
Web Technologies – Exercises: Week 5

This (& last week) makes a “bumper exercise” to keep you occupied between the timetabled “enrichment week” sessions. The university is open as usual all week so it’s an ideal time to catch up with the exercises & the reading.

There is no lecture on Tuesday 1st or lab class on Thursday 3rd November 2011.

Outcomes:

By the end of this exercise, you should be able to:

- Use string methods, functions and if-tests.
- Write a JavaScript *function*, use an *argument* and *return* a value.

Task 1: Do the week 5 quiz

As usual, your best mark before the end of the next lab session (08/11/12) contributes to the 10% “quiz mark” – *two weeks!* Aim for 100% :-)

Task 2: Add a function to week 4's **Date()** exercise

- 1) Copy week 4’s file “[week4date.htm](#)” to “[week5time.htm](#)”
- 2) Add a JavaScript *function* called **myTime** to the **<script>** block in the **<head>** of the *new* file.
 - **myTime** should take a *date object* as argument and return a *string* containing the time formatted like “**9:02AM**”. This has 4 parts (concatenated strings):
 - i) The hour with 12 hours subtracted after midday (use **if** tests!)
 - ii) A colon “:” character.
 - iii) The minutes with a leading zero as necessary.
 - iv) “AM” before midday, “PM” on or after midday.
- 3) Add a new row to the table created in exercise 3 to display the text “**myTime()**” in the 1st column and its JavaScript output **myTime(today)** in the 2nd column.
- 4) Use your **myTime** function and a new **Date()** object to write into another row the time of sunset on Thursday 27th October 2011 in a location of your choice (look it up!)
- 5) Add some more CSS formatting to identify the new rows –add at least a different coloured background and foreground to each using the CSS “#rrggbb” notation but not using inline style (otherwise have some fun with garish colours!)
- 6) Validate the XHTML and CSS.

<i>E.g. 11:59AM, 12:00PM, 1:00PM etc.</i>

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Task 3: Respond to some events

Read the slides & the text book chapters...

- 1) Take a copy of your week 2 flag exercises as [week5events.htm](#)
- 2) Add an **onload** event handler that pops-up an **alert** box to say something like “The flag has loaded!” when the page has finished loading.
- 3) Add to each element that is used in the flag an **onmouseover** event handler that writes the cell’s colour into the status bar using **window.status** when the mouse hovers over the cell. Remove the text when the mouse moves away.
 - i) **Beware!** By default **window.status** cannot be changed in many browsers ... *find out why :-)*
 - ii) If you can’t get **window.status** to work, use an **alert** instead...
- 4) Use some JavaScript and an event handler to cancel the *default action* of the link that links to Wikipedia’s page for your flag.
- 5) Validate your XHTML and CSS.

Task 3 extra:

Can you trap the event that occurs when the user browses away from a page? Use that to prevent the link in 4) above *and any other link* from going to a new page ... an evil trick used by pop-over/pop-under advertisers ...

This concludes the fifth week’s exercises ...
have a good “enrichment week” ☺

Dr James Denholm-Price