Teesside University School of Computing, Engineering & Digital Technologies

Business with Technology BSc Hons

Course Assessment (ICA)

Web Development- CIS1057-N

Evaluation Test Report

Module leader: Barry Hebbron

B1573381

2022

Table of Contents

1. The scope of this Evaluation test report

In this Evaluation and test report, we will be looking at the following areas: validation, verification, professional, ethical and legal issues that are important to take into consideration when building a microsite for the student futures department at Teesside University.

The validation will need to ensure that the microsite meets the requirements and design documentation of the department of student futures department for Teesside University. Furthermore, testing the site to ensure it functions correctly and is easy to use for the intended functionality. The student's future work placement microsite needs to meet the diverse target audience to deliver the value of purpose stated in the requirements documentation.

The verification process of checking through the student's future work placement microsite has been implemented and is functional. Apart from this process, I will test the site for bugs and other issues and review the HTML and CSS to ensure the code is written to the best practice.

Furthermore, involving the verification process, I must ensure the site adheres to professional standards and develops ethically and responsibly. This will give insight into the following guidelines of professional, ethical and legal issues that have been considered within the requirements documentation.

I am using a reflection cycle such as the Gibbs reflective cycle (Edinburgh U, 2020) to investigate the experiences of the microsite when approaching the project, from the requirements to design to the final build phase of the microsite. This can be seen in the following pages within this documentation artefact of the Test and Evaluation report (Labelled under “5. **Self-Evaluation and Reflection of student futures work placement microsite” Pages** between **25 to 27**)

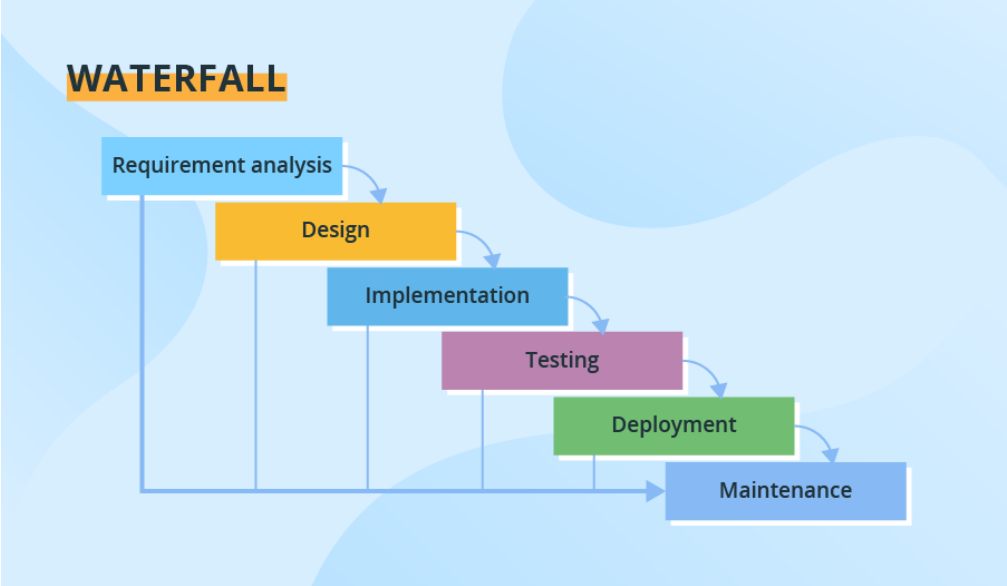
Continue onto the following page scope of project life cycles within student's future work placement site.

2. The scope of the project life cycles within the student's future works placement site.

The web life cycles can help expand through navigating web development's complex and demanding process (Shiklo, 2022). Various life cycle models within web development have been adapted and grown. Each life cycle can have its benefits and characteristics depending on the scale of the project.
The project life cycles that I have considered for adapting are the following:

- Waterfall Model Life cycle
- Agile Model Life cycle
- Scrum Model Life cycle
- V-model model Life cycle (Validation and Verification model)

Waterfall Model Life cycle



Waterfall Model life cycle diagram (Shiklo, 2022).

The Waterfall approach works best for tasks where the criteria are explicit and the intended outcome is understood. Software development is done linearly, with each stage of the process being finished before moving on to the next (Hariyanto, Sastra and Ardyanto, 2022).

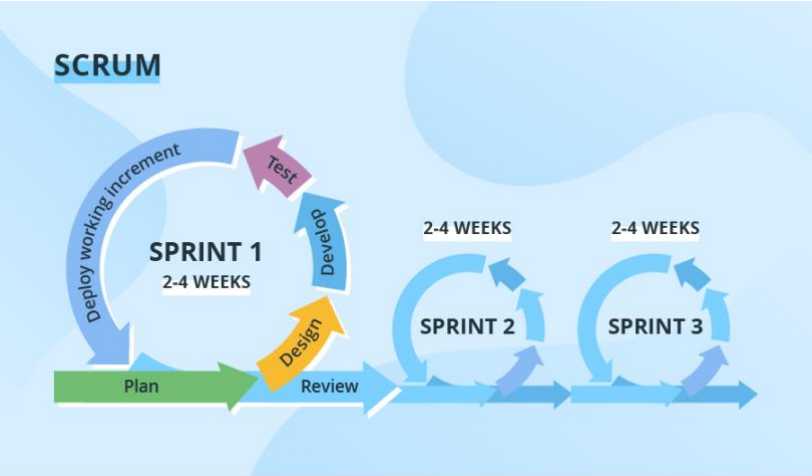
Continue onto the next page for the scope of project life cycles with the student's future works placement site.

Agile Model Life cycle

Agile model Life cycle (Reddy, 2019)

Agile web development is a flexible, iterative process that prioritises teamwork and the continuous delivery of functional software. The projects with this paradigm work best are those with quickly changing requirements or plenty of ambiguity (Nundlall and Nagowah, 2022).

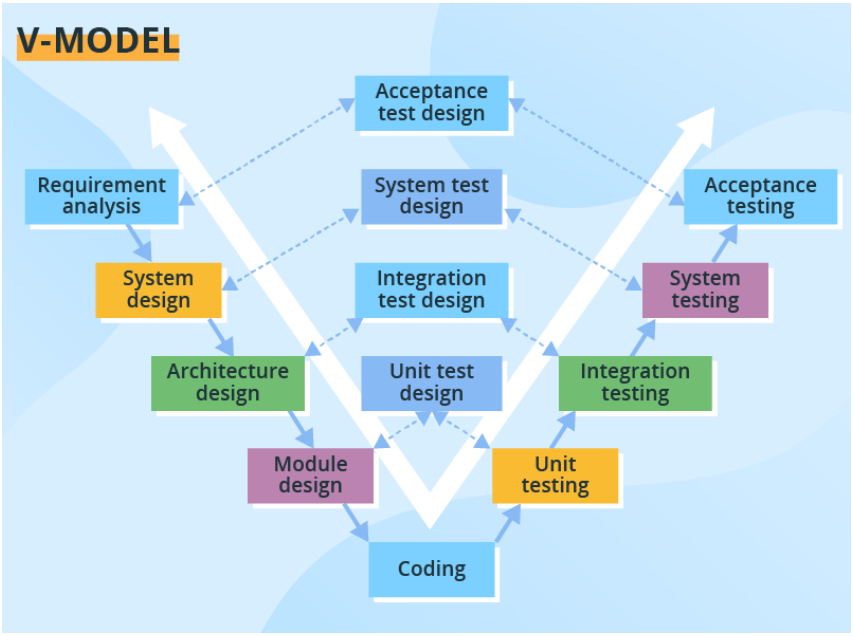
Scrum Model Life cycle



Scrum, Model lifecycle model (Shiklo, 2022).

The Agile model most used now is undoubtedly Scrum. The iterations (or "sprints") last between two and four weeks, and they are accompanied by careful preparation and evaluation of the preceding sprint (Chantit and ESSEBAA, 2021). Once the sprint activities have been defined, alterations are not permitted

Continue onto the next page for the scope of project life cycles with the student's future works placement site.



V-Model lifecycle model (Shiklo, 2022).

The V-model can steer the development of a web application or website. The V-model comprises several phases that stand in for various V-shaped locations. These are included in: Requirements gathering: The project team collaborates with stakeholders at this early phase of the V-model to establish the project's requirements and scope.

Design: During this phase, the project team focuses on the user interface, functionality, and any required connections of the web application or website. Implementation: Throughout this phase, the project team starts constructing the website or application by design. The front end and back end of the application must be coded. The project team does numerous sorts of testing during this phase to make sure the web application or website runs appropriately and satisfies the established criteria—testing phase, integration testing, and acceptance testing (Khan et al. 2022).

Conclusion

The waterfall model will be the project management life cycle I will take within this build of the student futures microsite. This is due to the linear path to the software development that will involve each development process from an ideology of progression flow in one direction from the start of gathering the requirements to design to build, and test evaluation artefact of the microsite (Garg, Kaliyar and Goswami, 2022). Furthermore, as this is a small project that has state clarity of problems and needs for the microsite, it can be simple and easier to use as an individual. However, they can be a drawback with this methodology with inflexibility for complex and rapidly changing projects. It is more suitable for building a microsite for student futures (Ingeno, 2018).

Continue onto the next page for the Testing process.

placements microsite

The Testing process for the student futures department microsite for Work Placement. The following will need to be considered:

Functionality Testing

- Links result in an appropriate response.
- HTML and CSS compliance (Abou-Zahra and Brewer, 2019).
- Legal constraints have been met specified within the Requirements and Design artefacts of the student futures department microsite.

Usability Testing

Completeness of the microsite meets the Targeted persona used within the requirements and design artefact of the microsite that will meet the criteria (Generosi et al., 2022).

Compatibility Testing

The Compatibility Testing of the microsite will be tested across platforms of third-party applications that users of the microsite will be using, such as chrome, edge,

Firefox, and Safari, as well as tested on both devices platforms, such as mobile and desktop (Blas, Leone and Gonnet, 2020). Secondly, the performance will be considered to see if any delayed load response times may occur for the microsite and if there is any lag or drawback on an interactive session. Thirdly Accessibility will need to be considered, such as whether it operates correctly for users who may require accessibility driven on the cross-platform navigation devices such as mobile and desktop devices on the microsite.

Unit Testing

Unit testing and integration testing will be conducted on this student futures department microsite for Work Placement on each page of the microsite. This will use the parameter of compatibility, usability, and functionality of the microsite. I will use third-party applications appropriate to the users and test the microsite's strengths and weaknesses (Weichbroth, 2022).

Quality Assurance of the Microsite

When testing the website, I will be cross-referencing against Quality, validating the Assurance of the microsite within the student futures department microsite for Work Placement (Kniazhina, 2022). To ensure the criteria are met for Quality Assurance, the following will take into consideration:

- The visibility of the microsite
- The comprehension of the microsite
- The diversity of Viewpoints

Continue onto the next page for the results of the conducted test of the student's futures work placements microsite.

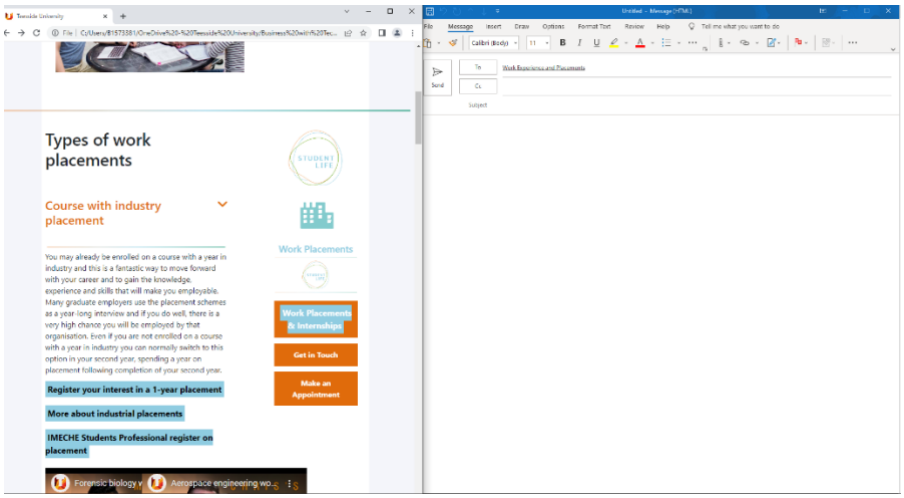
Functionality Testing

1. Links result within Microsite producing the appropriate responses.

Email client

- ✓ Outlook, go to email the address of the student futures area
- ✓ Placement area for work experience and placements

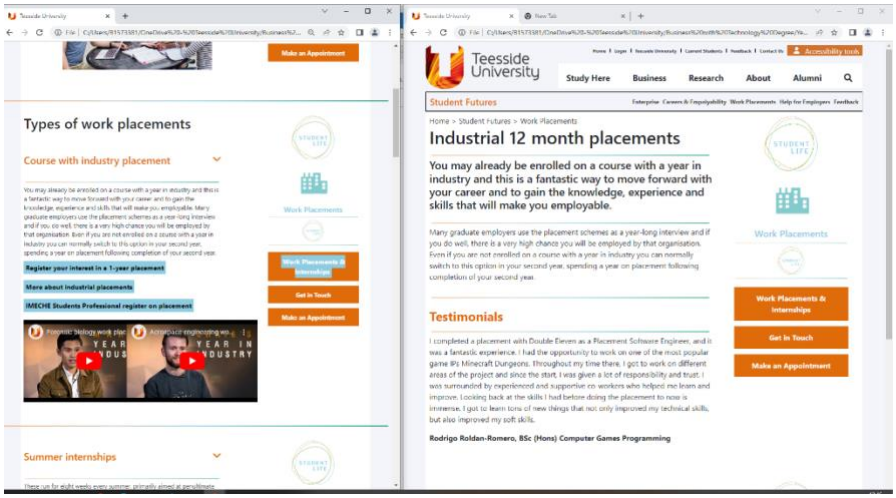
Evidence



Link to other pages

- ✓ **more about industrial placements**
- ✓ **IMechE student professional register**

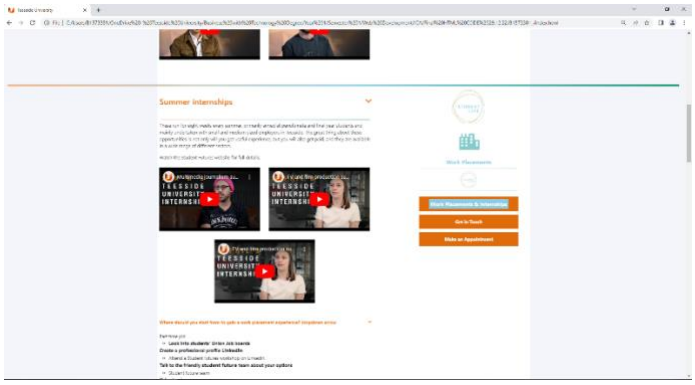
Evidence



YouTube links

- ✓ Videos preview
- ✓ Video on YouTube load up the screen

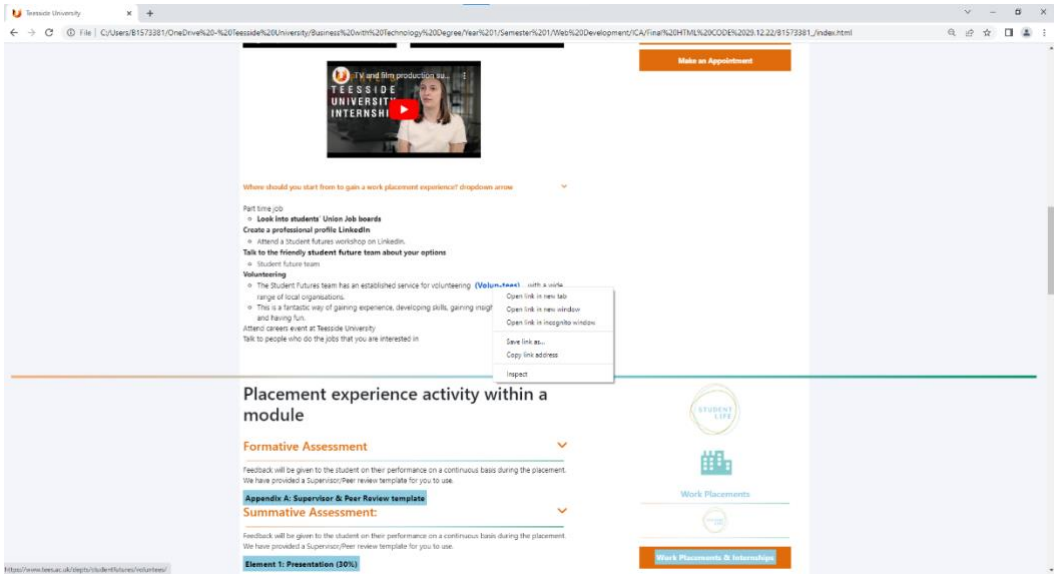
Evidence



Hyperlinks

- ✓ LinkedIn
- ✓ Student futures
- ✓ Volun-Tees

Evidence



Continue onto the next page for the results of the conducted test of the student's futures work placements microsite

Drop down links to each section

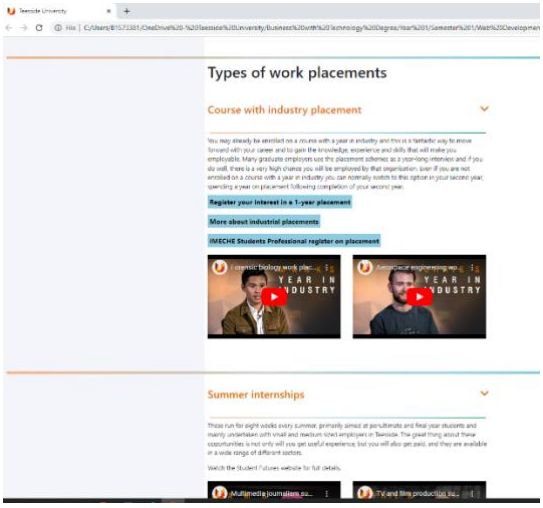
- ✓ Types of work placements
  - ✓ Course with industry placement

- ✓ Summer internships
- ✓ Placement experience activity within a module
    - ✓ Formative Assessment
    - ✓ Summative Assessment

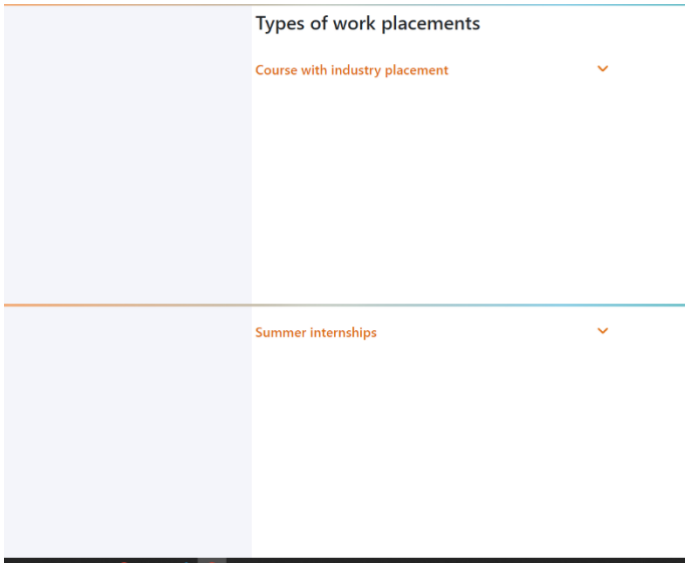
- ✓ Academic Tutor Visits

Evidence

- ✓ **Drop down link opens**



- ✓ **Drop down link closed**

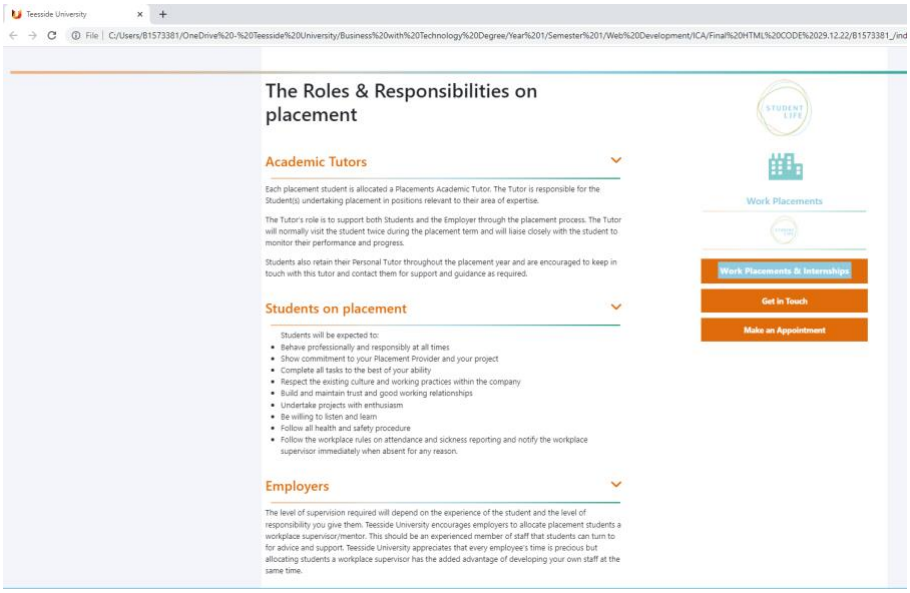


The Roles & Responsibilities of placement

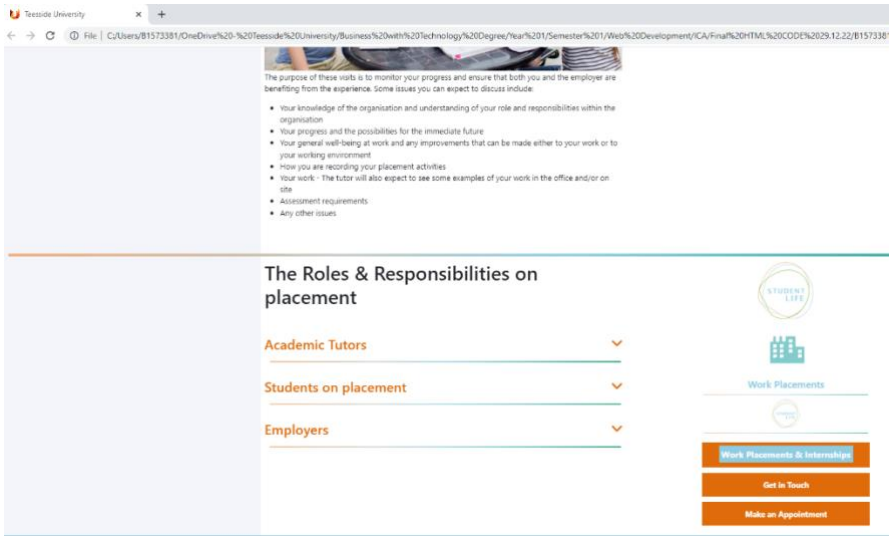
- ✓ Academic Tutors
- ✓ Students on placement
- ✓ Employers

Evidence

- ✓ **Drop down open**



- ✓ **Drop down closed**



Continue onto HTML and CSS compliance within markup of the microsite

1. HTML and CSS compliance within the markup of the microsite

To validator and check its compliance with the following standards, I used a markup validator tool which Is an accurate and reputable source of testing against the observation of the microsite.

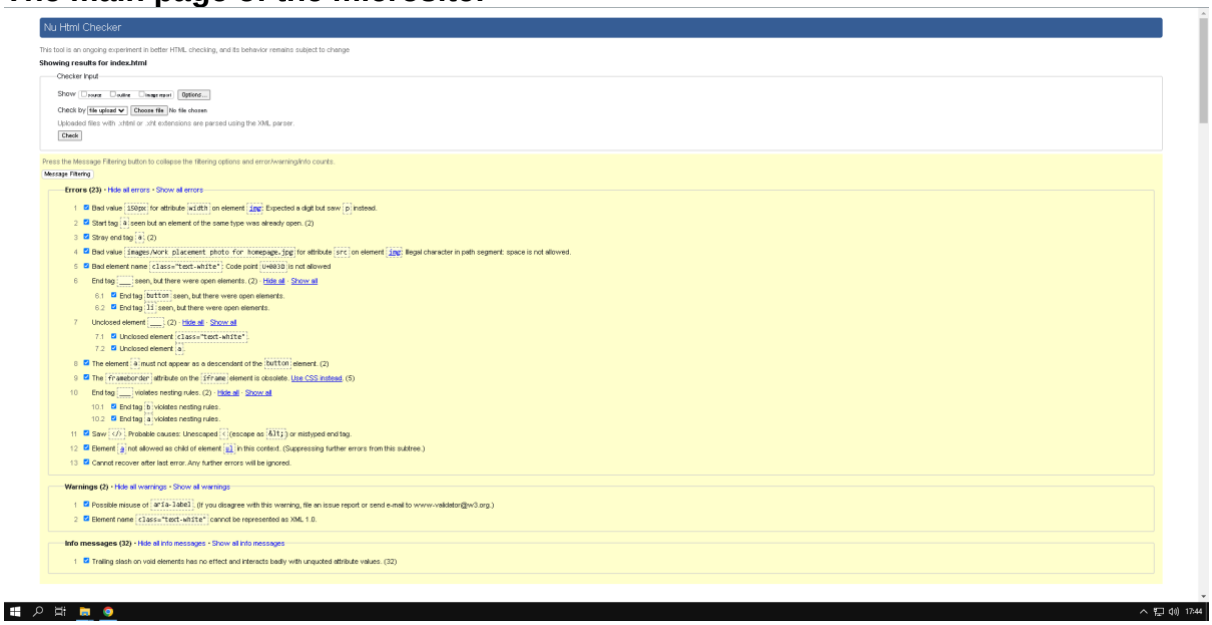
- ✓ Compliance to W3C (Tabarés, 2021)
- ✓ Correct tags used with HTML and CSS
- ✓ Comments have been made with code to explain areas of code.
- ✓ Syntax error and markup are clean.

Test result for Validator of the web documents of the HTML using (W3C *Markup validation service,* 2023)

Test Results v1- with errors and issues

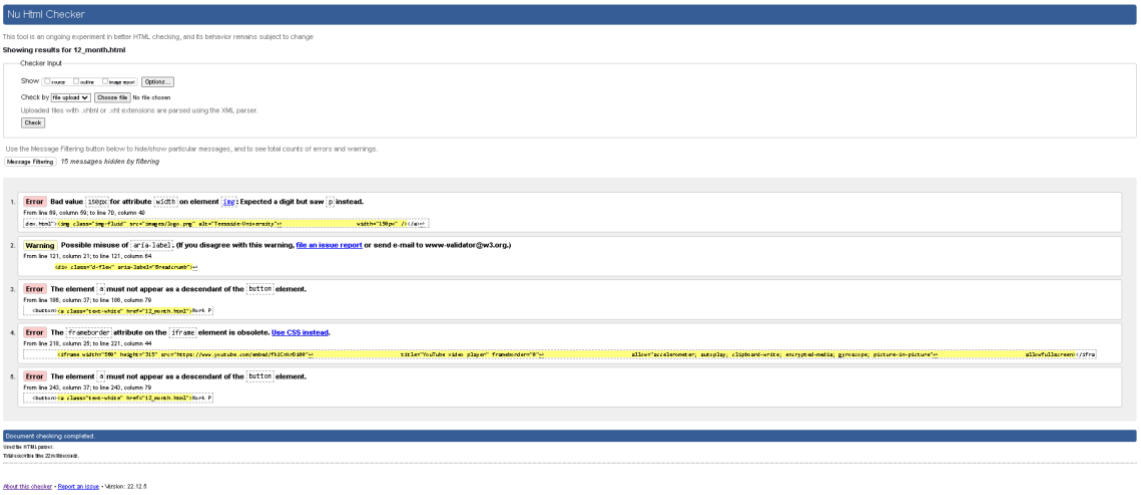
Here is the first result of the tests (W3C *Markup validation service,* 2023) with some errors with the HTML within the microsite.

The main page of the microsite:



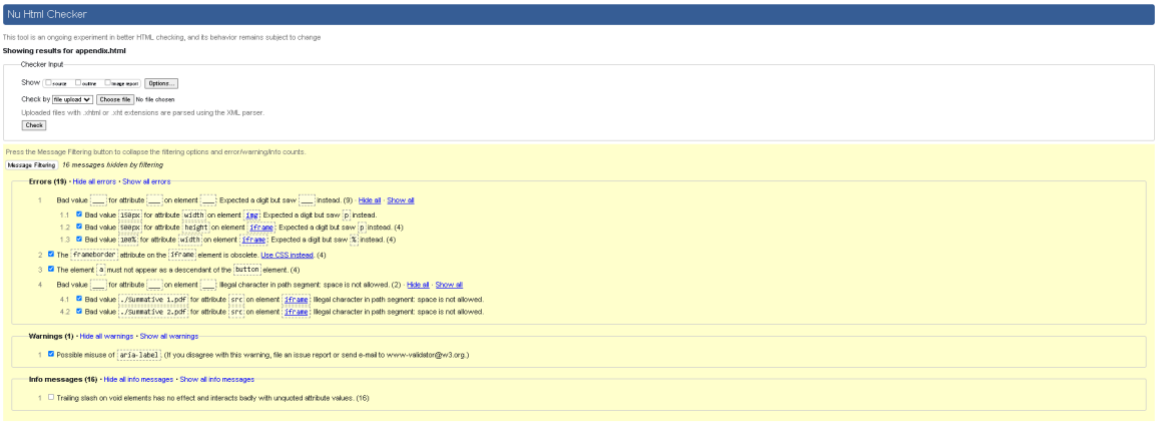
Error in total: 23
Warnings: 2
Info messages: 32

Industrial 12-month placements page HTML



Error in total: 4
Warnings: 1

Continued onto the next page for HTML and CSS compliance within the markup of the microsite

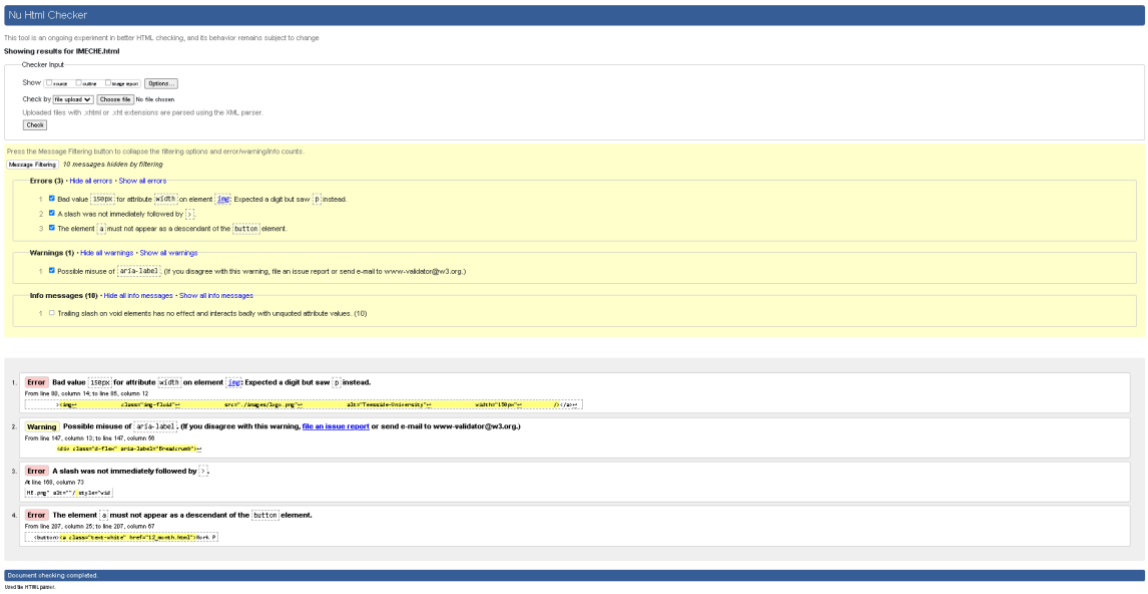


Error in total: 19

Warnings: 1

Info messages: 16

IMechE Students Placement Register HTML Page



Error in total: 3

Warnings: 1

Info messages: 10

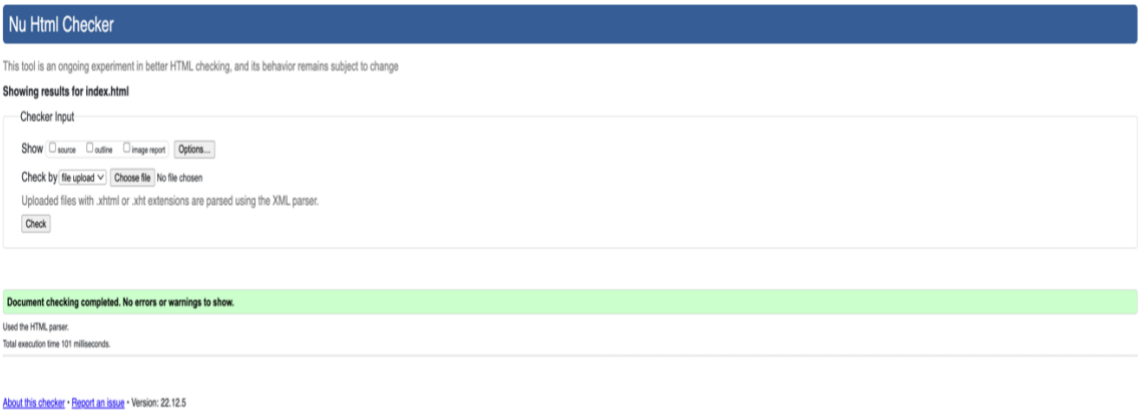
After running these tests, I had to look further and see how these errors occurred, so I went back to Visual studios code and cross-referenced all the errors and warning and info messages from the (W3C *Markup validation service,* 2023) and corrected these errors. This will enhance the capabilities of the microsite. The main mistake with the elements and minor syntax issues can happen due to the content and information used within this microsite. On the next page, you will see the resolved aspects of the (W3C *Markup validation service,* 2023), showing no errors, warnings, or information messages.

Continue onto the next page for the results of Test v2 with no errors or issues

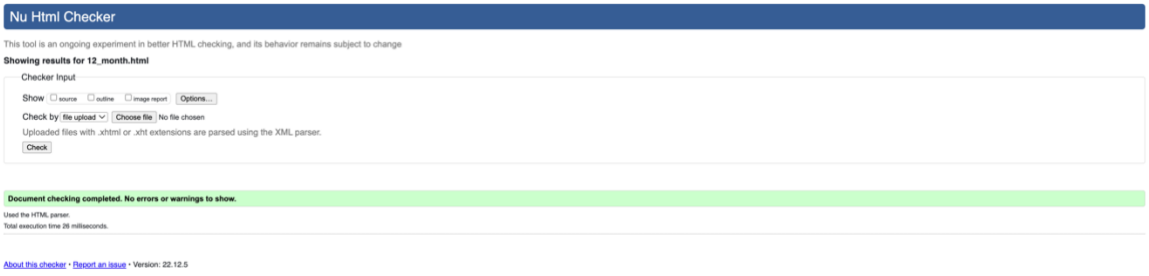
Test v2- with no errors or issues

After tweaks and fixes within the code, we ran the test in the same conditions running the same (W3C *Markup validation service,* 2023).

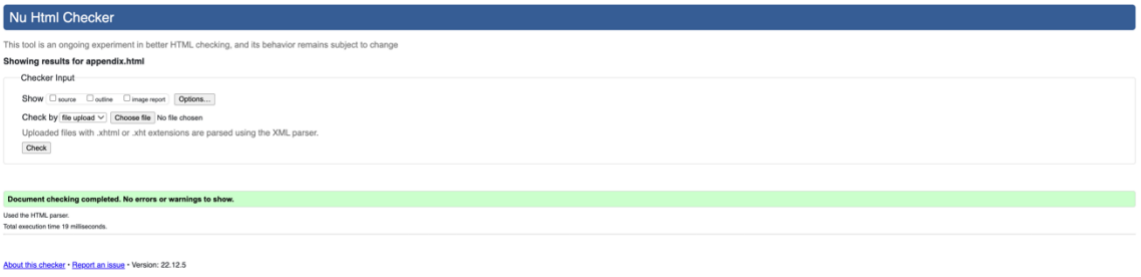
The main page of the microsite:



Industrial 12-month placements page HTML

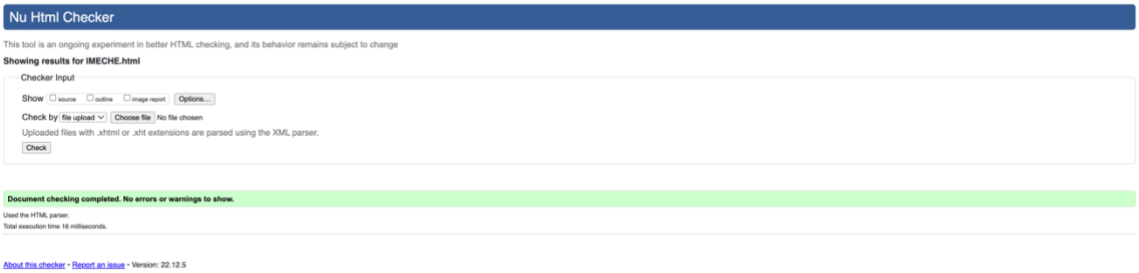


Appendix Placement experience activity within a module Placement experience activity within a module



Continue onto the next page for Test v2 with no errors or issues within HTML Markup.

IMechE Students Placement Register HTML Page



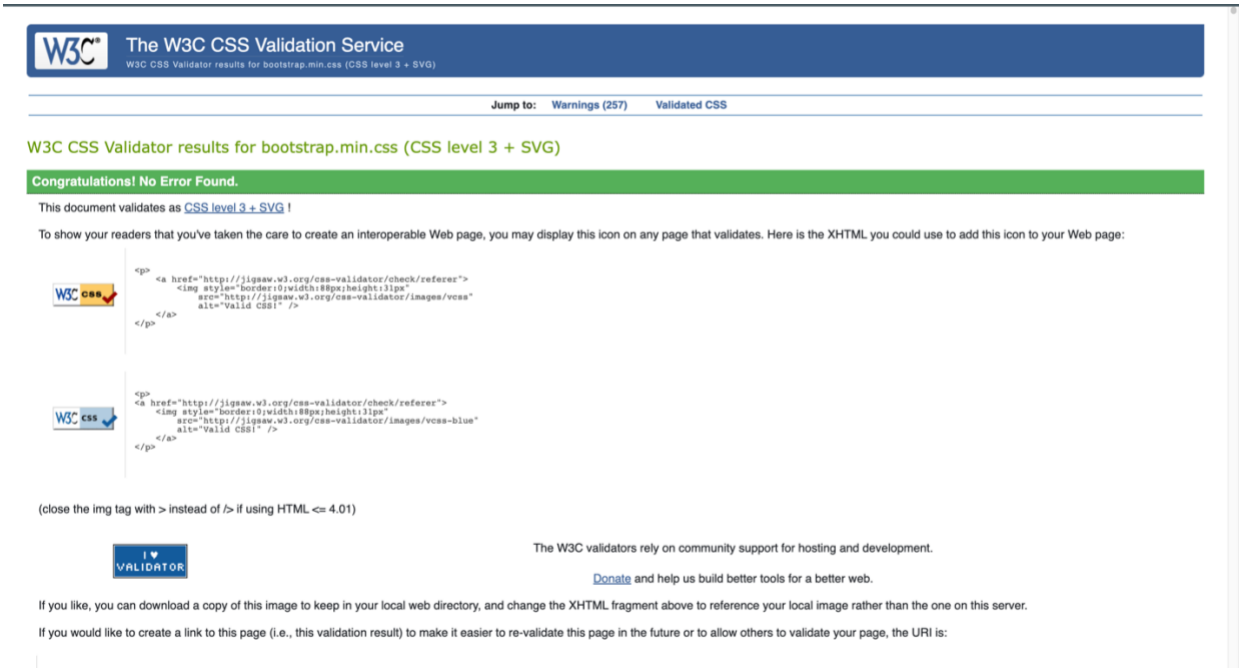
As you have seen in the test v2 (W3C *Markup validation service,* 2023), after running the code a second time, it has resolved all the errors and issues warnings, and the HTML is compliant with the following specification:

- ✓ Compliance to W3C (Tabarés, 2021)
- ✓ Correct tags used with HTML and CSS
- ✓ Comments have been made with code to explain areas of code.
- ✓ Syntax errors and errors and warnings are not within the code.

Continue onto next page for Test results for CSS

Test results for CSS

Test result for Validator of the check for CSS (Cascading style sheets) with style sheets using **(CSS Validation Service, 2023)**



The W3C CSS Validation Service

W3C CSS Validator results for bootstrap.min.css (CSS level 3 + SVG)

Jump to: Warnings (257) Validated CSS

W3C CSS Validator results for bootstrap.min.css (CSS level 3 + SVG)

Congratulations! No Error Found.

This document validates as CSS level 3 + SVG !

To show your readers that you've taken the care to create an interoperable Web page, you may display this icon on any page that validates. Here is the XHTML you could use to add this icon to your Web page:

```
<p>
    <a href="http://jigsaw.w3.org/css-validator/check/referer">
        <img style="border:0;width:88px;height:31px"
            src="http://jigsaw.w3.org/css-validator/images/vcss"
            alt="Valid CSS!" />
    </a>
</p>
```

```
<p>
<a href="http://jigsaw.w3.org/css-validator/check/referer">
    <img style="border:0;width:88px;height:31px"
        src="http://jigsaw.w3.org/css-validator/images/vcss-blue"
        alt="Valid CSS!" />
    </a>
</p>
```

(close the img tag with > instead of /> if using HTML <= 4.01)

The W3C validators rely on community support for hosting and development.

Donate and help us build better tools for a better web.

If you like, you can download a copy of this image to keep in your local web directory, and change the XHTML fragment above to reference your local image rather than the one on this server.

If you would like to create a link to this page (i.e., this validation result) to make it easier to re-validate this page in the future or to allow others to validate your page, the URI is:

- ✓ Correct tags used with HTML and CSS
- ✓ Comments have been made with code to explain areas of code.
- ✓ Syntax errors and errors and warnings are not within the code.

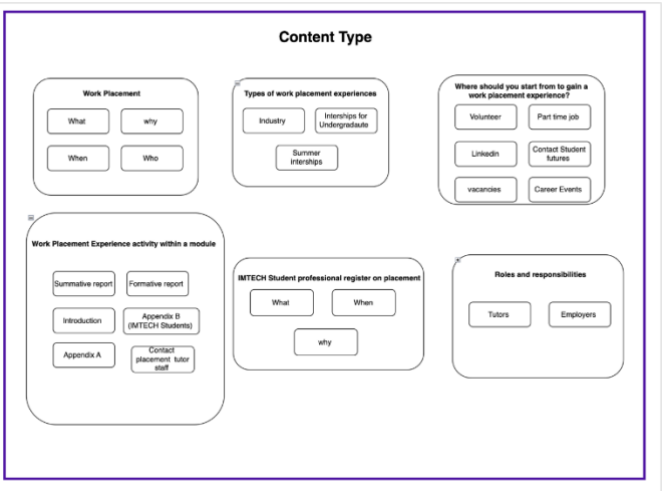
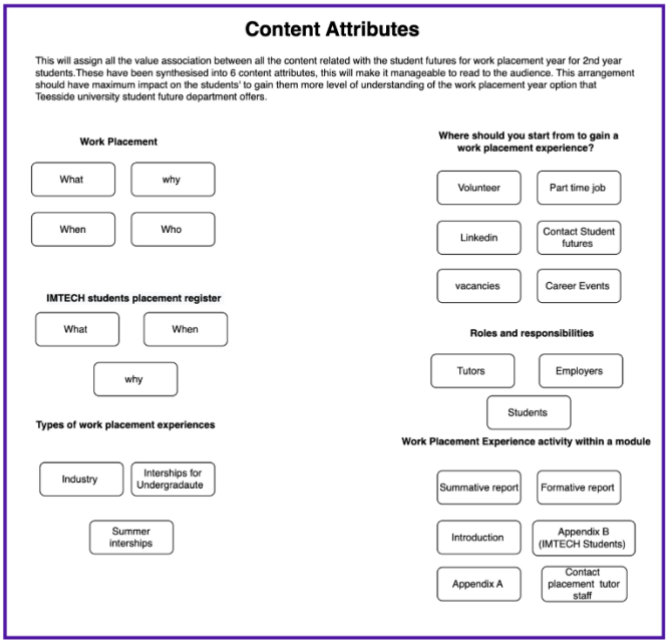
Continue onto the next page for Useability Testing

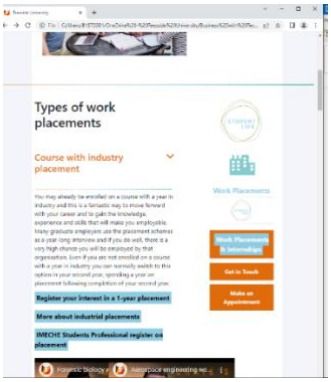
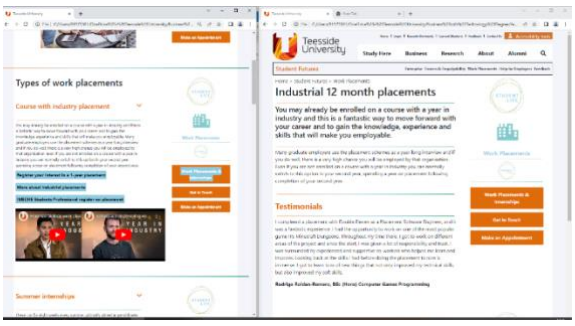
Usability Testing Results

The usability Test for this microsite will be look at the following criteria across both documentations of the Requirements documentation and the design documentation.

Criteria for Usability Testing	**Response to the criteria for the Usability of the microsite**
Does the microsite interact with the audience?	The microsite interacts with the target persona's which is stated within the requirements documentation by conducting the following: ✓ Interactive hyperlinks to useful resources ✓ Easy to navigate menus with navigate bar ✓ YouTube vide links with preview on the microsite ✓ The optimisation of the primary and secondary keyword analysis ✓ Suitable content that is accessible to a wide range of target audiences with the main audience been 2nd year students. ✓ The cross compatibility for accessing the microsite both on mobile and desktop devices.
Does the microsite target the personas ?	The main target personas of audiences that I have aimed with the student future work-placements microsite is the following: ✓ Mature students who have come to gain a higher education to improve their job career progression. ✓ Young students 18-22 years has completed their college education as well as their first year of there degree however they have a part time job and have no area of expertise on how to apply for a placement as well as what is the process and procedure, and opportunity of a placement year can offer to themselves. ✓ Students' who have a **disability** (**physical** or **mental** disability) which can have an impact on

	their own education as well as implication towards a placement year option. ✓ Students' who have an ethic minority within applying for a placement year and unsure if it will be suitable to fit into their culture. ✓ Students' who have come from deprived area within their country or region they live within the university. ✓ Student who has already completed a placement year within their degree subject that can be relatable or non-relatable. ✓ International students' who are looking into doing a placement year, however they may have implication towards their visa status due to them having an issue with having a placement year.

Does the content match to the requirements documentation?	The content of the student futures work placement has been broken down into the topic area that are discussed with the microsite and that align with the guidelines of the requirements documentation. The criteria of the content of student futures work placement are the following:  

Does the microsite have Domain name and design of the URL is recognisable to the audience?	The microsite of the student future work placement department design of the URL is recognisable due to the name of '**Teesside university'** as well as the heading section under as "work placements" which define the subject area. This gives the audience first interaction of the design. I have made the logo of "**Teesside university**" so its visible on various platform devices. Furthermore, the associate tag line "**Making you future ready"** which can help the target audience clear understand of the what work placements have to offer.
Has the primary and secondary work analysis been used within the microsite?	The main primary and secondary word analysis has been included within the microsite of the student futures work-placements area. This has been adapted from topic areas within the microsite. I have included the screenshot below to match the criteria of primary and secondary key word analysis. ✓ Primary Keywords have been included  ✓ Secondary keywords have been included 

Continue onto the next page for Combability Test for the microsite

Compatibility Testing

The compatibility of the microsite impacts the audience and persona types due to the accessibility and reach of the student's future work placements microsite. To test the compatibility of the microsite I will be using the following reputable source of standard browser used:

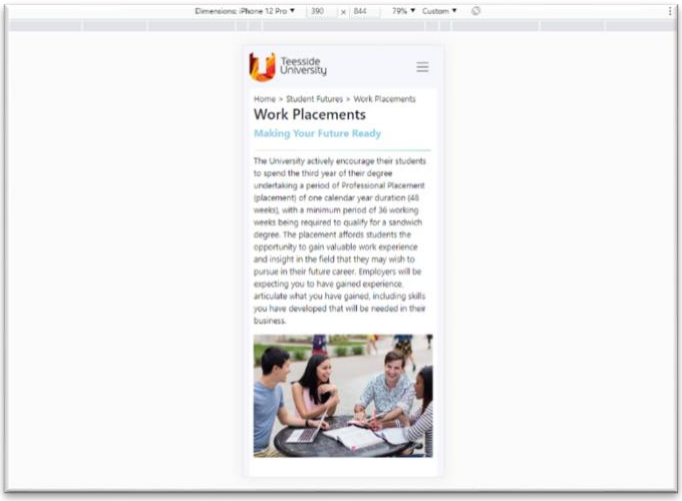
- ✓ Chrome (BasquesTechnically, 2023)
- ✓ Edge (MSEdgeTeam, 2022)

Chrome

I used development mode to test the mobile version and the desktop platform to complete the compatibility test on chrome. Both have consistency and load the microsite with all the correct content with no issues with latency on the mobile and desktop device platforms.

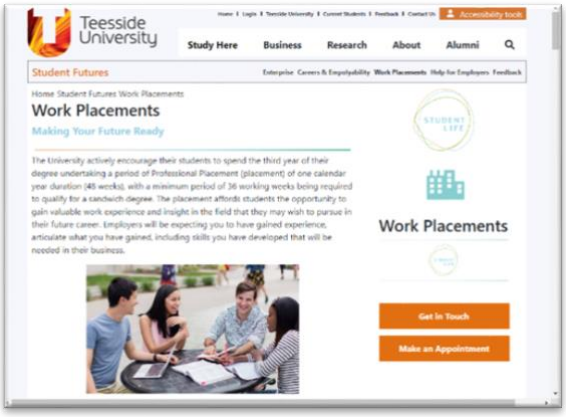
Mobile platform

Evidence for mobile device platforms with latency and performance and zoom-in and zoom-out capabilities for accessibility requirements.



Desktop Platform

Evidence for Desktop device platforms with latency and performance and zoom-in and zoom-out capabilities for accessibility requirements.



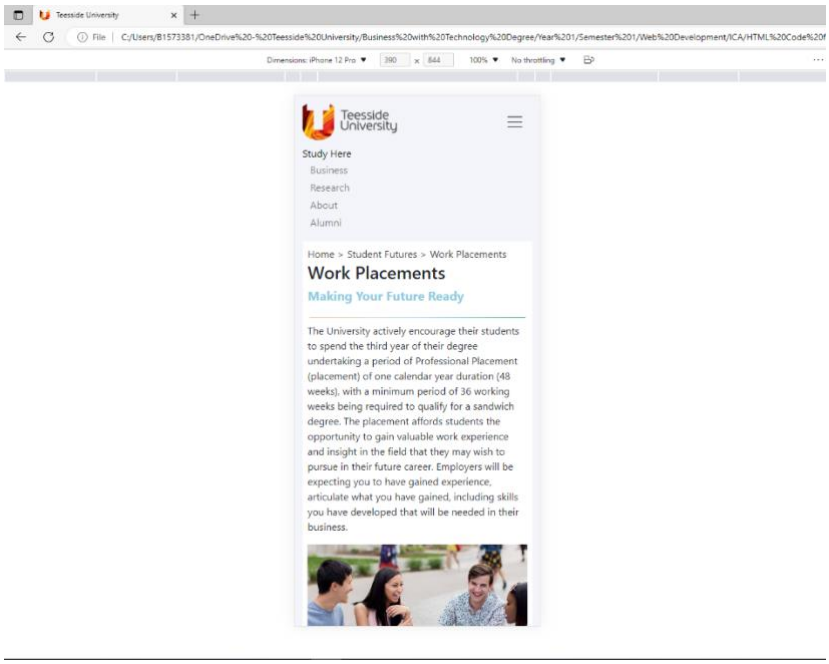
Continue onto the next page for Compatibility Testing

Edge

To complete the compatibility test on Edge, I used development mode to test the mobile and desktop versions. Both consistently load the microsite with all the correct content with no issues with latency on the mobile and desktop device platforms.

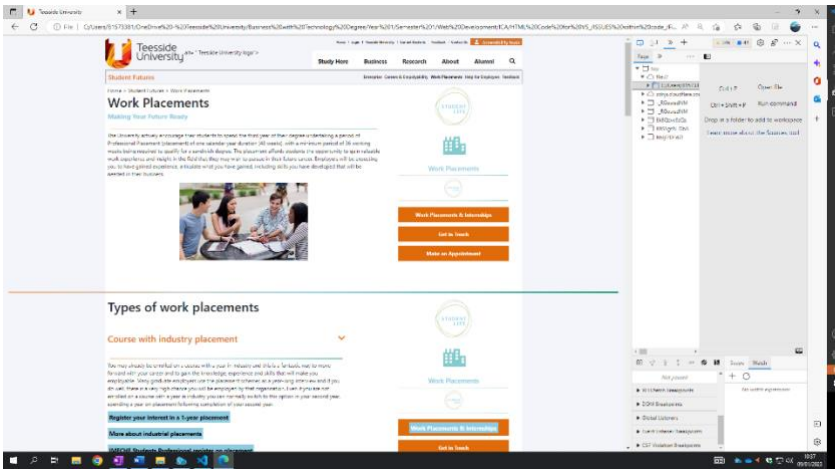
Mobile platform

Evidence for mobile device platforms with latency and performance and zoom-in and zoom-out capabilities for accessibility requirements.



Desktop Platform

Evidence for Desktop device platforms with latency and performance and zoom-in and zoom-out capabilities for accessibility requirements.



Quality Assurance of the Microsite

The following integrated phases will define the quality and assurance of the student future microsite:

The visibility of the microsite

- ✓ Easy to read markup within HTML and CSS.
- ✓ Easy-to-navigate menus and search options are available.
- ✓ Accessible from Mobile and desktop platforms.
- ✓ Clear URL and domain name design.
- ✓ We are reaching the target audiences defined in the requirements documentation.

Comprehension of the student futures microsite

- ✓ Content is easy to understand from all aspects of targeted personas.
- ✓ The comprehension of the content doesn't refer to false statements about organisations that can damage the integrity of an organisation.
- ✓ Comprehension of markup can be understandable to another developer for future development,
- ✓ Comprehension of domain name and design of URL.
- ✓ Comprehension of explicit images and graphical elements that have alternative
  text to explain their input within the microsite.
- ✓ The comprehension of concerns with copyright with obtaining images or developing text has been addressed concerning authors of the rights.

Diversity of viewpoints

- ✓ Testimonials have been considered within the microsite and added to give a more authentic feel to the microsite.
- ✓ The use of alternative topic areas discussed within the microsite corresponded well with the work placement area.
- ✓ Engagement between the student and university has been obtained by using an email client and hyperlinks to other reputable sources that the client has provided.
- ✓ The use of diversity within accessibility functions has been targeted to reach the targeted demographics of a broad range of personas'

Validation of Quality Assurance of the Microsite This is completed with the testing procedures within the current documentation and integration testing. An acceptance criterion has been used to compare the artefact documentation of the requirements documentation and design documentation.

5. Self-Evaluation and Reflection of student futures work placement microsite

I am currently a first-year business technology BSc Student. I have been a task to build a student futures microsite for 2nd-year placement students using HTML 5 AND CSS (Minnick, 2020) as well as a bootstrap to develop the microsite with documentation that must be suitable for the client, such as a requirement artefact and a design artefact as well as a Test and evaluation and the physical attribute of code that meet the criteria of the client which would be student futures department of Teesside University.

This task and precise job criteria were highlighted, and the appropriate material was given to be associated with the student futures department. The study was heavily involved with various research and development for the microsite and the proper lifecycle of a linear process from start to end of the small project.

Before beginning the project, I considered how I would execute this project to meet the client's needs and specifications. Firstly, I analysed the area of was looking into as well as the material after weeks of developing the documentation of requirements and design element hand in hand with referencing back to various source materials provided. I requested feedback regularly, which helped me meet the client's expectations and look at my professional development capabilities.

To expand on this, I built the microsite using a good text editor called Visual studios (Code, 2019), which I did have prior knowledge of operating in previous academic years. Then the build began of the actual microsite, and I referred back to the documentation artefacts, which kept me on track and made an easy-to-use list within OneNote to cross-reference against myself to stay on the path.

I initially felt overwhelmed by the amount of research development required to execute this project to the best of my ability for the client. I was under pressure as my code wasn’t ready for the microsite's standard and power. So, I had to use bootstrap, which I took inspiration from and developed to use my ideas. After this, I did have time to compose myself to complete and finish the task. I continued to the waterfall Lifecycle (Firzatullah, 2021) model to complete the tasks.

This did help me keep to a plan and schedule within building the microsite. However, I did face various setbacks due to personal circumstances at the time; areas of my code had issues, so I had to develop and do further research to extend my knowledge of HTML and CSS (Academy, 2023)within my current understanding of this subject area.
Overall, I had an eventful experience, from developing the documentation of artefacts suitable for the client's needs to building the microsite to an appropriate specification. However, after speaking to other colleagues and the lecturer for further advice on tackling various issues that occurred within the building process, I felt more positive to see that I was on track and as well as I thought with the time scale.

In retrospect, I need to continue in the right direction and use my instinct and initiative within my ability to build the microsite and consider the clients' expectations of the microsite and not delivery but deliver to the best of my knowledge. Furthermore, expand on to other lifecycles within building a website for clients' from a small to large scale project.

Moreover, I would like to conduct further analysis of support material given by the client as well as meet the criteria on the first occasion. Additionally, if I had additional knowledge of HTML and CSS as well as Java, I would like to create my bootstrap that is more unique from scratch to show my skills in the HTML and CSS language and adapt; this will help with front-end framed work within the microsite.

In the future, I will need to leave enough time to build the microsite and maybe consider building parts of each element of the microsite when the process of the documentation of requirements and design has been completed and run a regular test on each specific area of code within the microsite. After having a beneficial conversion with Barry Hebbron, lecturer on regular feedback discussion, we did discuss how I can develop a plan in place for each area of code and use that as a ticking box list to execute the code to a good quality without comprising decision within the requirements and design elements of the artefact for the client to approve each piece of code.

In terms of training and developing my skill within HTML and CSS as an entry-level developer, I will be undertaking further opportunities to build some other small microsites of my project and expand my knowledge of other languages within the scope of the web development industry. I will join various code Bootcamp and courses conducted by the university or third-party open learning academic online such as Codecademy (Wu, 2019). This helps me gain confidence in using languages in the web development sector, understand my code, and make me more confident when using various other languages, from minor to large-scale microsites.

End of Self-Evaluation and Reflection of student futures work placement microsite

Continue to next for references.

6.References

Abou-Zahra, S. and Brewer, J. (2019) 'Standards, guidelines, and trends, in 'Standards, guidelines, and trends, Web accessibility. Springer, pp. 225-246.

Academy, C. (no date) HTML & CSS articles, Codecademy. Available at: https://www.codecademy.com/articles/language/html-css (Accessed: January 5, 2023).

Blas, M.J., Leone, H. and Gonnet, S. (2020) 'Modeling and simulation framework for quality estimation of web applications through architecture evaluation', SN Applied Sciences, 2(3), pp. 1-21.

BasquesTechnically, K. (2023) Lighthouse: Optimize website speed, Chrome Developers. Available at: https://developer.chrome.com/docs/devtools/lighthouse/ (Accessed: January 9, 2023).

Chantit, S. and ESSEBAA, I. (2021) 'Towards an automatic model-based Scrum Methodology', Procedia Computer Science, 184, pp. 797-802. Available at: https://doi.org/10.1016/j.procs.2021.03.099. Available at: https://www.sciencedirect.com/science/article/pii/S1877050921007407.

CSS Validation Service, W.C. (no date) CSS Validation Service, The W3C CSS Validation Service. Available at: https://jigsaw.w3.org/css-validator/#validate_by_uri+with_options (Accessed: January 6, 2023).

Code, V.S. (2019) 'Visual Studio Code', Línea].Available: Https://Code.Visualstudio.Com/Docs/Editor/Whyvscode.[Último Acceso: Junio 2021], .

Edinburgh, U. (2020) Gibbs' reflective cycle, The University of Edinburgh. Available at: https://www.ed.ac.uk/reflection/reflectors-toolkit/reflecting-on-experience/gibbs-reflective-cycle (Accessed: December 26, 2022).

Firzatullah, R.M., 2021. Development of XYZ University's Student Admission Site Using Waterfall Method. *Jurnal Mantik*, *5*(1), pp.201-206.

Garg, A., Kaliyar, R.K. and Goswami, A. (2022) 'PDRSD-A systematic review on plan-driven SDLC models for software development', 2022 8th International Conference on Advanced Computing and Communication Systems (ICACCS). IEEE.

Generosi, A., Villafan, J.Y., Giraldi, L., Ceccacci, S. & Mengoni, M. 2022, "A Test Management System to Support Remote Usability Assessment of Web Applications", Information (Basel), vol. 13, no. 10, pp. 505.

Hariyanto, D., Sastra, R. And Ardyanto, D. (2022) 'WATERFALL METHOD IN WEBSITE-BASED MOTORCYCLE RENT INFORMATION SYSTEM DESIGN AND SERVICES', Jurnal Teknologi Informasi Universitas Lambung Mangkurat (JTIULM), 7(1), pp. 63-68.

Ingeno, J. 2018, Software Architect's Handbook: Become a Successful Software Architect by Implementing Effective Architecture Concepts, Packt Publishing, Limited, Birmingham.

Khan, A.A., Akram, M.U., Salam, A.A. and Butt, W.H., 2022, May. An enhanced agile-V model for system engineering in complex medical device development. In 2022 2nd International Conference on Digital Futures and Transformative Technologies (ICoDT2) (pp. 1-6). IEEE.

Kniazhina, R. (2022) Website quality assurance checklist, AnyforSoft. Available at: https://anyforsoft.com/blog/website-quality-assurance-checklist/ (Accessed: January 4, 2023).

Minnick, J. (2020) Responsive Web Design with HTML 5 & CSS. Cengage Learning.

MSEdgeTeam (2022) Emulate mobile devices (device emulation) - Microsoft edge development, Microsoft Edge Development | Microsoft Learn. Available at: https://learn.microsoft.com/en-us/microsoft-edge/devtools-guide-chromium/device-mode/ (Accessed: January 9, 2023).

Nundlall, C. and Nagowah, S.D. (2022) 'Task allocation and coordination process in distributed agile software development: an ontology-based approach', Information Technology and Management, pp. 1-26.

Reddy, S. (2019) Agile Project Management methodology - a manifesto, frameworks and process, Medium. Medium. Available at: https://medium.com/@sudarhtc/agile-project-management-methodology-manifesto-frameworks-and-process-f4c332ddb779 (Accessed: January 4, 2023).

Shiklo, B. (2022) *8 software development models: Sliced, diced and organised in charts*, *8 Software Development Models Organized in Charts and Explained*. ScienceSoft. Available at: https://www.scnsoft.com/blog/software-development-models#Charts (Accessed: December 26, 2022).

Tabarés, R. (2021) 'HTML5 and the evolution of HTML; tracing the origins of digital platforms', *Technology in Society,* 65, pp. 101529.

Weichbroth, P., 2022. A case study on implementing agile techniques and practices: Rationale, benefits, barriers and business implications for hardware development. Applied Sciences, 12(17), p.8457.

Wu, C. (2019) 6 beginner HTML/CSS tips & guidelines to make your life easier., Medium. The Startup. Available at: https://medium.com/swlh/6-beginner-html-css-tips-guidelines-to-make-your-life-easier-ffa826143152 (Accessed: January 5, 2023).

W3C *Markup validation service* (2023)The W3C Markup Validation Service. Available at: https://validator.w3.org/ (Accessed: January 6, 2023).