

Carradale Manor Web Development Project

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ABSTRACT

This poster presents a summary of a 3rd year Information Systems internship that was completed by a student for a bed and breakfast business. The project completed included the design and development of a website and a mobile application where the client did not have a high level of IT literacy.

The poster presents the aims, processes and outcomes of the project.

The skills developed and enhanced by the student included increased knowledge of HTML and CSS as well as the application of JavaScript and PHP and the creation of MySQL databases

Categories and Subject Descriptors

H.3.5 [Online Information Services]: Web-based Services

Keywords

Internship, Web Development, Mobile Development, Prototyping.

1. INTRODUCTION and BACKGROUND

Students completing the Information Systems major in the Bachelor of Commerce at the University of Canterbury are able to complete a 30 point internship course (INFO330 – Applied Information Systems Project), that requires the student to complete a 200 hour work based project and complete other associated academic work. This poster presents an outline of the project, the processes that were undertaken as well as the learning outcomes for the student.

The student project involved determining the requirements for a website for a bed and breakfast business, developing the website, and finally developing a mobile version of the website.

2. THE PROJECT

The overall aim of the project was to create a modern website (see figure 1) showcasing the house and gardens at Carradale Manor that allows online booking and a mobile application version (see figure 2).

Carradale Manor Web Development Project
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Project Aim
The overall aim of the project included creating a modern website showcasing the house and gardens of Carradale Manor, a web feature allowing online bookings and a mobile app/mobile version of the website.

Project Processes
The website was developed using Dreamweaver using HTML & CSS to display the front end with a back end server side PHP scripts. JavaScript was also used to modernise the website and provide dynamic content.

The project was completed using a prototyping/agile methodology where initial designs were created and then taken back to the client and modified as requested. The mobile application was developed using the jQuery mobile framework to allow compatibility across all mobile platforms.

Project Outcomes
The project had three major deliverables: a modern website to suit the requirements of the client, a database to manage bookings and a mobile application. Each was presented to the client and she was very happy with the final results.

Learning
During the project I improved my knowledge of HTML/CSS and learned how to apply JavaScript, PHP and how to create and query a MySQL database.

Mobile Website Shown on iPhone 5

Carradale Manor Homepage



Figure 1 – Home Page of Website

The owners of Carradale Manor do not have a high degree of information technology and internet literacy and as consequence consideration had to be given to finding an appropriate way to gather the requirements for the project.

A discovery prototyping approach was adopted where the clients were shown a series of iterations of the design of the website to help them determine their requirements [4].

The website was developed using Dreamweaver by using HTML and CSS to display the front end with the back end of the site being created using PHP. Javascript was also used enhance the website.

The mobile application was created using the jQuery mobile framework to allow compatibility across a range of platforms.



Figure 2 – Mobile Version of Website (iPhone 5)

3. STUDENT LEARNING

A significant amount of learning took place during the completion of the project along with a number of skills being enhanced and further developed. Aspects of student learning that were of most significance are shown in Table 1.

Table 1. Significant Areas of Student Learning

Enhancement of HMTL, CSS and Javascript skills
Learning PHP and MySQL for the first time
Development of mobile applications using the jQuery framework
Use of prototyping to discover user needs

4. CONCLUSIONS

The project was completed successfully and was deployed to the satisfaction of the clients and the student was able to apply and develop skills in a real life environment with these being consistent with some of the literature regarding similar projects [1],[3],[5].

The balance between the product created and the process gone through as also interesting in this project with this concept having been highlighted in the literature [2],[3].

5. REFERENCES

- [1] de Vries, H., McCarthy, C., Nesbit, T., Mack, H. and Reilly, M. (2012). *Entrepreneurial process meets Capstone Project in a collaborative environment*. 25th Annual Conference of Computing and Information Technology Research and Education New Zealand (CITRENZ), Christchurch, October 2012.
- [2] Garrett, P., Youngman, D., McCormack, J., Rosescu, C. and Mann S. (2003) Characteristics of Success – Virtually There. *Proceeding of the Sixteenth Annual Conference of the National Advisory Committee on Computing Qualifications*, Palmerston North, July 2003.
- [3] Mann, S., Smith, L. (2006) A value proposition model for capstone projects retrieved 15 April, 2012 from the Computing and Information Technology Research and Education in New Zealand website: www.citrenz.ac.nz/conferences/2006/papers/175.pdf
- [4] Martin, W.E., Brown, C.V., DeHayes, D.W., Hoffer, J.A. and Perkins, W.C. (2002) *Managing Information Technology* (4th edition). New York: Prentice-Hall
- [5] Nesbit, T., Oliver, R., Hancock, M. and Nesbit, G. (2005). *Developing And Running A Photographic Website* retrieved 18 April 2012 from the Computing and Information Technology Research and Education in New Zealand website: www.citrenz.ac.nz/conferences/2005/papers/nesbit_photo_web.pdf