HTML – part 2

Common elements and Semantic elements

Structure

- All content needs structure
  - Wrong:

```
<main>
This is some text
<img src="https://via.placeholder.com/320x240" alt="placeholder image">
Here is some more text
</main>
```

  - Right

```
<main>
<p>This is some text</p>
<img src="https://via.placeholder.com/320x240" alt="placeholder image">
<p>Here is some more text</p>
</main>
```

Semantics

- The branch of linguistics and logic concerned with meaning.
- We need to make sure we are using the correct elements, giving our content the correct meaning.
- E.g. <h1> gives the role (or meaning) of "a top level heading on your page."
- Semantic elements are used by search engines and screen readers.
- Some elements don't have semantics.
  - <span>
  - <div>

Hyperlinks

- Link documents to other documents or resources

```
<a href="products.html">Products page</a>
<a href="https://metropolia.fi">Link to another website</a>
<a href="document.pdf" target="_blank">Open pdf-document</a>
```

- Link to specific parts of a document

```
<a href="#example">Jump to example</a>
<!-- The above link takes to id "example" in the same document -->
<div id="example"><p>Some content</p></div>
```

Headings and paragraphs

- Heading
  - <h1> – <h6>
  - Number means hierarchy, not size
  - It's up to you what the numbers represent, if the hierarchy makes sense.
  - Preferably a single <h1> per page

- Paragraph
  - each paragraph must be wrapped in a <p> element

Lists & importance

- Unordered list

```
<ul>
 <li>Cow</li>
 <li>Fox</li>
 <li>Whale</li>
</ul>
```

- Ordered list

```
<ol>
 <li>Cow</li>
 <li>Fox</li>
 <li>Whale</li>
</ol>
```

- Emphasis (not italic)

```
<p>HTML is <em>so fun</em></p>
```

- Strong (not bold)

```
<p><strong>Don't be late</strong>from class.</p>
```

Tables

- Structured set of data made up of rows and columns.

- Should be used for tabular data NOT to lay out web pages.

```
<table>
 <tr>
  <th>Table heading 1</th>
  <th>Table heading 2</th>
 </tr>
 <tr>
  <td>1st row, cell 1</td>
  <td>1st row, cell 2</td>
 </tr>
 <tr>
  <td>2nd row, cell 1</td>
  <td>2nd row, cell 2</td>
 </tr>
 <tr>
  <td colspan="2">This cell takes 2 columns/cells</td>
 </tr>
</table>
```
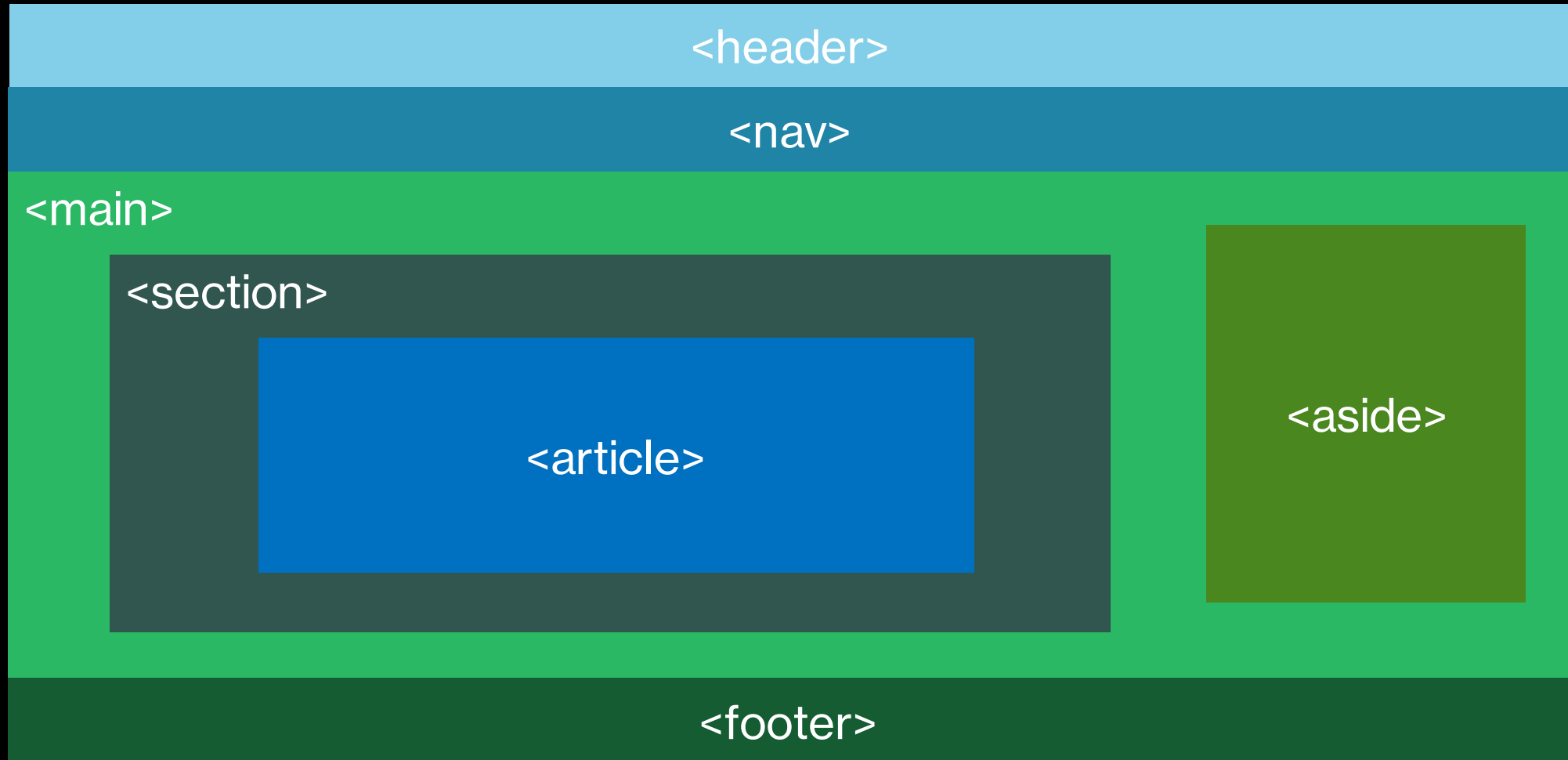
Forms

- Allow users to enter data, which is generally sent to a web server for processing and storage.

- Also can be used on the client-side to immediately update the interface in some way.

```html
<form action="/url/to/some/server">
 <input type="text" name="username" placeholder="Write username here">
 <input type="password" name="password" placeholder="Write password here">
 <input type="submit" value="Send form">
</form>
```

Document structure

Document structure

- <main>
  - Content unique to the page. Use only once per page.

- <article>
  - Content that makes sense on its own. Product, blog post, newspaper article...

- <section>
  - Like <article> but more for grouping together a part of a page. Like sections in a newspaper (sports, news, classifieds).

- <aside>
  - Additional information

- <header>
  - Introductory content. Exact meaning depends on location -> body, article, section. Don't confuse with headings.

- <nav>
  - Contains the main navigation functionality

Example

- Open HTML1 folder from HTML + CSS Examples in IDE/editor

Links

- [HTML elements reference](#)

- [Common solutions](#)

- [Content categories](#)

- [Validator](#)