Cardiff School of Computer Science and Informatics

Coursework Assessment Pro-forma

Module Code: CM1102
Module Title: Web Applications
Lecturer: Martin Caminada
Assessment Title: Website to computer Easter dates with CGI and Python
Assessment Number: 2
Date Set: Thursday 21st November 2019
Submission Date and Time: Friday 6th December 2019 at 9:30am

This assignment is worth 15% of the total marks available for this module. The penalty for late or non-submission is an award of zero marks.

Your submission must include the official Coursework Submission Cover sheet, which can be found here:

https://docs.cs.cf.ac.uk/downloads/coursework/Coversheet.pdf

Submission Instructions

See below.

Learning Outcomes Assessed

Design, build, and test back-end applications according to specifications and best practices.

Criteria for assessment

See below.

Feedback and suggestion for future learning

Feedback will be given by the lab assistants during the marking of your work (see below for details). This feedback could also be useful for the third piece of coursework of the current module.

Dr Martin Caminada
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Cardiff University
School of Computer Science & Informatics

CM1102 Web Applications

ASSESSED EXERCISE TWO

Website to compute Easter dates with CGI and Python

Date set	Week 8, 15:10 Thursday 21 November 2019
Submission date	Week 10, 09:10 Friday 6 December 2019
Demo date	Week 10, Friday 6 December 2019 lab slots

This exercise is worth 15% of the total marks available for this module.

Submission Arrangements

Submission:

- Via Learning Central, submit by Week 10, 09:10 Friday 6 December 2019:
  - A single .zip archive that includes the complete source code of your website, with the same structure as needed for deployment on the project server, including all required resources such as images.
  - A plain text file named readme.txt that includes: your name, student number, e-mail address, and the URL of the website on the project server. (If your website requires authentication, make sure you also provide the relevant credentials.)
  - The standard COMSC coursework submission coversheet: https://docs.cs.cf.ac.uk/downloads/coursework/Coversheet.pdf
- Upload your website to the submission server by the same deadline (Week 10, 09:10 Friday 6 December 2019). No changes are allowed after this deadline. Do not upload the .zip archive to the submission server — upload the individual files instead!

  Uploading your website should be done to websites.cs.cf.ac.uk using the SFTP protocol. Please make sure that you place your website in a folder named CM1102/exercise2 (scripts should go into the cgi-bin subfolder) which has been created for you. Once you have uploaded your website, you can access it at http://submission.cs.cf.ac.uk/<yourmailname>.

Demonstration: During your normal lab slots in Week 10, Friday 6 December 2019, you will need to demonstrate your website to a lab tutor. Demonstrations after the above deadline will not be accepted. The tutors will mark your website according to the criteria shown at the end of this document, and will provide instant feedback. If you have any questions regarding your mark, or if you need additional feedback, please do not hesitate to discuss this with the examiner while in the lab.

The penalty for late or non-submission is an award of zero marks. You are reminded of the need to comply with Cardiff University's Student Guide to Academic Integrity.

Instructions

Create a website that interacts with a Python program via CGI (Common Gateway Interface) to inform the user of the day and month on which Easter falls in a given year that the user inputs. The website must use a form to allow the user to input the year, and radio buttons to specify how they want the output to be formatted. The user should be able to select between the following formats:

1. Numerically, as dd/mm/year (for example: 20/04/2003).
2. Verbosely, with the full name of the month as day of named_month year (for example: 20th of April 2003).
3. Both of these formats.

Note that for option 2 some credit (1 mark) will be awarded for qualifying the date with a superscript of either st, nd, rd or th, according to the day.

Both the form and the program output should be formatted using CSS from an external stylesheet located on the server.

The website should be written entirely by hand using only HTML, CSS and CGI with Python. You must not use any form of HTML/CSS code generator apart from your own code. The website must be placed on the COMSC submission server, as per the instructions above, with the HTML code in the project directory and the Python code in the cgi-bin subdirectory.

Hints

Data items from a form, when accessed in CGI with Python, are returned by the form.getvalue() function as a string. Therefore, you will need to convert them to integers using the function int() before you can process them with your procedure to compute the Easter date. In your Python script, to determine the value of the radio buttons form controls, compare the variable containing the value returned by form.getvalue() with a string containing the respective item of text, that is the value of the value attribute of the corresponding form control.

Criteria for Assessment

Credit will be awarded against the criteria shown in the marking form on the next page. The examiners will have the discretion to award partial marks when a component is only partially implemented or is not fully working.

Feedback

Feedback on your performance will address the assessment criteria and will be instantly given by the examiner immediately after the demonstration. If you have any questions regarding your mark, or if you need additional feedback, please do not hesitate to discuss this with the examiner while in the lab.

Good luck!

ASSESSED EXERCISE TWO

First name:

Last name:

Student number: (without the initial letter)

Examiner: (initials)

Time: :

Criteria	Marks 0	1	2	3
An HTML web page with a form that accepts user input of both the year and the option for formatting the output				
The above page is styled with an external CSS style sheet				
Python + CGI program at least echoes (prints out) the year that the user has input into the form, as a HTML/CSS web page				
Python + CGI processing of user input to generate and output (in HTML/CSS) the date of Easter for the year that the user has entered				
Correct implementation of the user options for formatting the date as both "dd/mm/year" and "day of named_month year"				
The superscript for the day (st, nd, rd, or th) is correctly computed				
TOTAL				/10

To streamline the demo: Please fill in your details at the top of the marking form prior to the demonstration. The markers will fill in the marks in this form and, after giving feedback, will collect it from you.