### Web Development 1 – Lab Session 5

## HTML page level blocks

In this lab you'll first create a simple page, and apply styles to some DIVs and SPANs, using element and class selectors.

Next you'll organise a page into header, footer and three columns of content. First download the 'red\_queen' files and unzip into your lab05 folder. NOTE: You are advised to improve code readability with HTML comments before each page level block element.

NOTE: For the second half of this lab sheet you'll be editing the **mona.html** text file provided (and its associated CSS and image assets).

#### **PART A**

### Exercise A1: Class selector and anonymous class selector

1. Create a new HTML file containing the following heading and 3 paragraphs:

```
<h1>Classes are great</h1>
I am paragraph 1
I am paragraph 2

I am paragraph 3
```

- 2. Write a CSS file to style all paragraphs to have green text (and add an appropriate import statement in the HTML to read in this styesheet).
- 3. We now want to make only the second paragraph have yellow background color. Add a class attribute to the opening tag of paragraph 2, giving it the class "special":

```
I am paragraph 2
```

4. Now add a CSS rule so that paragraphs of class "special" have a yellow background:

```
p.special {
   background-color: yellow;
}
```

5. Next edit the opening tag of the level 1 heading, and make that heading also belong to class "special.

```
<h1 class="special">
```

6. Let's change the CSS rule so that it is an **anonymous** class – i.e. ANY element of class special will have the rule applied; so we remove the 'p' before the full stop:

```
.special {
  background-color: yellow;
}
```

## **Exercise A2: Span**

1. Let us apply some style to the word "great" in the level 1 heading. Since strong and em might be used in some other way in out imaginary website, lets use the generic inline element "span" and a class, to be able to target a style rule to be applied only to the word "great". First add the span tags around the word, with a class of "stand" out":

```
<h1>Classes are <span class="stand_out">great</span></h1>
```

2. Now add a CSS rule so that elements of anonymous class "stand\_out" are in small-caps:

```
.stand_out {
   font-variant: small-caps;
}
```

#### **Exercise A3: Div**

1. Write a new HTML file about songs – there will be a band as a level 1 heading and one of their songs in a paragraph.

```
<h1>Blondie</h1>
Hanging on the telephone
<h1>Sex Pistols</h1>
God save the Queen
<h1>Maklemore & Ryan Lewis</h1>
Same Love
```

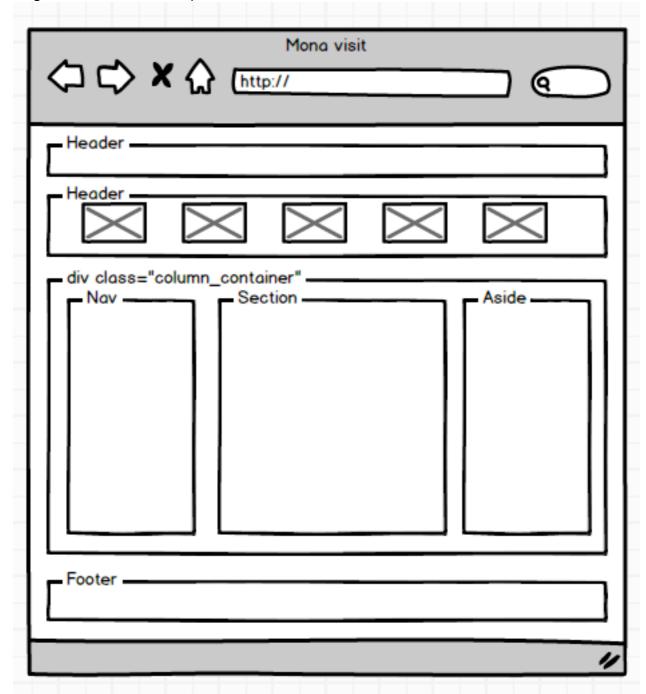
2. We can group each heading and paragraph together with the generic <div> element. (We could also use section – but let's use div this time). Finally write your own style rule to blocks of class "song" (next week try adding a border-top to each DIV ...).

```
<div class="song">
    <h1>Blondie</h1>
    Hanging on the telephone
</div>
...
```

#### PART B: Mona museum

#### **Exercise B1: Headers and footer**

Before you start – look at this diagram – this is the high level 'page layout' you are to create using HTML blocks in this part of the exercise.



1. Unzip the provided Mona resoures into a sub-folder of your lab05 folder. Do all your work in this folder.

**Note:** Use 7zip – extract to here (right mouse button menu) to Unzip folders when working on ITB Windows computers. Avoid the use of the build-in Windows.

Do NOT double left-mouse-click a ZIP folder - you'll just be 'looking inside' the ZIP folder, but have not actually extracted the contents.

Extract the folder then DELETE the ZIP – don't leave ZIP files hanging around your computer hard disk.

2. Add a parent 'header' element around the level 1 heading.

```
<!-- ******** HEADER ********* -->
<header>
     <h1>Mona - Museum of Old and New Art</h1>
</header>
```

3. Add another parent 'header' element around the 4 images images just after the level 1 heading, AND add a <section> around each image:

<header></header>			
<section><img< th=""><th><pre>src="images/logo.png"</pre></th><th>alt="red</th><th>queen</th></img<></section>	<pre>src="images/logo.png"</pre>	alt="red	queen
exhibit">			
<section><img< th=""><th><pre>src="images/red_queen1.png"</pre></th><th>alt="red</th><th>queen</th></img<></section>	<pre>src="images/red_queen1.png"</pre>	alt="red	queen
exhibit">			
<section><img< th=""><th><pre>src="images/red_queen2.png"</pre></th><th>alt="red</th><th>queen</th></img<></section>	<pre>src="images/red_queen2.png"</pre>	alt="red	queen
exhibit">			
<section><img< th=""><th><pre>src="images/red_queen4.png"</pre></th><th>alt="red</th><th>queen</th></img<></section>	<pre>src="images/red_queen4.png"</pre>	alt="red	queen
exhibit">			
<section><img< th=""><th><pre>src="images/red_queen5.png"</pre></th><th>alt="red</th><th>queen</th></img<></section>	<pre>src="images/red_queen5.png"</pre>	alt="red	queen
exhibit">			

4. Markup the final line in the body as a 'footer' element:

```
<footer>
  2013 Tasmania visit report &copy; Matt Smith
</footer>
```

5. When you view the page in a browser you should see how some of the styles for header and footer have been applied...

## Exercise B2: Navigation links into a 'nav' element

1. Markup the level 2 heading 'links' and its unordered list of links as being inside a 'nav' element:

### Exercise B3: List of exhibitions into an 'aside' element

1. Markup the level 2 heading 'July 2013...' and its definition list of exhibits as being inside an 'aside' element:

## Exercise B4: Main content elements into a 'section' element

1. Markup all the content between the 'nav' and 'aside' elements as bring inside a 'section' element:

```
Visitors paths through the museum are recorded, allowing visitors to retrieve they routes from the web at a later date (if they provided an email address), and also providing useful traffic date for museum staff, in terms of visitor behaviour while in the museum 

</re>

</section>
</section>

<aside>

<
```

## Exercise B5: Column container for nav, section and aside

1. We want a 3-column page layout, this is achieved by placing the 'nav', 'section' and 'aside' elements inside a containing DIV, which we will give the class 'column\_container'. The CSS file 'layout.css' contains rules that will arrange these elements into a neat 3-column page, sandwiched between the page-wide header and footer:

## HINT:

Don't forget to add the </div> closing tag BEFORE the footer block ...

Step by step you have marked-up page level rectangular blocks to have CSS applied to create the following 3-column page layout:

## Mona - Museum of Old and New Art











#### links

Main museum website

Wikipedia page about Mona

Article about the 'O' mobile app guiding visitors around Mona

Guardian Mona review web page

Canberra Times Mona review web page

#### Museum Of New and Old art (Mona)

#### **Background**

Hobart hosts an internationally renowned new museum of art, 'Mona' the Museum of Old and New Art. It is often favourably compared to the Guggenheim Museum in Bilbao, in that it is a major international tourist attraction located in a small city. Mona opened in 2011, the result of a multi-million redevelopment of the previous Moorilla Museum of Antiquities.

As well as traditional 2D paintings and 3D sculptures, many of the exhibitions involved multimedia systems, such as video and animation systems, or fully interactive electronic 'installations'

#### The O



Mona developed an innovative mobile app, named 'The O', that is provided to each visitor on a iPod with headphones

- This app allows users to search for information about nearby exhibits (the devices uses wireless technology to monitor the visitors location in the museum)
- Visitors paths through the museum are recorded, allowing visitors to retrieve
  they routes from the web at a later date (if they provided an email address),
  and also providing useful traffic date for museum staff, in terms of visitor
  behaviour while in the museum

# July 2013 Mona exhibition highlights

## Chen Zhen (installation) "Danser la musique"

trampoline with bells attached - make music as you bounce

## Rafael Lozano-Hemmer (installation) "Pulse Room"

100s of incandescent light bulbs visitor holds heart-beat-monitor for a few seconds, then nearest bulb starts to flash to that beat

(and all the others move on one step) so the bulbs show a living history of the heart beats of the most recent

#### Lindsay Seer (installation) "Nowhere Less Now 2012"

photography, performance, video and animation.

## Ryoji Ikeda (installation) data.tron/data.matrix

Hypnotic, animated graphical visualisation of big data

#### Kutlug Ataman (video installation) Küba a room full of TVs and arm chairs, each TV show a different person's life story

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