

## Software Systems Framework

## BSc Computing

# Project Proposal

“Implementation of an extranet system to give Ermin Plant LTD a competitive edge in the

e-commerce market.”

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# Overview

Ermin Plant LTD is a plant hire company based in the South Gloucestershire region of the UK consisting of 6 depots across the region and have a vast amount of plant equipment for sale and hire from small leaf blowers to 8 tonne boom lifts.

At this point in time all of Ermin Plant’s ordering is done over the phone and through the faxing order forms and with a lot of Ermin’s competitors now having web based solutions to allow customers to browse and purchase equipment online, Ermin have approached me to re-design their existing static website into a fully functional dynamic website allowing customers to browse all their available equipment, review prices and information about each item and then allow the customer to purchase through their website.

I am aware that there are already several e-commerce templates on the market but there is a *need* for my project as some ‘off the shelf’ e-commerce templates have limited functionality and are difficult to tailor to specific needs of a company. My website and e-commerce solution is going to be specific to what Ermin Plant require and will provide them with the best way to showcase their products to the public and allow customers to purchase the items they require.

# Project Objectives

This project is intended to solve the problem of Ermin Plant not being able to compete in the on-line market. My system, which will be an online, e-commerce solution will allow users to buy products online which will solve this problem and allow Ermin to compete online. With using unique design and using technical code my system will not only provide Ermin Plant to trade online but also will hopefully give them a competitive edge in the market.

Below are list of initial system and project objectives that I expect to meet after completing my project

## System objectives

* Create a website which meets all of Ermin Plants requirements. (to be specified)
* It will have an ecommerce solution allowing customers to browse all the available equipment
* The system will allow customers to purchase items through the website
* It will provide a secure payment system for customers
* It will have an admin and customer log in areas with all required privileges.

This list is not a list of specific requirements but are aims identified from researching Ermin Plant. The finished system will have a lot more functionality and objectives will be added during my research stage.

## Project objectives

* To complete the project within the deadline
* Produce a quality software system which is honours worthy
* Produce a well written report that compliments my finished system
* Improve my knowledge of web technologies

# Why is this project honours worthy?

This project is taking what I have learnt over the past 3 years at Bournemouth University and applying them in a detailed project with the aim to help Ermin Plant increase their income by allowing them to trade online.

They currently have their own website but is out dated and has no e-commerce facility. I am going to re-design their website, and also implement a functional shopping cart system to allow customers to browse all of the companies products and purchase them online.

This project is honours worthy because it combining all my skills from what I have learnt over the past 3 years and applying it into a real life situation. It is complex enough to push me but not too complex to be unfeasible. There is a lot of research involved to enable to design the best system that is an important part of any honours degree.

In line with the British Computer Society I aim to solve a problem to someone who is in real need. By completing this project I will have helped Ermin Plant solve the issue of not being able to trade online by creating them an online e-commerce solution.

# How does this project relate to your degree title outcomes?

As my degree outcome of BSC (Hons) Computing allows me to “cover any computing-related topic” I believe my chosen project allows me to cover several topic areas in computing.

I will be taking knowledge and expertise gained in all the modules I have taken in the last 3 years and applying them in my project.

Below is an example of how I am using a selection of modules from different areas of computing in my project.

* **Web Application Development**: in my first 2 years on the course I was taught several techniques relates to the web. I was taught several programming languages such as html, css, php and mysql which I will all use in my project.
* **Analysis Design and Testing**: this module has helped me to think about the process of designing a system. I will use several techniques such as pseudo code and UML to help me design my system
* **Integrating Team Projects**: this module from the 2nd year, although being a group project has provided me with the biggest help with my project. It allowed me to complete a full system from design to finish. I will take all the things I learnt from that project and apply and improve on them in my final year project.

My project also conforms to the BCS accreditation requirements. For example it allows me to do “An in-depth investigation of the context, relevant literature, and any products similar to the artifact being developed” as I will have to research into existing systems and decide what makes a good and bad ecommerce system before designing mine.

# Constraints

As with all projects, there will be several constraints for me to overcome. My mine constraint is time and I have a specific deadline that must be met. Therefore I must be strict with my time and stick to my work plan as much as possible. I understand that my Gantt chart is a working document and there will inevitably be times where something takes longer than expected but I will have to accept this and make up the time in another task or workflow. I have allowed for a complete free week at the end of my project (shown on the Gantt chart) to allow me to go through and check my project and allow time for binding before the submission deadline. There is also the risk of the client not being fast or reliable with feedback as I progress. As I have already made contact with the Managing Director at Ermin Plant this shouldn’t be too much of an issue as this project is a main priority for him and the company.

# Code Re-Use

Code-ruse will play a large in my project. I will research a lot into existing systems and see how different e-commerce solutions are run. I will be able to use code from previous projects I have worked on at university and also from open source websites to help me produce a good quality system for Ermin Plant. Code-reuse will save me a lot of time during my project and allow me to focus on the more complex parts of the system.