



# UNIVERSITY OF GREENWICH

<b>COMP1841 (2025/26)</b>	<b>Web Programming 1</b>	<b>Contribution: 100% of course</b>
<b>Module Leader: Matt Prichard</b>	<b>PHP/MySQL CRUD system</b>	<b>Deadline Date:</b>
<b>Upload time 23:30 UK time</b>		
<b>Learning Outcomes:</b> 1 Develop a web application with relational database connectivity using a variety of technologies, specifically HTML5, PHP PDO and MYSQL 2 Discuss issues surrounding Internet and intranet technologies, such as browser dependency, accessibility, legal and security concerns. 3 Critically analyse and evaluate Internet related business problems.		

## Developing a functioning CRUD data driven website

This is an individual piece of coursework. It is to be implemented in PHP and MySQL on the CMS student web server (i.e. on your I Drive) or on localhost with an XAMPP type of install on your own machine. You must use PHP PDO programming and show an understanding of relational database design including referential integrity.

**Do not use MySQLi to develop this system. You must build the system using PHP PDO and the method and structure shown in the class. Your mark will be capped at 40% for ignoring this. Please talk to me if you are not clear about this.**

### General Overview

During the lectures and labs, you will be given the basic building blocks of a web-based PHP/MySQL CRUD system based on an online joke site. It will be **up to you** to apply these skills and techniques to a different but similar case study.

You are required to build a system where students can post questions amongst themselves to get help with their coursework. This is a prototype system so the functionality will be quite limited, but able to be built upon in future iterations.

Think of it as a **very simple** self-contained student [stack overflow](#).

Below is an outline of functional requirements for the new system in a loose order of importance.

- A public facing web front end allowing students to view a list of questions or posts by other students.
- The facility for a student to post, edit and delete a question.
- An area to manage authors and module names
- Provide a contact form for students to send an email message to a system administrator.

### Detailed specification:

#### A public facing web site that:

- Displays a list of questions/posts.
- Allow a user to add, edit and delete a post.
- Ability to display an image/screenshot for each post (You will be shown methods to achieve this in the class - there are some differences to what you can do on our servers compared to your local host, or managed hosting that we will discuss).

- Allow user to add edit and delete list of users (username, email address for example) and connect them to their posts in the database).
- Allow user to add edit delete list of module names.
- Ability to assign a post to a module name and user from pre-existing lists (drop down menus)
- Allow user to send an email message to the admin via a web form.

### **Additional information and considerations**

You must ensure your system at least addresses basic [legal accessibility requirements](https://www.w3schools.com/accessibility/index.php).

<https://www.w3schools.com/accessibility/index.php>

Where appropriate implement form validation though either JavaScript or modern HTML 5 elements.

It is expected that the database part of the system contains more than one table and demonstrates an understanding of relationships between tables. You are only required to enter enough records into the database to demonstrate functionality.

The front end needs to be clear to navigate and consistent across all pages. Try to alter or improve the front end I give you.

Use of any CSS frameworks such as Bootstrap is allowed.

**Any other additional functionality you may add beyond this scope needs to be clearly identified in the report if you want credit for it.**

Additional functionality discussed in the lectures such as login /password system.  
Or you own additions that you want to implement can be included to achieve a higher mark.

**All sources of code not from the lectures must be fully referenced.**

**Any use of AI tools to help with coding must also be clearly referenced, do not try and hide it is better to explain it.**

**Do not implement anything that you do not understand.**

# Deliverables

1. **A formal report (2000 words +/- 10%) in PDF format containing:**
  - Title page, including the **URL of the web site if it is on the I-Drive and any passwords that may be needed to access your system.**
  - **Put the word count on the title page.**
  - Table of contents.
  - Introduction.
  - Design of the pages, navigation structure, data diagrams.
  - Discussion of the technologies used and why.
  - Detailed consideration of any legal, social and ethical issues including personal data storage and an understanding of [GDPR](#).
  - Overview of your system with annotated screen shots showing sample pages to prove the functional requirements have been met.
  - Evidence of a structured and thorough testing schedule including input validation / control.
  - Conclusions and future recommendations (half a page max)
  - Harvard Referencing and Citations.
  
2. **A ZIP file of your entire site code, including your database file.**

Report including evidence of testing and evaluation	30%
Functioning CRUD web system	70%
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Total	100%
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## Marking scheme – read this section very carefully

Report (2000 words) you are allowed plus or minus 10% of these limits	30	mark
<p>Introduction</p> <p>Wireframes/page designs if different from the lab versions, navigation structure diagram and a data diagram (ERD).</p> <p>Include a brief discussion of the <b>technologies</b> used <b>as you understand them in relation to your work</b>. Remember, HTML, PHP, CSS , MySQL are technologies. VSCode, Google Chrome are tools. I am not interested in hearing about the tools you used!</p>	6	
<p>A discussion of any legal, social and ethical issues including web accessibility. Discuss personal data storage and show an understanding of <a href="#">GDPR</a> and how this may have changed after Brexit. <b>This needs to be in the context of your own system where possible not just a generic essay on the subject.</b></p> <p>This part is 27% of the report mark - so should be at approx 500 words.</p> <p>This section needs to be thoroughly referenced. If there are no references and citations for this section, <b>you will get a zero</b>. I am interested in your research not your opinion. Do not use an AI to write this for you!</p>	8	
<p>Overview of your system with <b>annotated screen shots</b> showing sample pages to prove the <b>functional requirements have been met</b>.</p> <p>A walkthrough is different to testing. This is where you show the system in action to someone who has perhaps not used it. In theory I should be able to mark your system from the walkthrough, but I will run it as well.</p>	8	
<p>Evidence of structured testing.</p> <p>Testing is a formalised process generating a table of results showing you have applied different test cases etc. The purpose is to find bugs, <b>all systems have bugs</b>. You will not lose marks for identifying bugs, that is the whole point of testing.</p> <p>This will all be covered later in the module. This is different to the walkthrough above which is to demonstrate functionality.</p> <p>Conclusion and future recommendations (what you would do if you had more time)</p>	8	

<p><b>Use of English, spelling, grammar, and Harvard Referencing.</b></p> <p>Common errors include typos, misuse of capitalisation, poor punctuation, lack of headings, huge paragraphs with no breaks.</p> <p>Do not use the first person, so no “I” or “me” or “my”.</p> <p>References without citations in the body of the text are useless.</p> <p>Make sure they are listed alphabetically by surname. When in doubt use the built in referencing tool. Avoid a list of references that are Anon!</p> <p><b>1 mark removed for each error up to a maximum of 5 marks.</b></p> <p><b>Penalties may also be incurred for the following:</b></p> <p>Unreferenced use of AI tools.</p> <p>Avoid using rewording and synonym tools altogether, they add no value.</p> <p><b>Using ChatGPT type tools to generate content for you is basically plagiarism and could result in an assessment offense,</b></p> <p><b>No matter how bad you think your writing is don't worry, you will get a better mark if it comes from you, not a tool.</b></p> <p><a href="https://www.gre.ac.uk/articles/public-relations/guidance-on-the-use-of-artificial-intelligence-ai">https://www.gre.ac.uk/articles/public-relations/guidance-on-the-use-of-artificial-intelligence-ai</a></p>		
Total		

Functioning CRUD web system	70	mark
Please note this is not an exact science as there are many variations of the system and differing possibilities of how complete it can be. Therefore, this mark breakdown is a rule of thumb not an exhaustive check list. The marker has the final say but the reasoning will be explained in the feedback.		
Display a list of questions/posts from the database	10	
Allow a user to add, edit and delete a post.	7	
Ability to display an image/screenshot for each post (You will be shown methods to achieve this in the class - there are some differences to what you can do on our servers compared to your local host, or managed hosting that we will discuss).	3	
Allow user to send an email message to the admin via a web form.	3	
Ability to add edit and delete users (username, email address for example) and connect them to their posts in the database).	7	
Ability to assign a post to a module name and user from pre-existing lists (drop down menus)	3	

<b>Ability to add edit delete list of module names.</b> (modules will likely have a 1 to 1 relationship with posts so again these should connect to the post table in the database)	7	
<b>Additional features to be added to the completed above requirements could include:</b> An admin area. A login system. Password protected and encrypted. Dealing with forgotten passwords Sign up system. Tracking a user in the system so not needing a user dropdown menu. Excellence in the front-end design. Detailed client and server-side validation. <b>Others not listed that may occur to you.</b> Marking here is discretionary.	30	
<b>Total</b>		
<b>Grand total</b>		

Marking Rubric for written work								
		0-29% Fail	30-39% Fail	40-49% Satisfactory	50-59% Good	60-69% Very Good	70-79% Excellent	80-100% Exceptional
<b>D1 Knowledge</b>	<b>Knowledge of underlying concepts and principles associated with relevant theory.</b>	No evidence or a lack of understanding of underlying concepts and principles associated with relevant theory. described.	Little evidence and some lack of understanding of underlying concepts and principles associated with relevant theory.	Basic evidence and some understanding of underlying concepts and principles associated with relevant theory. Discussions show some knowledge and/or understanding of theoretical concepts.	A sound understanding of underlying concepts and principles associated with relevant theory.	A clear understanding of underlying concepts and principles associated with relevant theory.	A thorough understanding of underlying concepts and principles associated with relevant theory..	Exceptional knowledge and critical understanding of underlying concepts and principles associated with relevant theory.
<b>D2 Research</b>	<b>Can collect and interpret appropriate data and successfully undertake research with a degree of autonomy.</b>	No evidence of collecting and interpreting appropriate source material.	Poor evidence of collecting and interpreting appropriate source material. No evidence of undertaking research with a	Adequate evidence of collecting and interpreting appropriate source material. Undertaking research with a degree of autonomy.	Good evidence of research. Successfully undertake research with a degree of autonomy.	Very good evidence of research. Successfully identifying alternatives and determining appropriate resources.	Excellent evidence of research. Successfully identifying suitable alternatives and determining excellent resources.	Outstanding evidence of research. Successfully identifying best alternatives and determining excellent, current resources.



			degree of autonomy.					
<b>D3 Evaluation</b>	<b>Able to reflect upon own practice and experience, compare and contrast this with knowledge and research,</b>	No evidence of analysis or critique of knowledge and/or practice relevant to the assignment. No engagement with relevant material beyond basic factual recall.	Little evidence of analysis or critique of knowledge and/or practice relevant to the assignment. Minimal engagement with relevant material beyond basic factual recall.	Limited evidence of analysis or critique of knowledge and/or practice relevant to the assignment. Adequate engagement with relevant material that goes beyond basic factual recall.	Solid evidence of analysis or critique of knowledge and/or practice relevant to the assignment. Good engagement with relevant material that goes beyond basic factual recall.	Strong evidence of analysis or critique of knowledge and/or practice relevant to the assignment. Deep engagement with relevant material.	Excellent evidence of analysis or critique of knowledge and/or practice relevant to the assignment. Very deep engagement with relevant material.	Abundant evidence of analysis or critique of knowledge and/or practice relevant to the assignment. Very in-depth engagement with relevant material that is approaching that of an experienced professional.

<b>D4 Communication</b>	<b>Produce a well-structured narrative, written in coherent, standard English, presented in an appropriate academic style. Express ideas in an effective and convincing manner.</b>	<p>No structure evident. The assessment includes a significant number of errors in Standard English. It lacks academic style, and this impedes flow. Further proof-reading clearly needed and additional support for academic writing.</p> <p>The student should refer themselves to student services for additional</p>	<p>Little structure evident. The work is hampered by errors in Standard English. It lacks academic style and does not flow well. Further proof-reading clearly needed and additional support for academic writing.</p> <p>The student should refer themselves to student services for additional support in</p>	<p>The structure is satisfactory overall but would benefit from further improvement. Errors appear in the use of Standard English, More careful proofreading recommended. The work does not flow well in several places and this affects clarity.</p>	<p>A good structure for the most part. The work observes many academic conventions in style and content and is mostly presented in Standard English. There are some errors and omissions. Some sentence structure would also benefit from revision to improve the flow of the work in places.</p>	<p>A very good structure – with clear presentation and organisation of ideas. The work observes almost all academic conventions in style, content and is presented well, mostly using Standard English throughout. Much of this work uses a style which flows well.</p>	<p>Excellent structure and very well organised ideas. The written English is of a very high standard and the work observes all academic conventions in style and content. Excellent flow and style and a pleasure to read.</p>	<p>This assessment is exceptionally well structured and organised. The written English is of an extremely high standard and observes all academic conventions in style and content. The assessment flows exceptionally well and is a pleasure to read.</p>
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		support in their writing.	their writing.					
<b>D5 Referencing</b>	<b>Determine appropriate resources. Sources used are acknowledged in the text and reference list using correct academic citation (Harvard style)</b>	No evidence of determining appropriate resources. Sources used are not acknowledged.	Poor evidence of determining appropriate resources. Most sources used are not acknowledged.	Some evidence of determining appropriate resources. Most sources used are acknowledged.	Good evidence of determining appropriate resources. All sources used are acknowledged.	Evidence of determining very good resources. All sources used are acknowledged.	Evidence of determining excellent resources. All sources used are acknowledged well.	Evidence of determining an extensive list of outstanding resources. All sources used are acknowledged appropriately.
<b>D6 Employability</b>	<b>Shows awareness of potential avenues of employment post-graduation,</b>	Demonstrates no understanding of the digital entertainment sector.	Demonstrates little understanding of the digital entertainment sector.	Demonstrates some understanding of the digital entertainment sector. Shows some knowledge	Demonstrates good understanding of the digital entertainment sector.	Demonstrates very good understanding of the digital entertainment sector. Shows very strong	Demonstrates excellent understanding of the digital entertainment sector.	Demonstrates outstanding understanding of the digital entertainment

	<b>understand s how the skills demonstrat ed in this assessment relate to their continuing personal developme nt and preparation for the world of work.</b>	Shows no knowledge of what roles there are and what skills are required. Cannot demonstrate understanding of how current practice will prepare them for entering the workplace, or what is required of them to achieve the required level for employment .	Shows a little knowledge of what roles there are and what skills are required. Surface level understanding of how current practice will prepare them for entering the workplace, or what is required of them to achieve the required level for employment .	of what roles there are and what skills are required. Basic understanding of how current practice will prepare them for entering the workplace, or what is required of them to achieve the required level for employment.	Shows good knowledge of what roles there are and what skills are required. Solid understanding of how current practice will prepare them for entering the workplace, or what is required of them to achieve the required level for employment .	knowledge of what roles there are and what skills are required. Clear understanding of how current practice will prepare them for entering the workplace, or has a clear plan for how to achieve the required level for employment.	Shows in-depth knowledge of what roles there are and what skills are required. Excellent understanding of how current practice will prepare them for entering the workplace, or has a clear and detailed plan for how to achieve the required level for employment.	nt sector. Shows highly detailed knowledge of what roles there are and what skills are required. Deep understanding of how current practice will prepare them for entering the workplace, or has a clear, detailed and well-thought out plan for how to achieve the required level for
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