

# ECM1417 Web Developement

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| Handed Out | Handed In  |
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| 26/02/2018 | 31/03/2018 |

This Continuous Assessment is worth 30% of the module mark. It is an individual assessment, to be submitted using BART.

## 1 Introduction

The owner of a small video games company wants to develop a mobile friendly application which he can use to both retrieve and add to his stock on the move. His staff all work from their own devices so it is important that the applications works on a range of browsers and screen sizes. Additionally, as his staff often work in areas with limited internet connection, the application should make use of client side processing and AJAX calls to improve the user experience.

You have been approached as the developer to build this application. The high level requirements are:

- A database with a single table to hold the stock information.
- PHP backend to manage a user login, create sessions and connect to a database.
- AJAX to dynamically fetch data from the PHP backend service.
- HTML / CSS for application front end.

Access to the system must be secured by a username and password.

Throughout the assignment you must bear in mind all of the topics discussed during the module, such as the maintenance of state, security and validation. You must provide a short design document (5 pages) outlining your design and justifying it. This report must have a cover page (not included in the page count) **which must contain the URL of your website ? failure to include this may mean that the website cannot be tested, which will result in a lower mark.**

## 2 Submitting Your Work

You are required to submit the following:

- A runnable version of your system, which should be placed in a directory called `coursework` within your `~/phpdir`.
- Submit your design document and the source codes through `turnitin` as well.

### 3 Marking Criteria

Work will be marked against the following criteria.

- **Client (30%)** – to what extent have client-side technologies (HTML, CSS, JavaScript, D3) been used? How easy to use is the client application? Are the pages constructed from well formed (valid – <https://validator.w3.org/>) HTML? Is the CSS sensibly organised? Does JavaScript run without error?
- **Server (30%)** – to what extent has PHP been used to construct a useful server-side application? Has thought been given to security and data validation? Does the server application run without error? Is the program sensibly organised?
- **MySQL Database (20%)** – has a sensible MySQL database been implemented to store the data?
- **Code quality (10%)** – to what extent has the code been arranged sensibly (into files and functions)? How readable is the code? How useful are comments for explaining the operation of the code?
- **Design document (10%)** – has the design of the program been justified clearly? How clearly are the components of the program outlined?