Comp 125 - Visual Information Processing

Spring Semester 2019 - Week 11 - Monday

Dr Nick Hayward

Final Demo and Presentation

Dates

- Week 15 - Wednesday 24th & Friday 26th April 2019
- Final report due 3rd May 2019 by 1.25pm

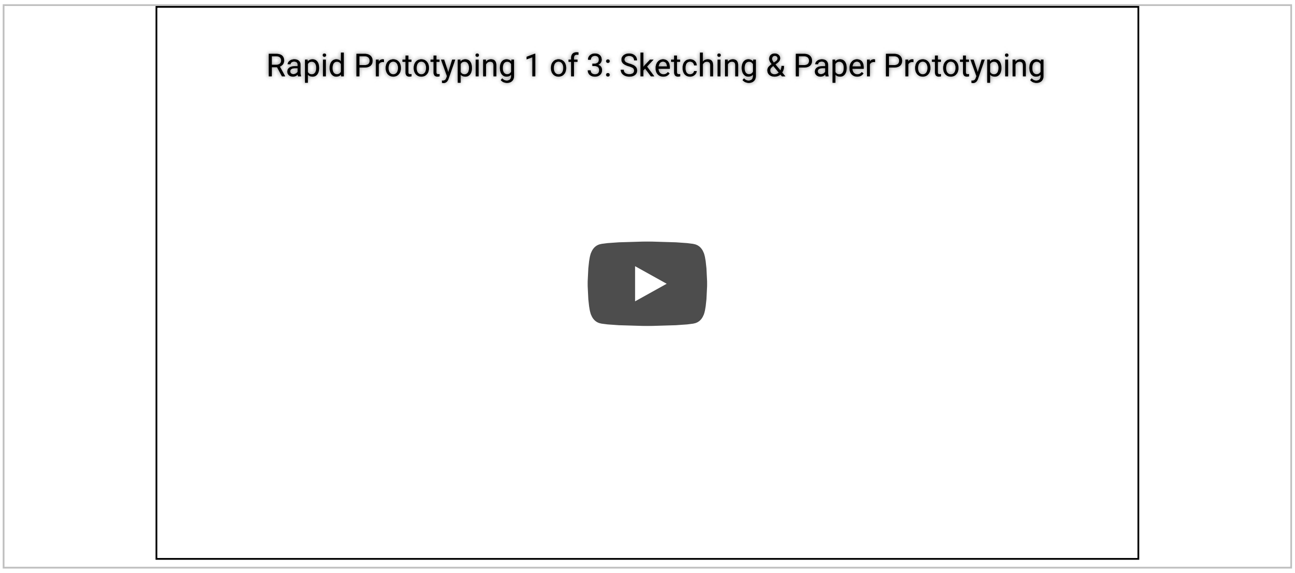
Final Demo and Presentation

- group project - maximum 3 persons per group
- develop an app concept and prototype
- working app (as close as possible…)
  - *must use technologies outlined during the course*
- show and explain code used to develop the app
- explain design decisions
  - *describe patterns used in design of app*
  - *layout choices…*
- show and explain implemented differences
  - *where and why did you update the app?*
  - *perceived benefits of the updates?*

Further details on course website - https://csteach125.github.io/coursework/#assessment2

Video - Design

Paper Prototyping



Rapid Prototyping 1 of 3: Sketching & Paper Prototyping

Rapid Prototyping 1 of 3: Paper Prototyping

Source: YouTube - Google

HTML5 - semantic elements and structure - intro

- perceived issue or concern with HTML5 semantic elements
  - *how and when to add them to our document*
  - *where and when do we add them to our page?*
- non-semantic elements often considered simpler to apply
  - *generalised application and context for usage*

HTML5 - semantic elements and structure

header and nav

- `<header>`
  - *used to collect and contain introductory content*
  - *semantically appropriate for the head or top of a page*
  - *technically feasible and acceptable to include multiple `<header>` elements*
  - *e.g. `<header>` within main content, sidebar content, an article, a section...*
- `<nav>`
  - *short for navigation*
  - *stores and defines a set of links for internal or external navigation*
  - *not meant to define all page navigation links*
  - *often considered suitable for primary site links*
  - *additional links can be placed in*
  - *sidebar, footer, main content...*
  - *no need to consider a `<nav>` element for these links...*

HTML5 - semantic elements and structure

main

- this element tag defines our **main** content
- traditionally the central content area of our page or document
- HTML4 often used a `<div>` element
  - *plus a `class` or `id` to define central content*
  - *e.g.*

```
<!-- e.g. HTML4 main content -->
<div id="main">
  ...
</div>
```

- HTML5 semantically defines and marks content as `<main>`
- `<main>` should not include any page features such as
  - *nav links, headers etc, that are repeated across multiple pages*
- cannot add multiple `<main>` elements to a single page
- must not be structured as a child element to
  - *`<article>`, `<aside>`, `<footer>`, `<header>`, or `<nav>`*

HTML5 - semantic elements and structure

section, article, aside - part 1

- `<section>`
  - *defines a section of a page or document*
  - *W3C Documentation defines as follows,*

> *a section is a thematic grouping of content. The theme of each section should be identified, typically by including a heading as a child of the section element.*

- a site can be sub-divided into multiple `<section>` groupings
  - *e.g. as we might consider a chapter or section break in a book...*
- `<article>`
  - *suitable for organising and containing independent content*
  - *include multiple `<article>` elements within a page*
  - *use to establish logical, individual groups of content*
  - *again, newspaper analogy is useful to remember*
  - *e.g. a blog post, story, news report...might be a useful article*
  - *key to using this element is often whether content can be used in isolation*
- `<aside>`
  - *used to define some content aside from containing parent content*
  - *normally used to help define or relate material to surrounding content*
  - *effectively acts as supporting, contextual material*

HTML5 - semantic elements and structure

section, article, aside - part 2

- MDN Documentation suggests,

> *if it makes sense to separately syndicate the content of a `<section>` element, use an `<article>` element instead*

and

> *do not use the `<section>` element as a generic container; this is what `<div>` is for, especially when the sectioning is only for styling purposes. A rule of thumb is that a section should logically appear in the outline of a document.*

HTML5 - semantic elements and structure

figure, figcaption

- `<figure>` & `<figcaption>`
  - *as with print media, we can logically group image and caption*
  - *`<figure>` acts as parent for image grouping*
  - *child elements include*
  - *`<img>` and `<figcaption>`*

```html
<figure>
<img src="media/images/philae-demo2.jpg" alt="temple of philae"
width="333px" height="200px">
<figcaption>Ptolemaic temple at Philae, Egypt</figcaption>
</figure>
```

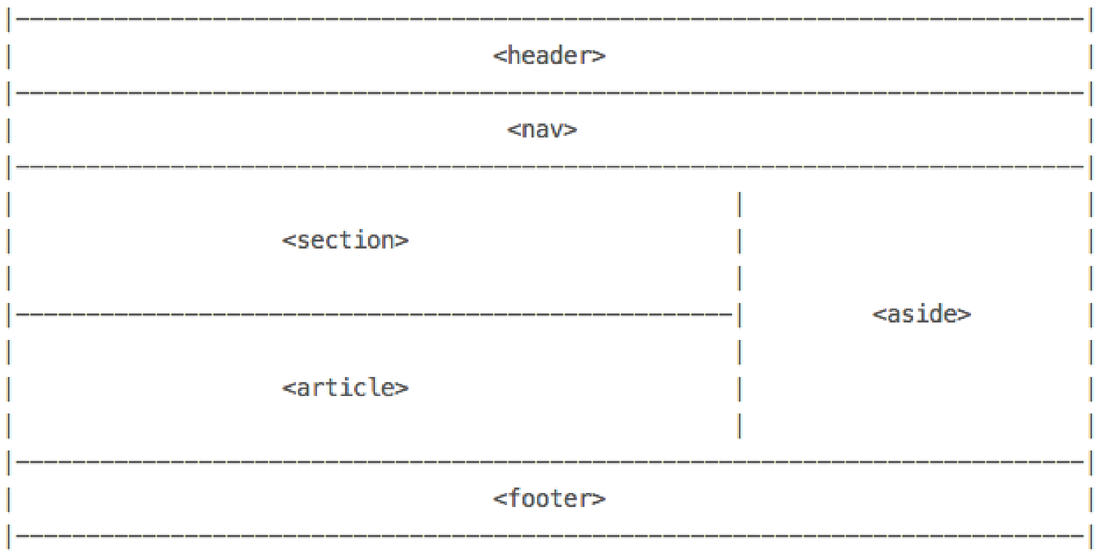
- updated demo with figure grouping - Demo - Semantic structuring

footer

- `<footer>`
  - *usually contains information about its containing element*
- example 1 - in a footer for an article
  - *might use this element to define and record*
  - *author of the article*
  - *publication date*
  - *suitable tags or metadata*
  - *associated documents...*
- example 2 - a footer simply placed at the **foot** of a page
  - *record copyright information*
  - *contextual links*
  - *contact information*
  - *small logos...*
- example 2 considered standard usage for `<footer>`
  - *continues from HTML4 and earlier generic usage...*

Image - HTML5 page structure - part 1

semantic elements

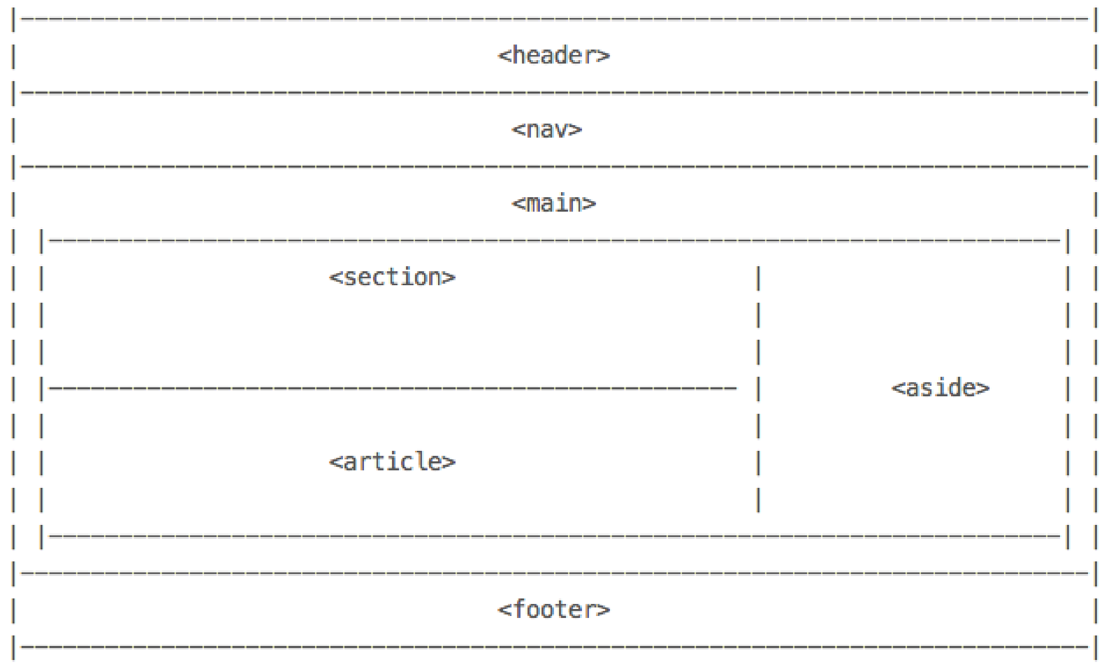


```
|----------------------------------------------------------------------|
|                              <header>                                |
|----------------------------------------------------------------------|
|                               <nav>                                  |
|----------------------------------------------------------------------|
|                                              |                       |
|                <section>                     |                       |
|                                              |                       |
|----------------------------------------------|        <aside>        |
|                                              |                       |
|                <article>                     |                       |
|                                              |                       |
|----------------------------------------------------------------------|
|                              <footer>                                |
|----------------------------------------------------------------------|
```

HTML5 - Structure

Image - HTML5 page structure - part 2

semantic elements



```
|--------------------------------------------------------------------------|
|                                <header>                                  |
|--------------------------------------------------------------------------|
|                                 <nav>                                    |
|--------------------------------------------------------------------------|
|                                 <main>                                   |
|  |--------------------------------------------------------------------|  |
|  |                <section>                 |                         |  |
|  |                                          |                         |  |
|  |                                          |                         |  |
|  |----------------------------------------  |         <aside>         |  |
|  |                                          |                         |  |
|  |                <article>                 |                         |  |
|  |                                          |                         |  |
|  |--------------------------------------------------------------------|  |
|--------------------------------------------------------------------------|
|                                <footer>                                  |
|--------------------------------------------------------------------------|
```

HTML5 - Structure