2401 - Web Design and Development
Wednesday 21.2.2024

Semantic HTML5 markup exercise:

Analyse the attached document *example-doc-pcu.pdf* and recreate the content using **semantic HTML5 markup**. Take special care of the following:

- Correct use of **semantic** HTML5 tags
- Correct **nesting** and **casing**
- Clean **indentation** and **line spacing** in your code
- **Valid** HTML5

1. Create a new project called **pcu-courses** The project only needs a single html file. **Use a correct file name.** If you are using Windows OS and you can not see the **file extension** change your compuer preferences so you can.
2. Install the **Live Preview** (Microsoft) plugin into VSCode and test that it works
3. Learn how to create markup by typing the **name of a tag** followed by a **tab**
4. The content provided in the sample page must be marked up using the floowing HTML tags.
   ```
   h1
   nav
   ul + li
   section
   h2
   article
   h3
   p
   ```
5. Set a correct page **title**
6. **Pay attention to the correct code indentation**
7. The main headline must be **h1**
8. The navigation must be inside a nav tag, the navigation content is a list **ul** individual list-items **li,** Content of each list item must be enclosed in an anchor tag **a**.
9. Enclose each part about a school in an **section** tag
10. Each section contains a headline that must be marked up as **h2**
11. Each section contains a multiple articles about each course. Each course must be marked up as **article**
12. Each article contains a subheadline **h3** and a paragraph **p**
13. Add an **id** attribute to each section. Use the proper naming for each **id**
14. Add an **href** attribute to each anchor tag in the navigation
15. Link each anchor in the navigation to the approriate section
16. Validate your HTML using W3C validator

Code examples:

Example of a simple list:
```
<ul>
     <li>Red</li>
     <li>Green</li>
     <li>Blue</li>
</ul>
```

Example of a list with internal anchors:
```
<ul>
     <li><a href="red">Red</a></li>
     <li><a href="green">Green</a></li>
     <li><a href="blue">Blue</a></li>
</ul>
```

Example of an article:
```
<article>
     <h3>Hello World</h3>
     <p>This is a paragraph</p>
</article>
```

Wrong nesting:
```
<article>
     <h3>
          Hello World
          <p>This is a paragraph</p>
     <h3>
</article>
```

Wrong casing:
```
<ARTICLE>
     <h3>Hello World</h3>
     <p>This is a paragraph</p>
</article>
```

Correct markup but messy indentation:
```
<section>
<article>
<h3>Hello World</h3>
     <p>This is a paragraph
</p>
     </article></section>
```

Same As above but clean indentation:
```
<section>
     <article>
          <h3>Hello World</h3>
          <p>This is a paragraph</p>
     </article>
</section>
```

Research links:

https://clearlydecoded.com/anatomy-of-html-tag

https://www.merkle.com/en/merkle-now/articles-blogs/2023/what--why---how-of-semantic-html.html

https://www.codecademy.com/resources/docs/html/semantic-html

https://www.w3schools.com/html/html_headings.asp

https://www.w3schools.com/tags/tag_nav.asp

https://www.w3schools.com/html/html_lists_unordered.asp

https://way2tutorial.com/html/html_internal_links.php

https://www.w3schools.com/tags/tag_section.asp

https://www.w3schools.com/tags/tag_article.asp

https://ctrly.blog/html-tag-nesting/

https://www.w3schools.com/html/html_id.asp