School of Computing, Edinburgh Napier University

1. Module number	SET08101
2. Module title	Web Tech
3. Module leader	Simon Wells
4. Tutor with responsibility for this Assessment	Your first point of contact is Simon Wells
5. Assessment	Please see attached.
6. Weighting	25%
7. Size and/or time limits for assessment	Please see attached.
8. Deadline of submission Your attention is drawn to the penalties for late submission	**5:00PM on Monday 26th February 2018**
9. Arrangements for submission	Supply your Git clone URL to the module leader at least one week before the deadline. Push your final code to your Git repository before the deadline indicated above.
10. Assessment Regulations	This assessment is subject to the University Regulations.
11. The requirements for the assessment	Please see attached.
12. Special instructions	None
13. Return of work	Marks and feedback sheets will be emailed to you within three **working** weeks.
14. Assessment criteria	Please see attached. With reference to the module descriptor, this assessment covers LO1: Describe Internet and World Wide Web technology standards LO2: Identify and apply an appropriate web page development methodology LO3: Demonstrate competence in the use of authoring tools & markup languages. LO4: Demonstrate competence in Client-Side and Server-Side programming

Coursework Assignment
Web Tech (SET08101)

Overview

The aim of this coursework is to design and implement a website consisting of a set of pages about classical ciphers. Your site must be implemented using HTML, CSS, & Javascript and make no use of additional libraries, templates or frameworks.

Your site must include at least an index.html page, a design.html page, and one additional html page for each cipher that you implement in Javascript. You should decide on your own naming and organisational scheme for any additional html pages & any associated CSS, JavaScript, or other files required by your solution.

index.html - This will be the default page that your visitors will see. From here your user must be able to navigate to the other pages in your site.

design.html - This page is a ***design document*** page which will demonstrate all of the typographical and presentational elements used in your site.

cipher page(s) - For each cipher you select, you must include an appropriately named html page that includes at least a description of the cipher, a text entry area for writing a message, and an area for displaying the enciphered version of the message. You will implement the selected cipher using JavaScript so that a message can be enciphered and deciphered.

A simple place to start is with the Caesar Cipher. The Rot13 cipher, which we investigated in the labs is a special case of the Caesar Cipher which was used in Ancient Rome to encipher secret messages. You should find, research, and implement at least two different ciphers for your site.

Deliverables

The coursework has two separate parts; a **submission** and a **demonstration**.

1. Submission

You must submit a Git repository containing the following:

1. The source code for your app
2. A written report using LaTeX

Your source code and report must all be committed to Git and pushed to your repository before the coursework deadline. Any late submissions that are not authorised by your Programme Leader will be capped at 40%. Any evidence of plagiarism will be submitted to the School misconduct officer for possible disciplinary proceedings.

1.1 Source code

- All source code (HTML, CSS, JS) and associated files (such as images) required to view your site must be committed to your Git repository. If your project requires supplementary software (for example an external library) this must also be provided (unless this is forbidden by the license – in which case a URL for a download must be provided) along with instructions for setting it up. If you have used external libraries then you must document this fact in your report and also include the associated licenses in a folder in your Git repository.

- You must provide the public git clone address for your repository by email to the module leader (s.wells@napier.ac.uk) at least one week before the deadline. Your submission will then be cloned once the deadline has passed. However your repository will not be accessed or inspected prior to the deadline.

- Your Git repository must be named according to the following pattern (all lowercase):

  lastname_firstname_set008101_coursework1

- Your repository must be pushed to a hosting service, e.g. Bitbucket or Github, and you should make your repository private (both services provide private repositories for educational purposes). If your repository is private then you must also add the user ***siwells*** as a collaborator so that your work can be retrieved.

- Email the Git clone URL for your repository to s.wells@napier.ac.uk at least one week before the assignment deadline. This should be the SSH clone URL (the one that starts with either git@github or git@bitbucket).

1.2 Report

Your report must be no longer than 6 pages in length (excluding appendices) and written using the Napier LaTeX report template available here:

http://github.com/edinburgh-napier/aux_latex_cw_template

Appendices may be used to include supplemental data, for example test data, screenshots, designs, or documentation, but these must be referenced from within the main body of your report.

The format of the submitted report must be in PDF and should include the following sections:

1. Introduction. An introduction to the assignment stating its scope and content – this should include a brief overview of your site and your choice of codes or cyphers. Reference any background reading that you've done.

2. Software design. You are expected to plan how you will approach your implementation before actually writing any HTML, CSS, or JavaScript. You should describe this plan and the associated artefacts in this section. Artefacts might include lists of requirements, sketches of the layout for

important pages, or a navigation diagram showing how pages are organised in relation to each other.

3. Implementation. Short description of your site's implementation including screenshots.

4. Critical evaluation of your implementation. Points to consider discussing in this section are:

    - A comparison against the requirements set out in this document

    - Possible improvements to your application, for example, what did you miss out?

5. Personal evaluation - reflecting on what you learned, the challenges you faced, the methods you used to overcome challenges, and you feel you performed.

6. References (Optional) - If you have used additional resources then these must be cited. Otherwise this section may be omitted. You must provide a reference for every resource used that you have not created yourself – for example, additional image, sound, video, or software library resources.

2. Demonstration

Demos will be held during timetabled contact time on Tuesday afternoons in the JKCC during weeks 8 & 9. Prior to these dates you will be able to arrange a demo time slot. During this time slot a marker will expect you to show off your app. You should aim to be set up and ready to go **before** your demo slot time. You will then demonstrate your application to a member of the teaching team to highlight the features of the application and ensure that all the capabilities of your application are exhibited. It is your responsibility to ensure that you can demo the site that you have developed; this can be via a lab machine or your own laptop, however without a demonstration your submission will not be marked.

Assessment Criteria & Marking Scheme

The marking scheme is devised so as to reward those who go beyond the core taught material by integrating their own self-directed learning and discoveries. A reasonable attempt at a difficult application is likely to attract more marks than a complete implementation of a simple application. As a general rule, the more functionality, the better the mark, however your functionality should be consistent with a cohesive overall design.

70-100% A submission in this mark band will demonstrate that you have gone beyond the core learning for the module and have actively pursued your own learning path. Your submission will include a site that goes beyond the core techniques discussed in class and lab sessions and that offers an excellent level of functionality with rewarding user experience. You will have evaluated your design using appropriate techniques. You will have implemented more advanced features that have not been specifically covered in the practical sessions and which you will have investigated for yourself. Your design and code will be excellent. All HTML, CSS, and JavaScript will be well organised. Your report will be comprehensive, very well written and presented, and will correctly reference all the material you have used. This is likely to include textbooks, online forums and tutorials and some of the suggested reading for the module.

60-69% To achieve a mark in this band you will have developed a site with very good functionality, offering the user multiple ciphers to discover. You may have chosen more complex ciphers to implement, or might have implemented ciphers that require additional keys. Your site will have a pleasing design, making very good use of appropriately selected HTML, CSS, Javascript features in order to provide a pleasing user experience. Your report will address all the necessary sections effectively, be very well written, clearly presented, and will reference all materials you have used.

50-59% A submission graded into this mark band will indicate that you have developed a site that is less ambitious in its functionality. You will have implemented at least two ciphers and your site will enable users to both encipher and decipher messages. Your site will have solid design and provide an acceptable user experience. Your report will be well written and will reference the material you have used.

40-49% To achieve a mark in this band you must have developed your own set of HTML web-pages with associated CSS and Javascript as appropriate. Your user must be able to navigate between your pages. You will have implemented pages for two ciphers. Your cipher pages will encipher a supplied message. Your design will be rudimetrary but a basic usability requirement is that other users (aside from yourself) must be able to navigate your web-site. A submission in the grade band may be based on an extension of the practical work covered in class. Your report will adequately describe your work.