

SOC09112 Professional Internship

Final Report Brief

Adam Pinter
40443184

Introduction

The aim of this report is to describe and evaluate the work done for my 3rd year Professional Internship module. The report includes a brief introduction to the internship, the client assigned to me and their place of work as relevant to the work required. It presents the specifics of the project, the requirements, and the actual development process. It describes the skills used to achieve the project goal and soft and technical skills developed during the internship.

Internship

The internship was part of a 3rd year university module, so it provides credit for the second semester as well as work experience. The main goal of the internship module is to provide students some experience in a workplace environment or working for a client on a project. The client assigned to me is the curriculum leader of the Business Education and Computing course at Craigmount High School in Edinburgh. The course provides education for children from S1 to S3 in accounting, administration and IT, business management, computing science, games development, cyber security, and retail. The client teaches among other things web development to S2 students using online tutorials and code practicing tools.

As part of the module the internship started on the 23rd of February with an initial meeting where we discussed the main requirements and problems needing to be solved by the end of the internship. Followed by a series of emails to further clarify the most important requirements.

The client hired me to help create a specific teaching tool to aid her with teaching web development. My job was to research and assess online teaching tools she has used in the past and using this assessment create a tool specifically to accommodate her requirements and be suitable for the teaching of S2 students. Eventually the specific project was to create an online tutorial and an offline printable version based on this research.

Skills audit

As a Web design and Development student I could fully utilize my knowledge in HTML and CSS when researching the tools technical aspects. Having received a college and university level education in the language I have been a beginner myself. This helped me greatly with making decisions on what methods to implement from the example tools that accommodate the beginner level challenges and practice. Specifically using online tools and tutorials I also had some previous experience in mostly self-teaching methods.

As the online tool was developed in WordPress as a basic online tutorial with some visual aid, I could transfer some previous experience and skills from Joomla which is also a CMS. However, since I have not used WordPress before to a meaningful

level, I had the opportunity to learn more about the system and get very useful experience. The project also included accommodating specific client requirements as well as perceived user requirements based on similar online tools and their features. Learning to understand the problems, needs and wants of a user base was the most valuable skill I could develop during the project. One thing I did not anticipate when starting my research for the project is gaining a brief experience in teaching. Which of course did not happen but having to figure out a way to convey information to beginners about a subject I already know have given me a valuable lesson that can be used in the future, as I will surely find myself in situations where I must explain a concept to a client who did not learn web development. As the internship was mostly like freelance and hired work methods and the project was entirely developed by me, I have gained some experience in decision making and working without excessive supervision. Writing example code for visual aid in the tutorials has made me focus a lot more on the practices of clean code, which is a very valuable soft skill. Since the material was for beginner students, I have consciously separated parts of code to make it easier to read. Which is not necessarily clean code practice, but it made me pay attention to the overall look of the code.

Project Artefacts

In the beginning of the internship project most of the work was requirements gathering. During the first meeting with the client, we have discussed the project, the requirements, and some possible solutions. As the client explained she has been using the website trinket.io as an online tool, which she is happy with. We agreed that having an interactive way for her students to try and practice their code is something that is important to keep. She mentioned that using the tutorial from the raspberry pi website 'Bird watch' had its benefits as it include some premade CSS, but overall, the tutorial is not exactly on the level for her 2S students. The specific requirements for the tutorial were to include basic html, like headings, paragraphs, text formatting and inserting pictures. Some intermediate level exercises with CSS, lists, video embedding and advanced techniques like using tables links and multiple pages. The tutorial should be available in offline format as not all her students have consistent access to computers. These requirements were initially set in an email forwarded to me during the meeting. During the meeting we have agreed I will further research these websites and evaluate, what can be taken away from them and what aspects should be avoided when creating the tutorial. Also, to figure out what medium would be the best to deliver the tutorials.

By the 15th of March, I have done some research on the given example websites and tutorials and received email confirmation to go ahead with a website that would include the tutorials. After this, I could start doing excessive research on the tools and examples discussed. I have also started to put together a step-by-step tutorial that based on the requirements can be used offline and includes the three levels of increasing difficulty.

During the 4-5 weeks of the project, I have created a series of example code using the text editor on trinket.io, which the students should be familiar with. Throughout the coding I have created screenshots to be used in the tutorial. The theme of the example website is somewhat based on the discussed Bird watch website and a video tutorial from Khan Academy (Appendix 1). Both are creating an example website about animals, so I have decided to follow this trend. For the introduction part of the tutorial, I mostly used w3schools introduction to html page, as this is just generic fact-based information about the technical terms and did not require creative solutions. Through research I have created the step-by-step in a way that is I believe engaging and interesting. For example, I found that the cumbersome aspects of the birdwatch website comes from the ready-made code that the students are supposed to use without understanding them. I have created the three levels in a way that slowly introduces CSS with increasingly more difficult code, but the students should be somewhat familiar with from the previous exercise.

Once the tutorial was ready, I have begun to turn it into a website using WordPress. I have chosen the CMS because it is an easy-to-use tool and makes it easy for the client to add content to the page in the future. I have experimented with different methods. In the beginning I wanted to create a blog type webpage, as I wanted it to be extendable with more tutorials in the future if needed. But the step-by-step tutorial was not compatible with the 'newest first' blog style, as it would make the user search for the beginner's exercises in the archives. By the end of the internship, I have decided on a simple layout webpage with only a few buttons to access the tutorials, a resources page for additional tools and useful sites, including the researched Bird watch, and the downloadable docx versions of the tutorials. There is also a brief introduction to what the website is about. In the last few days of the project, I have reuploaded content to the website, made some changes to the homepage introduction and made the website public, which concludes deployment. (for the example code and tutorial see Appendix 2 the product itself)

Evaluation

This internship has been a good experience. The skills acquired during the project will surely be useful in my carrier, both soft and technical skills. The most I will take away from this is the confidence that I can research, plan, and develop a project without supervision to a set of specified requirements. As mentioned in the skills paragraph I have learned some useful skills in conveying information in my field to possible clients who are not technically fluent. There is a good opportunity in continuing to practice WordPress as a CMS to have more carrier options, this project has set the foundation for that. I believe the implementation of the project could have been better if I had more technical skills. If for example instead of using the text editor from trinket.io I could implement a similar tool into the website so the user can have all the tools they need in one place. All in all, I think the offline step-by-step tutorial is well built and the online version has possibilities for growing.

Appendices

Appendix 1

<https://projects.raspberrypi.org/en/projects/cd-sebento-htmlcss-1>

<https://www.khanacademy.org/computing/computer-programming/html-css/intro-to-html/pt/html-basics>

Appendix 2

The website

<https://sarahendrie.wordpress.com>