



# UNIVERSITY OF GREENWICH

<b>COMP1842 (2023/24)</b>	<b>Web Programming 2</b>	<b>Contribution: 100% of course</b>
<b>Module Leader: Matt Prichard</b>	<b>JavaScript Web Application</b>	<b>Deadline Date: Tuesday 23/04/2024 11:30pm UK time</b>
<b>Learning Outcomes:</b> 1 Develop a CRUD web application using the JavaScript based MEVN stack 2 Discuss issues surrounding Internet and intranet technologies, such as browser dependency, accessibility, legal and security concerns. 3 Critically analyse and evaluate some of the key differences between SQL and NoSQL databases		

## **Part 1 – 30%**

Submit 6 weekly lab task (weeks 2, 3, 4, 6, 8 and 9 ). The tasks will be explained in detail in each of those weeks and the evidence is to be submitted as appendices to the main report (template available on Moodle).

Each task is worth up to 5 marks.

## **Part 2 – 30 %**

Developing a **very basic** MEVN stack CRUD system

This is to be implemented on the University G-Drive. If you want to work on your own machine you will need to support yourself through the installation processes.

We will develop a basic system in the labs, and you will be shown how to evidence this for your report. Higher marks will be awarded for:

1. Implementing the test page
2. Adding a new menu item and page.
3. Adding a new field to the crud system, the current system has 2, add a 3<sup>rd</sup> language.

I will discuss this in more detail in the lecture.

## **Part 3 – 40 %**

### **Written report**

**1500- 2000 words max**

Using the template provided or similar:

- Discuss and illustrate the key differences and pros and cons of RDBMS vs NoSQL database systems.
- Discuss modern JavaScript stacks such as MEVN and compare to traditional XAMPP stack development. Demonstrate and understanding of Vue.JS and what benefits they can bring to modern web development.

# Deliverables

## **1 - A formal report (main body max 2000 words) in PDF format containing:**

- Title page
- Table of contents.
- Introduction
- A critical analysis and evaluation of the key differences between RDBMS and NoSQL databases.
- Comparison and evaluation of XAMPP vs MEVN stacks
- Discussion of your understanding of the technologies used. E.g Node, npm, Vue, MongoDB etc.
- Evaluation, conclusion, and future recommendations.
- Harvard Referencing
- Appendices 1 - 6 (not part of the word count) evidencing the 6 weekly tasks from the labs
- Appendix 7 (not part of the word count)- Evidence of your working CRUD MEVN stack system. You will be given details of what constitutes evidence and how to provide it. Clear cropped, resized, and annotated screenshots with accompanying commentary.

## **2 - A zip file of your final 'src' folder from the front-end of the CRUD system and the weekly task code folders where requested**

## Marking Scheme

<b>Report – excluding appendices</b>	
Clear introduction, evaluation, conclusion, and future recommendations.	5
A critical analysis (referenced and illustrated) and evaluation of the key differences between RDBMS and NoSQL databases.	15
Comparison and evaluation of XAMPP vs MEVN stacks. Discussion of your understanding of the technologies used. E.g Node, npm, Vue, MongoDB etc and how they fit together with reference to your finished system.	15
Complete formal document structure as described above, Use of English, spelling, grammar, Harvard Referencing and citations	5
Total	<b>/40</b>

Evidence of functioning MEVN CRUD web system	30
6 weekly tasks- possible 5 marks each	30
Grand total	<b>/100</b>

Marking Rubric for part 3								
		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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