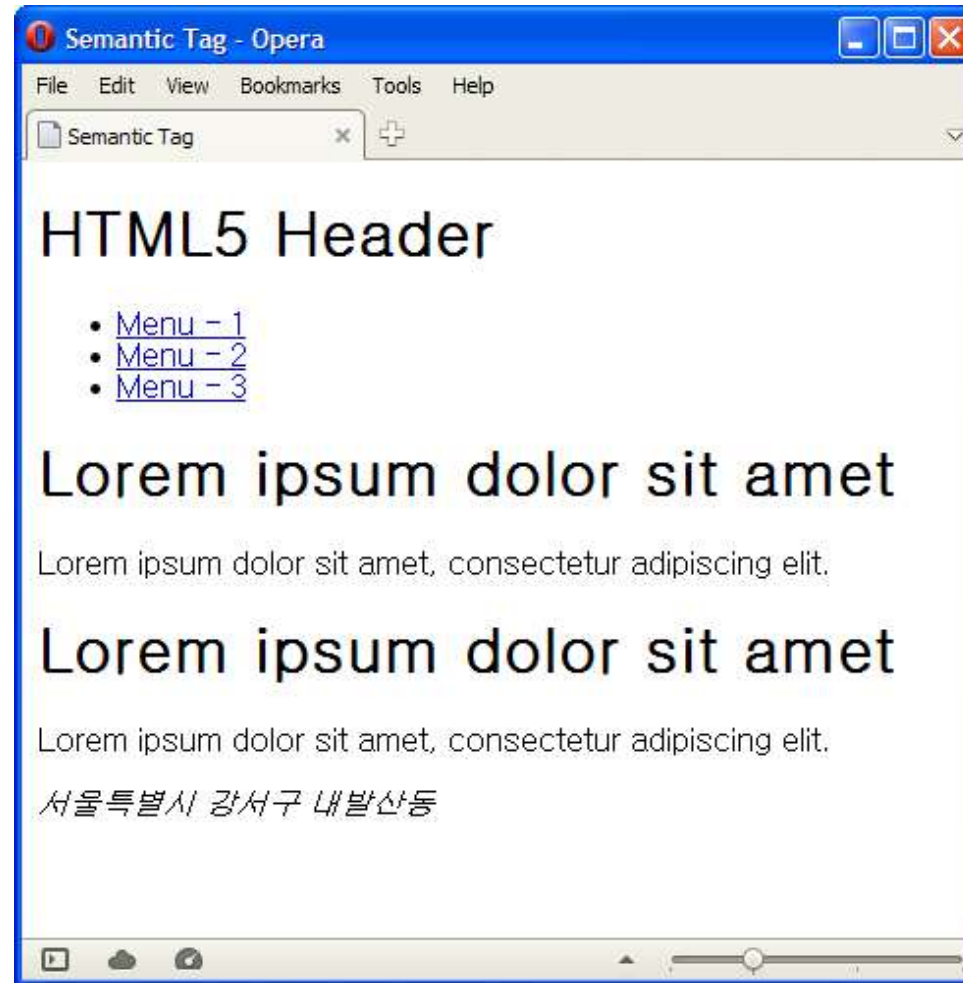
## ■ Files

- semantic.html

# Lab7 : semantic.html

```
1 <!DOCTYPE html>
2 <html>
3 <head>
4   <title>Semantic Tag</title>
5 </head>
6 <body>
7   <header>
8     <h1>HTML5 Header</h1>
9   </header>
10  <nav>
11    <ul>
12      <li><a href="#">Menu - 1</a></li>
13      <li><a href="#">Menu - 2</a></li>
14      <li><a href="#">Menu - 3</a></li>
15    </ul>
16  </nav>
17  <section>
18    <article>
19      <h1>Lorem ipsum dolor sit amet</h1>
20      <p>Lorem ipsum dolor sit amet, consectetur adipiscing elit.</p>
21    </article>
22    <article>
23      <h1>Lorem ipsum dolor sit amet</h1>
24      <p>Lorem ipsum dolor sit amet, consectetur adipiscing elit.</p>
25    </article>
26  </section>
27  <footer>
28    <address>서울특별시 강서구 내발산동</address>
29  </footer>
30 </body>
31 </html>
```

# Lab7 : Result



# Lab8 : Heading Tag

## ■ Web Browsers

- Edge, Firefox, Google Chrome, Opera, Safari

## ■ Text Editors

- Visual Studio Code, Notepad++, Editplus, etc...

## ■ Files

- heading.html

## Lab8 : heading.html

```
1  <!DOCTYPE html>
2  <html>
3    <head>
4      <title>Lab : Heading Tag</title>
5    </head>
6    <body>
7      <h1>Header 1</h1>
8      <h2>Header 2</h2>
9      <h3>Header 3</h3>
10     <h4>Header 4</h4>
11     <h5>Header 5</h5>
12     <h6>Header 6</h6>
13   </body>
14 </html>
```

# Lab8 : Result

