

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 your local QA tutor
5. Assessment	Please see attached descriptor for details
6. Weighting	Part #1 (40%) Part #2 (60%)
7. Size and/or time limits for assessment	Please see attached for details. A short, approximately 5 minute, demonstration will be required.
8. Deadline of submission Your attention is drawn to the penalties for late submission	Part #1 is due at 3PM on Friday 6th March 2020 Part #2 is due at 3PM on Friday 10th April 2020
9. Arrangements for submission	Please see attached descriptor for details
10. Assessment Regulations	This assessment is subject to the University Regulations.
11. The requirements for the assessment	Please see attached descriptor for details
12. Special instructions	None
13. Return of work	We will aim to email provisional marks to you within three working weeks.

14. Assessment criteria	<p>Please see attached. With reference to the module descriptor, part #1 of this assessment covers aspect of learning outcomes 1, 2, & 3 and part #2 covers aspects of learning outcomes 1, 2, 3, & 4.</p> <p>L01: Describe Internet and World Wide Web technology standards</p> <p>L02: Identify and apply an appropriate web page development methodology</p> <p>L03: Demonstrate competence in the use of authoring tools & markup languages.</p> <p>L04: Demonstrate competence in Client-Side and Server-Side programming</p>
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Web Technologies Coursework Specification

Overview

The assignment for this module is a single project that is split into two parts. This document details both parts. The objective is to demonstrate your understanding of client-side web development and mastery of HTML, CSS, & JavaScript. You will achieve this by completing a project in which you design, implement, and evaluate a web site for a “choose your own adventure” style text adventure game. This is a type of game in which the player reads a section of a story and is then presented with options about how the storyline develops. The player can reach different outcomes depending upon the choices that they make so the storyline and endings can vary greatly based upon their selections.

You should carefully consider the nature of the problem, and plan a set of pages, a visual design, and user interface elements that provides your player with a good experience. If appropriate you may also include additional features, functionality and make use of third-party & browser-based APIs as necessary to implement your project. Your entire site, however, must be hosted and deployed within GitHub pages. It is a good idea to research similar browser-based games that you can use as a benchmark against which to measure the functionality of your own and which might provide inspiration for how other developers have approached similar problems. It is advisable to discuss any ideas that you have for extensions to the basic requirements with your module leader during timetabled contact time, such as labs, as this is an opportunity for formative feedback to help you to perform well and to achieve a decent grade.

The first part of the assignment is a report which will focus on the features, analysis, design, and plan for implementation of your site & is worth 40% of the total mark for this assignment. The second part of the assignment is the implementation and deployment of your design and is worth 60%.

It is expected that what you design initially might well deviate from your final implementation and that techniques you discover later in the module might cause you to re-think or re-approach decisions or plan you have already made. You might even discover that your initial idea needs to be completely replaced with something more achievable. This is perfectly fine and gives you an opportunity for critical reflection in your final report.

Above all, this coursework should be fun, so use your imagination, and give your creativity a free rein. Invention and originality will be rewarded by the marking scheme. I hope you enjoy working on it.

Part #1

For this part of the assignment you will develop an idea for your choose your own adventure game site alongside a design and a plan for achieving an implementation of that design. These will be presented in a report. You will likely want to develop a satisfying user experience, and utilise a visually pleasing design, so consideration of your users interactions with the site at this stage can be useful.

Before you begin, it is worth doing a little research into the kinds of features that existing browser-based games support. Don't get too ambitious though as you have a limited amount of time and are probably looking at what teams of professional developers have achieved over a longer timescale. As a rule it is worth having a simple, core plan that you can supplement with more elaborate functionality in the situation that you make better progress than you expected, but allowing you to fall-back to something more achievable if you experience challenges.

Your deliverable for this part of the assignment is a single, short, and well written PDF report, that is limited to no more than 8 pages of text (images do not contribute towards the page limit) and which includes the following:

1. A description of the game that you are planning with enough background context for your reader to understand what you are trying to do. If you have a draft of your story or storyline then you should include it here.
2. A summary of any background research you have done with a description of how this has contributed to your project (perhaps through better understanding of potential solutions, libraries, or APIs that might assist you).
3. A list of features and some discussion of why each feature is included.
4. A navigation tree and some discussion of how you plan to organise your site.
5. A sketch of an initial user interface for your system and some commentary on the motivation for your design, i.e. how does your design address the features you've listed. NB. Any designs can be hand-drawn and scanned/photographed for inclusion in your report.
6. As appropriate: any additional sections that you deem fit to describe your project. For example, if you have decided to implement a particular feature as an extension then this would be the place to report on it. Similarly if you intend to save data within the browse, then some description of the kinds of data that you intend to store, how you will store it, and how it will be structured, should be reported on.
7. (Optional) You may include appendices in your report if you have too much material to fit within the 8 page limit.

Your report must be uploaded to Moodle by the deadline of **3PM on Friday 6th March, 2020.**

Part #2

You must implement your planned site from part #1 using HTML, CSS, and JavaScript. You may use any other technologies such as libraries, frameworks, third-party APIs, and browser APIs as appropriate. However your entire site must be deployed through GitHub pages. When you have used tools, libraries, or APIs other than pure HTML, CSS, and JavaScript written by yourself, you must be able to justify why you used them rather than creating a solution for yourself.

Your deliverables for this part of the assignment are the following:

1. The complete source code of your site must be committed to a GitHub Git repository. Your repository must be made public before the deadline.
2. A public deployment of your site using the GitHub pages hosting feature.
3. A short (limited to no more than 4 pages) PDF report that covers the following:
 - 3.(a) Explains the differences between your initial plan as outlined in part #1 and your final implementation.
 - 3.(b) Describes any features that you would add or improve to enhance your project, given more time and what you now know.
 - 3.(c) Reflects upon the challenges you faced and achievements you made during this assignment.

Your report must also be committed to your Git repository before the deadline and all changes pushed to GitHub.

A link will be made available through Moodle before the deadline so that you can communicate the location of your GitHub repo and GitHub pages deployment URL to the markers.

The deadline for part #2 of the assignment is **3PM on Friday 10th April, 2020.**

Demonstrations

It is school policy that all coursework must be demonstrated and that without a demonstration your submission will not be marked. Demonstrations will be held during the assessment weeks and all students will have the opportunity to sign-up for a demo slot. The module leader will contact the class closer to the deadline to organise demo slots.

The main goal of the demos is to establish that the work you've submitted is your own. It is also a useful opportunity to provide a small amount of verbal feedback to you. Demos will be held during Weeks 14 & 15. During your demo you will have the opportunity to show off your app and may be asked questions about your work. It is very difficult to see every feature of your work during the time available so please don't be upset if there isn't quite enough time to talk about everything you've done. The deployed work will be thoroughly examined during the marking process in addition to the demo.

Note that you should aim to be set up and ready to go **before** your marker arrives to see you. It is your responsibility to ensure that you can demo the site that you have developed but **without a demonstration your submission will not be marked**.

Feedback

Feedback is very important to your learning process. During the duration of this module you will experience feedback using a variety of modes and at various times. The most common type of feedback that you will get is verbal feedback during timetabled contact time. The aim of this is to help you to improve your practical skills and to help you to think critically about your progress. This is why attendance at lab sessions is important as these provide a great opportunity to discuss your ideas with teaching staff in a less pressurised context. You will also get some written feedback after your hand-ins along with your grade. Generally this is more brief than the verbal feedback you will have already received, and is primarily aimed at helping you to see what you did that helped you to achieve your grade. There may also be suggestions for improving things that you should consider in the context of your work. Under ideal circumstances you will be emailed written feedback within three working weeks of the submission deadline. However you will also receive verbal feedback both during your demonstration and during contact time throughout the trimester. Verbal feedback is as important, sometimes more-so, than written feedback, and should neither be discounted nor disregarded.

Grade Guide

The marking schemes are devised so as to reward those who go beyond the core taught material by integrating their own self-directed learning and discoveries. As a general rule, the more functionality, the better the mark, however your functionality should be consistent with a cohesive overall design, professional presentation, and pleasing user experience. Note that, because this is a project, rather than a mere test of your capabilities, you have significant leeway for what

you include in your final submission (beyond the specified requirements). The following grade guide gives you a coarse description of how to interpret your overall percentage grade (for the entire module). When interpreting your feedback, please don't think in terms of "where did I lose marks?" or "did I get marked down for that?" but instead you should consider that you start off with nothing and incrementally approach perfection. A better question to ask yourself is "what could I have done to improve my work?" or "how could I refine what I have done to mark it even better?". Thinking critically about our achievements ourselves is how we develop a professional sense of the quality of our work, rather than relying on external validation of whether it is good enough. Projects like this are designed to encourage that kind of reflection and professional development. The following scale will give you some idea of the overall grade bands:

0-40% There are a number of ways to achieve a mark in this band, but generally you will either have failed to create a working practical implementation to a minimal standard in either part of the project, or have failed to submit a report that is written to an acceptable standard in either part of the project, or some combination of both.

40-49% Work in this grade band is considered to be up to an overall, acceptable, but minimal standard and constitutes a bare pass of the module. Practical implementations will cover at least the core requirements in each part and reports will be written to a minimally acceptable standard of content and presentation.

50-59% Work in this grade band is work that has achieved a good standard. This means that there is evidence that you are applying some depth of knowledge to the goals that you set out to achieve and are developing ambition in relation to what you build.

60-69% To achieve a mark in this band you will have produced work that is to a very good standard. As a rule, **most students will achieve in the mid to upper end of this grade band**. This indicates that you are developing significant depth in your understanding of the domain as a whole, as well as significant technical understanding of underlying technologies. You will also be developing reliable critical faculties that enable you to realistically appreciate what you have achieved and how it can be improved.

70-100% A submission in this mark band represents excellent work. Above 80% you should consider your work to be exceptional, and above 90% your work is exemplary and tending towards perfection. To achieve a mark above 70% you will have integrated and extended the lab work covered in class to offer an excellent level of functionality, both in terms of the number of features and their quality of implementation. Your reports will explain your thinking, in relation to both design and implementation, with clarity. To achieve above 80% then you should be aiming to exceed the taught content of the module and introduce ideas and findings from your self-directed learning.

You should think strategically about how to approach this assignment. The grade guide is cumulative, i.e. to get a higher grade, you must also have achieved the functionality required to attain a lower grade. A lower-risk strategy is to identify

the core features that you think will attract a pass mark then aim to complete those features as soon as possible. Once you believe that you've secured some work at the pass level then you should iterate over your working solution to improve those features and try not to break things.

Notes

Your report should be written using the Napier report template:

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

It is recommended that you use L^AT_EX to typeset your report, but so long as your report is according to the template format this will not be enforced.

Try to avoid accusations of plagiarism:

- Do not copy and paste text from the Internet.
- If you use code from the internet, please acknowledge it in comments in the code and also in the report.
- After reading reference material, lay it down where you cannot see it and write your own interpretation in your own words.
- Credit will be given for good referencing.
 - If you are unfamiliar with, or unsure about citing or referencing the work of others then you can find additional guidance here:

<https://my.napier.ac.uk/Academic-Study-Skills/Pages/Referencing-Guidelines.aspx>

- Professor Hall has also prepared guidelines on reference in reports here:

https://moodle.napier.ac.uk/pluginfile.php/1718339/mod_resource/content/1/2005_hall_referencing.pdf

Indicative Marking Scheme (Part #1)

Topic	Criteria	Marks
Core Criteria	A description of your site & game together with a summary of any background research & exploration of how this relates to your site	/20
	<ul style="list-style-type: none">* List of features* Navigation tree* Initial UI sketch & commentary* Implementation Plan	/50
Above & Beyond	The following is indicative: Design of features that go beyond the idea of the core “choose your own adventure” game. For example, use of sound, graphics, data-storage, external data sources, or extending the game remit to include elements of role-playing or text-adventure games.	/30
Total		/100

Indicative Marking Scheme (Part #2)

Topic	Criteria	Marks
Core Criteria	Working implementation and subsequent deployment of your planned design. This includes the development & integration of an appropriate user interface & associated user experience.	/50
	A report containing: * Explanation of differences between initial plan and final submission * Description of features for enhancement * Reflection upon challenges faced * Reflection upon achievement made	/20
Above & Beyond	The following is indicative: The implementation of any features that go beyond the idea of the core “choose your own adventure” game. For example, your use of sound, graphics, data-storage, external data sources, or extending the game remit to include elements of role-playing or text-adventure games.	/30
Total		/100

1. Module number	SET09103
2. Module title	Advanced Web Technologies
3. Module leader	Dr. Simon Wells
4. Tutor with responsibility for this Assessment	Your first point of contact is the module leader
5. Assessment	Please see attached descriptor for details
6. Weighting	Part #1 (40%) Part #2 (60%)
7. Size and/or time limits for assessment	Please see attached for details.
8. Deadline of submission Your attention is drawn to the penalties for late submission	Part#1 is due at 3:00PM on Wednesday 30th October 2019 Part #2 is due at 3:00PM on Wednesday 4th December 2019
9. Arrangements for submission	Please see attached descriptor for details
10. Assessment Regulations	This assessment is subject to the University Regulations.
11. Requirements for the assessment	Please see attached descriptor for details
12. Special instructions	None
13. Return of work	Within three working weeks.

14. Assessment criteria	<p>Please see attached. With reference to the module descriptor, part #1 of this assessment covers aspect of learning outcomes 1, 2, & 4 and part #2 covers aspects of learning outcomes 1, 2, 3, & 4.</p> <p>L01: Understand the role of HTTP and related protocols in the design and efficient exploitation of robust and scalable services and APIs for the Internet and Web.</p> <p>L02: Evaluate the sensitivity of data gathered by your Web app and select appropriate tools and techniques to ensure its security and privacy.</p> <p>L03: Demonstrate effective use of client side scripting languages and libraries at an advanced level to produce a compelling user experience.</p> <p>L04: Demonstrate competence at an advanced level in the design, development, and evaluation of web applications and services using server-side languages, libraries, and tools.</p>
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