

Week 3 Practical Exercises

Note:

- Exercise 2 will be assessed as part of the Practical Set 1 submission, and therefore will be part of Checkpoint 1 in week 4 practical class.
- Include HTML comments for your student ID, Name, and Practical Class Time at the top of each source file created.
- All files must be uploaded to your TWA web site before submission of Practical Set 1.

Objectives:

- Become proficient in writing and applying simple CSS to HTML documents
- Complete exercises 1, 2 below and upload the solution to your TWA web site in the **Practicals/Prac1/Week3** folder. Test and **validate** the pages.

Suggested Resources:

- HTML tutorial <https://www.w3schools.com/html/default.asp>
 - HTML 5 tutorial https://www.w3schools.com/html/html5_intro.asp
 - HTML tag list <https://www.w3schools.com/tags/default.asp>
 - CSS tutorial <https://www.w3schools.com/css/default.asp>
 - CSS reference <https://www.w3schools.com/cssref/default.asp>
 - HTML validator <https://validator.w3.org>
 - CSS validator <https://jigsaw.w3.org/css-validator/>
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Exercise 1:

- In the **practicals/prac1** folder of your TWA web site create a new subfolder named **week3**
 - Upload the files (html and images) from Week 2 Exercise 4, 5, and 6 to your TWA web site in the **Practicals/Prac1/week3** folder.
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Exercise 2:

For this exercise, you will create a **CSS file** that will be applied to exercise-4.html, exercise-5.html, exercise-6.html that you have uploaded to the **week3** folder.

Figures 1, 2a, 2b, 3, 4 on the following pages are screen shots of each html page to show how the presentation of the html page in the Chrome browser will be changed by the following CSS rules.

- Create a CSS file named **master.css**
- Link** the master.css file to exercise-4.html, exercise-5.html, and exercise-6.html in the **week3** folder by adding the appropriate html tag(s) to **each** of the html documents.
- Add appropriate CSS rules to master.css to achieve the following:
 - background colour for the html document to be set to white
 - typeface for the html document to be set to a **list of fonts** in the following order: 'Raleway', Verdana, Arial, Sans-serif
Hint: 'Raleway' is not a standard web font. You will need to use the Google Font repository.
 - font size for the html document to be set to 100% of the browser default
 - font colour for the html document to be set to black
 - the html document is to have left and right margins of 75 pixels, and top and bottom margins of 50 pixels
 - the html document is to have a solid 1 pixel border of colour #172457. The border is to have rounded corners with a radius of 15 pixels.
 - The html document is to have left and right padding of 50 pixels, and top and bottom padding of 25 pixels
 - h1 headings are to be 220% of the browser default font size, with text colour of #172457 and must be centred

- i. h2 headings are to be 160% of the browser default font size, using the Georgia typeface, with text colour of #7B85AD, and each first letter of each word capitalised.
- j. h3 headings are to be 120% of the browser default font size, using the Georgia typeface, with text colour of gray
- k. paragraphs, unordered lists, ordered lists are to have 1.5 line spacing
- l. paragraphs should use full text justification
- m. list items that are in ordered lists are to use left and right padding of 15 pixels
- n. The desalination plant image on the first page, and Figure 1 and Figure 2 on the second page are to have widths of 744 pixels. The captions of these images are also to be bound by this width.
- o. The miniature submarine image on the first page is to be 250 pixels wide, be displayed on the right-hand side of the page such that the text wraps around it to the left (note: neither the heading or Box 1 are allowed to wrap around the image), and have bottom padding of 10 pixels and left padding of 15 pixels. The caption of this image is also to be bound by this width. The image should have a top and right margin of 0 pixels.
- p. The captions for these images are to use full text justification, have a 15 pixel padding at the bottom, use a font size that is 70% of the browser default font size, be displayed in italics, and have a solid 1 pixel black border underneath the caption
- q. The caption for the desalination plant is to have no border
- r. The navigation section at the top of the page is to have a background colour of #172457 with a font size that is 120% of the browser default font size, and is to have rounded corners with a radius of 5 pixels.
- s. Hypertext links within the navigation section are to be displayed using white text colour and when the mouse hovers over the link the background colour is to change to #7B85AD (see Figure 4)
- t. Each hypertext link within the navigation section is to have top and bottom padding of 14 pixels, and left and right padding of 16 pixels, and should use centred text alignment. **Hint:** to achieve the same layout as shown in the screen shots you may need to investigate the *display* css property.
- u. hypertext links that are not in the navigation section (eg, 'Next Page', 'First Page') are to have text colour of black and displayed in italics. If the link has previously been loaded by the browser then the text colour is to be #7B85AD
- v. There is to be a 2 pixel solid black border between the header section of the document and the rest of the main content
- w. The top two lines of the page 'TWA Week 3 Practical Exercises' and 'my Student ID' must be displayed to the right of the page, have padding at the bottom of 10 pixels, be in italics at 70% of the browser default font size and using a text colour of #7B85AD
- x. the Copyright text at the bottom of the page is to have white text colour using a font size that is 70% of the browser default font size. This section is also to have background colour of #7B85AD, left padding of 20 pixels, top and bottom padding of 2 pixels and have rounded corners with a radius of 5 pixels
- y. Box 1 on the first page must have a 1 pixel dashed border of colour #172457 and have left and right padding of 15 pixels. The border must have rounded corners of radius 5 pixels

Impacts of climate change | Aus

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TWA Week 3 Practical Exercises
my student ID

Exercise 5 Exercise 6

What are the impacts of climate change?



The Southern Seawater Desalination Plant at Binningup, WA, supplies drinking water to Perth. Photo: Darryl Peroni Photography, courtesy of Water Corporation.

Climate Changes Have Always Affected Societies And Ecosystems

Climate change, whatever the cause, has profoundly affected human societies and the natural environment in the past. Throughout history there are examples of societal collapse associated with regional changes in climate, ranging from the decline of the Maya in Mexico (linked to drought) to the disappearance of the Viking community from Greenland in the fifteenth century (linked to decreasing temperatures). Some of these regional climate changes occurred rapidly, on timescales similar to current rates of global climate change.

Impacts From Human-Induced Climate Change Are Already Occurring

The clearest present-day impacts of climate change in Australia and elsewhere are seen in the natural environment, and are associated with warming temperatures and increases in the number, duration and severity of heatwaves. These impacts include changes in the growth and distribution of plants, animals and insects; poleward shifts in the distribution of marine species; and increases in coral bleaching on the Great Barrier Reef and Western Australian reefs. Some of these changes can directly affect human activities; for example, through the effects of changing distributions of fish and other marine organisms on commercial and recreational fisheries, and the impacts of coral bleaching on tourism.



Developed by the CSIRO Information and Communications Technology Centre at its Queensland laboratory, Starbug is an autonomous, miniature submarine for underwater monitoring and surveying of ecosystems such as the Great Barrier Reef.

Some regional changes in Australian rainfall have been linked to human induced climate change. Southwest Western Australia has experienced a reduction in rainfall since the 1970s that has been attributed, at least in part, to enhanced greenhouse warming. Societal adaptation to the resulting shortfalls in water supply is possible and already occurring (Box 1).

Box 1: Impacts of a drier climate: the case of southwest Western Australia

Declining rainfall and surface reservoir recharge since the mid-1970s in southwest Western Australia have been linked to changes in atmospheric circulation that are consistent with what would be expected in an atmosphere influenced by increasing greenhouse gas concentrations. The Water Corporation of Western Australia is addressing the diminishing surface water resource by setting out to deliver a 'climate-independent' supply of water for domestic consumption through two desalination plants. These now have the capacity to provide around half the piped water supply for the wider Perth region at a cost several times greater than that of surface water.

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Figure 1 – exercise-4.html

Future climate change | Australia

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Exercise 4

Exercise 6

TWA Week 3 Practical Exercises

my student ID

What are the impacts of climate change?

Current Changes Are Expected To Continue And Intensify In The Future

The impacts of future climate change and related sea-level rise will be experienced in many areas, from the natural environment to food security and from human health to infrastructure.

Ecosystems:

Among Australia's terrestrial ecosystems, some of the most vulnerable to climate change are

- alpine systems as habitats shift to higher elevations and shrink in area;
- tropical and subtropical rainforests due to warming temperatures (moderated or intensified by rainfall changes);
- coastal wetlands affected by sea-level rise and saline intrusion;
- inland ecosystems dependent on freshwater and groundwater that are affected by changed rainfall patterns; and
- tropical savannahs affected by changes in the frequency and severity of bushfires.

Climate warming causes land and ocean life to migrate away from areas that have become too warm, and towards areas that previously were too cool. In many places, climate change is likely to lead to invasion by new species and extinctions of some existing species that will have nowhere to migrate, for example because they are located on mountain tops (Figure 1). Seemingly small changes, such as the loss of a key pollinating species, may potentially have large impacts.

current climate

+1°C

+3.5°C

+5°C

species richness

Wet Tropics bioregion

species

1-5

6-10

11-15

16-20

21-25

26-30

31-35

36-40

41-45

46-50

Figure 1: As temperatures become warmer, native animals that depend on cooler mountain habitats may be particularly vulnerable, as shown for this example from northern Queensland. The maps indicate the number of considered species now present in the Wet Tropics bioregion under the current climate and those expected with temperature rises of 1°C, 3.5°C and 5°C shown according to the colour code at the left. The impacts of changes in rainfall are not included in this example. Adapted from Williams et al. (2003).

Carbon dioxide affects ecosystems directly, both positively and negatively. On land it enhances growth in some trees and plants, an effect sometimes called 'CO₂ fertilisation'. Absorption of CO₂ into the oceans causes 'ocean acidification', impeding shell formation by organisms such as corals and causing coral deterioration or death.

Bushfires:

The number of extreme fire risk days has grown over the past four decades, particularly in southeast Australia and away from the coast (Figure 2). Future hotter and drier conditions, especially in southern Australia, are likely to cause further increases in the number of high fire-risk days and in the length of the fire season. CO₂ fertilisation may lead to increased foliage cover and hence increased fuel loads in warm arid environments such as parts of southern Australia. A study of southeast Australia has projected that the number of fire danger days rated at 'very high' and above could double by 2050, under high

Figure 2a – exercise-5.html

Autumn 2020

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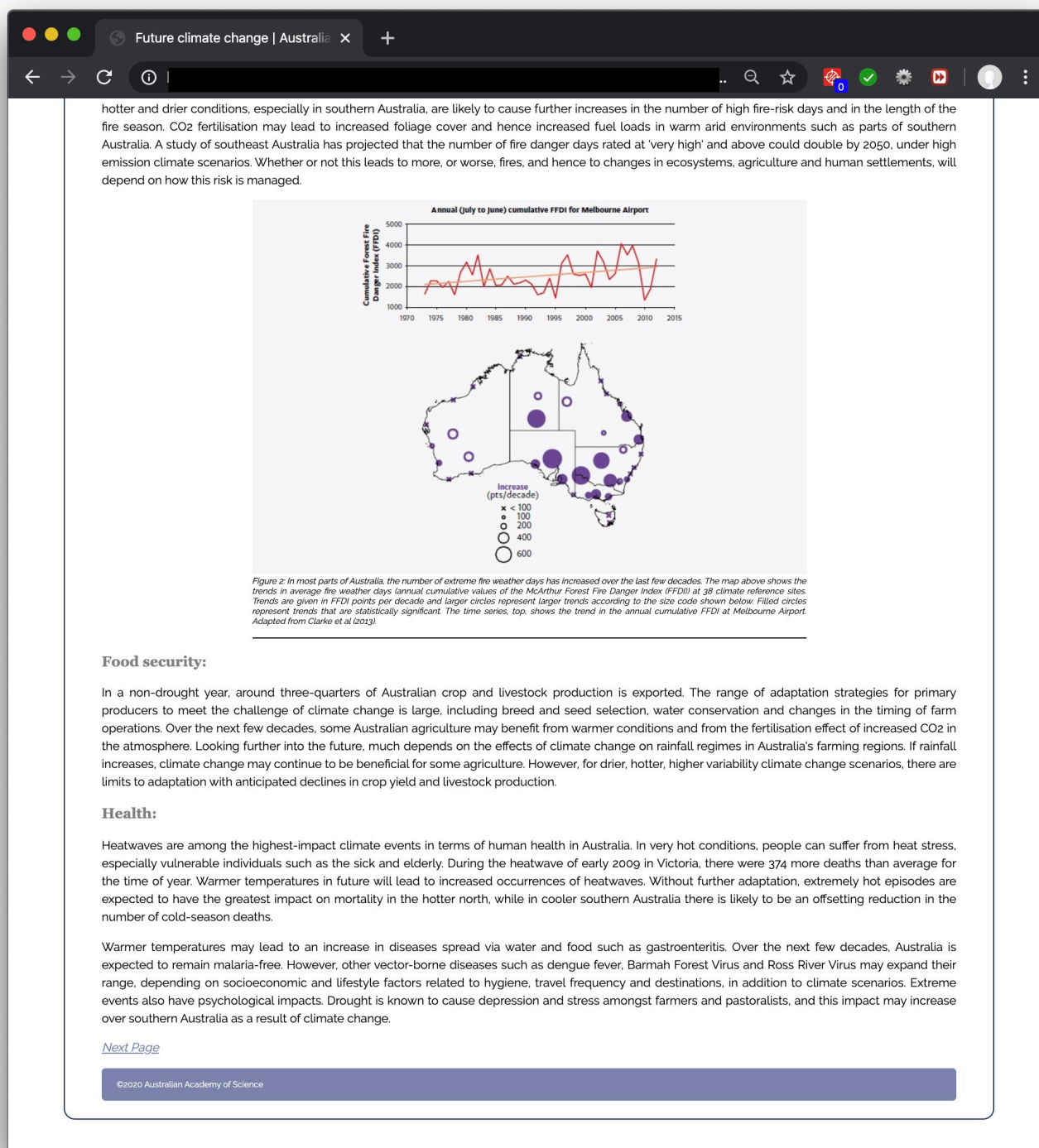


Figure2b – exercise-5.html continued

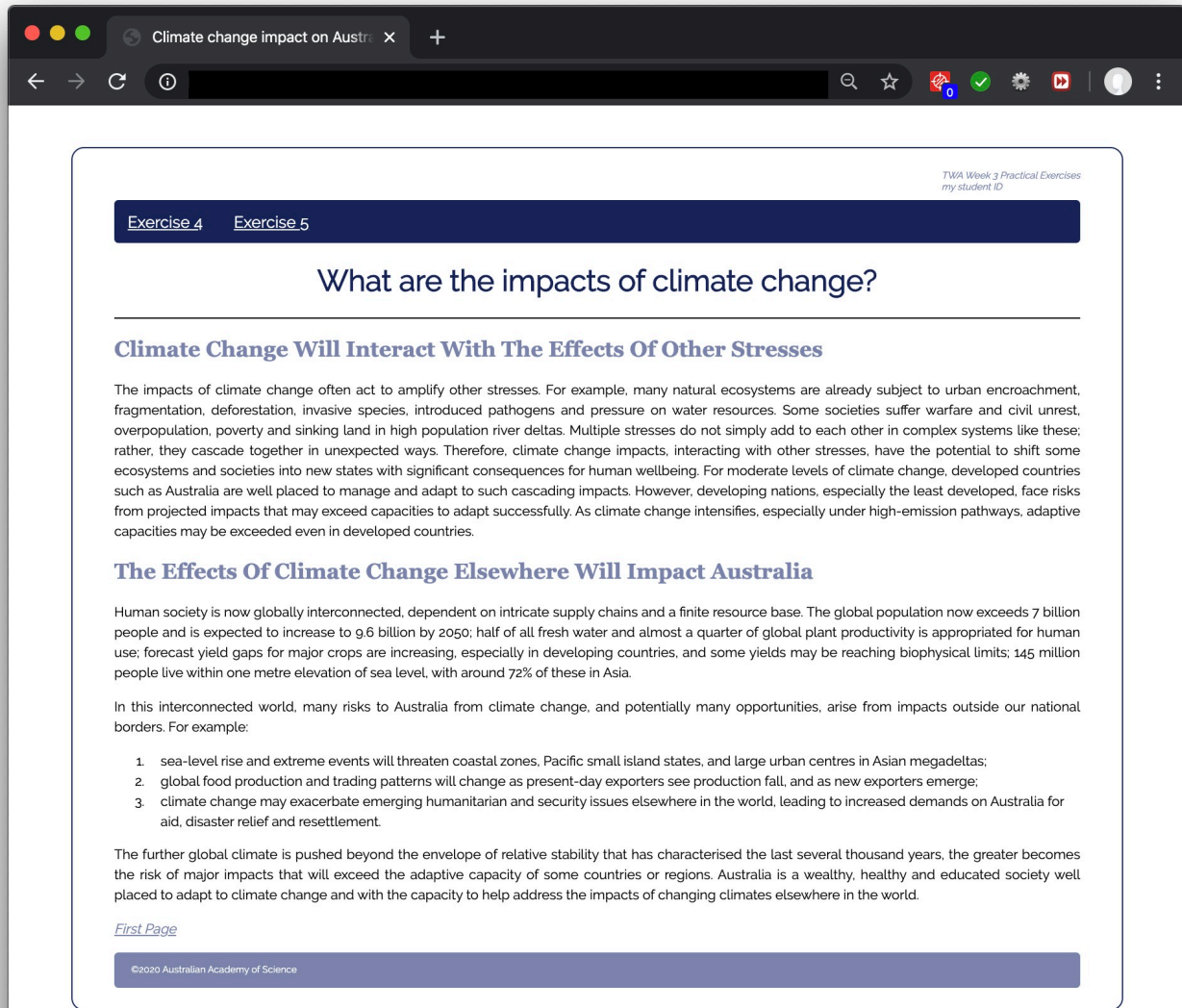


Figure 3 – exercise-6.html

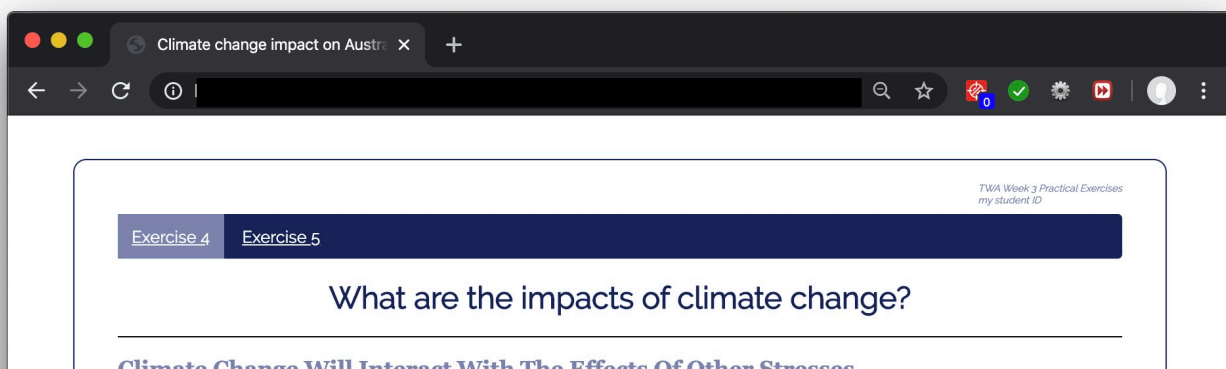


Figure 4 – showing mouse-over on menu