

# Assessment Information/Brief 2021/22

|  |  |
| --- | --- |
| **Module title** | Client Server Systems |
| **CRN** | 50249 |
| **Level** | 5 |
| **Assessment title** | **Assignment 2** |
| **Weighting within module** | This assessment is worth 50% of the overall module mark. |
| **Submission deadline date and time** | 6/5/2022 by 4pm |
| **Module Leader/Assessment set by**  Lee Griffiths, [l.s.griffiths@salford.ac.uk](mailto:l.s.griffiths@salford.ac.uk) – contact via MS Teams | |
| **How to submit**  The work should be submitted to Blackboard by the submission date for assessment. | |
| **Assessment task details and instructions**  Your task is to further develop the features of your Assignment 1 PHP MVC web application by using the Client Server technologies covered in the Trimester 2 workshop exercises (**mostly JavaScript**) – *do not use jQuery*. Your enhanced features must be written in **plain JavaScript** and you are encouraged to build classes in your JavaScript code, follow a design pattern and generally take an Object Oriented development approach. You need to do the following:   1. You need to develop an interactive live mapping feature which extends your Assignment 1 solution. It needs to allow **authenticated** (logged in) users to track the location of their **mutually accepted** friends in real time (or as near as possible) so that all or a selected group of friends can be shown on a map which updates periodically. The client will provide location information so that each user of the system is able to update their location and see their friend’s locations. You will need to make use of coordinate data that you store in your database for each user and their location needs to be updated as they physically move around with the device which is showing the client map page. You should use plain JavaScript AJAX techniques to implement your live system. Do not use web sockets – these are beyond the scope of this work **(60 marks)** 2. Then choose **one** of the following to develop your system further **(40 marks)**.  * AJAX implementation of live search feature and results for users (based on material in Workshops 15 & 16) including images thumbnails and filters. Consider browser memory usage. The search feature must be powerful and allow effective narrowing of results to a small number for a large dataset. * AJAX implementation of “infinite scrolling” or “load more” on demand dynamic results (based on material in Workshops 15 & 16 and JS user interface event handlers) with appropriate number (100s) of data items to demonstrate it well. Consider a sliding window of results to limit browser memory usage. * AJAX implementation of multiple update features e.g. friend requests/accepts issues, profile image upload (with progress indicator), user login (based on Workshops 15 & 16) to provide a smoother user experience all without page reloads.  *Deliverables (work to hand in)* A compressed .zip folder containing the complete folders and all files associated with your solution to the Assessment task (part 1 and part 2). The functionality will be assessed in one-to-one demonstration of your solution which will be set after the submission date.  **Total 100 marks** | |
| **Assessed intended learning outcomes**  On successful completion of this assessment, you will be able to:  A1 - assess a range of server-side programming technologies and the programming languages that support these technologies, and discuss the circumstances when each is used;  A2 - assess a range of client-side programming technologies and the programming languages that support these technologies, and discuss the circumstances when each is used;  B1 - design, create, test and demonstrate software implementing a data-driven web application, programming in industry standard scripting languages and connecting to industry standard database packages;  B2 - identify security risks in a web application, and follow good practice guidelines to minimise these.  B3 - work within legal constraints, such as data protection, accessibility and copyright | |
| **Module Aims**   1. to provide the skills required to develop modern data-driven interactive web applications 2. to appreciate the issues involved with combining client-side and server-side components 3. to use industry-standard software development tools and techniques. | |
| **Feedback arrangements**  Assessment will be carried out via software demonstration. Feedback will be given during the demonstration, and provided via an annotated feedback sheet given to the student and marks will be placed on Blackboard. | |
| **Support arrangements**  You can obtain support for this assessment by attending all timetabled sessions, visiting the module leader during open surgery times (see staff timetables) or emailing the module leader. During busy parts of the teaching period email replies may take up to 2 working days.  **askUS**  The University offers a range of support services for students through [askUS](http://www.askus.salford.ac.uk/).  **Good Academic Conduct and Academic Misconduct**  Students are expected to learn and demonstrate skills associated with good academic conduct (academic integrity). Good academic conduct includes the use of clear and correct referencing of source materials. Here is a link to where you can find out more about the skills which students require <http://www.salford.ac.uk/skills-for-learning>.  **Academic Misconduct is an action which may give you an unfair advantage in your academic work. This includes plagiarism, asking someone else to write your assessment for you or taking notes into an exam. The University takes all forms of academic misconduct seriously. You can find out how to avoid academic misconduct here** [**https://www.salford.ac.uk/skills-for-learning**](https://www.salford.ac.uk/skills-for-learning)**.**  **Assessment Information**  If you have any questions about assessment rules, you can find out more [here](https://www.salford.ac.uk/askus/academic-support/student-handbook/your-studies/course-support/assessment-and-feedback).    **Personal Mitigating Circumstances**  If personal mitigating circumstances may have affected your ability to complete this assessment, you can find more information about personal mitigating circumstances procedure [here](https://sss.salford.ac.uk/).  **Personal Tutor/Student Progression Administrator**  If you have any concerns about your studies, contact your Year Tutor or your Student Progression Administrator.   |  | | --- | | **University Performance Descriptors**  **Extremely poor (0-9).**  Totally inadequate demonstration of required knowledge. Not able to apply the practical and analytical skills from their programmes. No appropriate design methodology. No demonstration of analysis evaluation or synthesis. No evidence of the ability to self-manage a significant piece of work and critical self-evaluation of the process. Little academic value; presentation is extremely poor; work has no structure or clarity; extremely poor use of language; no references; no attempt to provide evidence of sources used**.**  **Very Poor (10-19).**  Virtually no relevant knowledge demonstrated. Fails to adequately apply the practical and analytical skills from their programme. Very poor use of design methodology. No meaningful analysis or evaluation or synthesis. Unable to self-manage a significant piece of work and to identify appropriate issues for critical self-evaluation of the process for reflection. Academic arguments presented are inappropriate or very poorly linked; presentation is very poor; work has little discernible structure or clarity; very poor use of language; lack of ability to source adequate material; very poor referencing.  **Poor (20-29).**  Inconsistent or inaccurate knowledge.Limited and inappropriate and inaccurate application of the practical and analytical skills from their programme. Poor use of methodology. Descriptive, occasional attempts to analysis or evaluate material but lacks critical approach to evaluation or synthesis. Identifies issues for reflection but lacks evidence of reflective processes. Some but inconsistent ability to self-manage a significant piece of work or critical self-evaluation of the process. Confusion or weakness in academic argument; presentation is poor; work is disorganised and lacks clarity; poor use of language; poor use of reference material; inappropriate or out dated sources with numerous referencing errors.  **Unsatisfactory (30-39).**  Limited evidence of knowledge. Inappropriate application of the practical and analytical skills from their programme. Unsatisfactory design methodology. Mainly descriptive evidence of analysis, inconsistent critical approach, little evaluation or synthesis. Follows processes of reflection but fails to demonstrate insight; lacks coherence in the self-management of a significant piece of work. Presentation is unsatisfactory; work is limited in terms of structure, coherence or clarity; limitations in academic style; unsatisfactory referencing with errors; limited ability to support content with relevant sources.  **Adequate (40-49).**  Basic knowledge with occasional inaccuracies. Appropriate yet basic application of the practical and analytical skills from their programme. Superficial depth or limited breadth, but an overall adequate identification of design methodology. Critical analysis evident, with some evaluation and synthesis, although limited evidence of reflection. Some evidence of an ability to self-manage a significant piece of work and critical self-evaluation of the process. Some appropriate academic argument although not well applied and lacking in clarity; presentation of work is adequate in terms of structure, coherence, clarity and academic style; some inconsistencies; some grammar and syntax errors which detract from the content; narrow range of sources; referencing in presented work is adequate with some inconsistencies or inaccuracies; over utilises secondary sources; references used are inappropriate in terms of currency.  **Fair (50-59).**  Mostly accurate knowledge with satisfactory depth and breadth of knowledge. Solid application of the practical and analytical skills from their programme Fair use of design methodology. Sound critical analysis and evaluation or synthesis. Demonstrates basic ability of synthesise information in order to formulate appropriate questions and conclusions; reflective process is utilised, with insight demonstrating planning for future practice; shows the ability to self-manage a significant piece of work and critical self-evaluation of the process. Relevant academic argument; presentation of work is fair in terms of structure coherence, clarity and academic style; some inconsistencies in grammar and syntax; fair range of sources identified with appropriate referencing and few inaccuracies; appropriate use of primary and secondary sources.  **Good (60-69).**  Consistently relevant accurate knowledge with good depth and breadth. Clear and relevant application of the practical and analytical skills from their programme. Good use of design methodology. Clear, in depth critical analysis, evaluation and academic argument with synthesis of different ideas and perspectives. Utilises reflection to develop self and practice; aware of the influence of varied perspectives and time frames; demonstrates an ability to self-manage a significant piece of work and critical self-evaluation of the process. Presentation of work is well organised with good use of language to express ideas or argument; very few inconsistencies in grammar and syntax good; good range of sources; well referenced with very few inaccuracies; good use of primary and secondary sources.    **Very Good (70-79).**  Comprehensive knowledge demonstrating very good depth and breadth. Clear insight into links between the practical and analytical skills from their programme. Strong use of design methodology. Very good analysis and synthesis of material with evidence of critical and independent thought. Demonstrates ability to transfer knowledge between different contexts appropriately; balanced and mature approach to reflection used to enhance practice and performance; clear ability to self-manage a significant piece of work and critical self-evaluation of the process. Presentation is of a very good standard, demonstrating a scholarly style. Very good grammar and syntax. Clear evidence of referencing to a wide range of primary and secondary sources which are used effectively in supporting the work.  **Excellent (80-89).**  Excellent depth of knowledge in a variety of contexts. Coherent and systematic application of the practical and analytical skills from their programme. Excellent use of design methodology. Excellent critical analysis and synthesis. Integrates the complexity of a range of knowledge and excellent understanding of its relevance; confident in their ability to self-manage a significant piece of work and critical self-evaluation of the process Arguments handled skilfully with imaginative interpretation of material; presentation is excellent, well-structured and logical; demonstrates a scholarly style; excellent grammar and syntax.  **Outstanding (90-100).**  Outstanding knowledge. Exceptional application of the practical and analytical skills from their programme. Excellent professional execution of design methodology. Outstanding critical analysis and synthesis. Excels in self-managing a significant piece of work and critical self-evaluation of the process show an aptitude to formulate new questions, ideas or challenges. Incorporates evidence of original thinking; presentation is outstanding demonstrating a fluent academic style.  **In Year Retrieval Scheme**  Your assessment is **not** eligible for in year retrieval. | | **Reassessment**  If you fail your assessment, and are eligible for reassessment, you will need to resubmit on or before the resit deadline. For students with accepted personal mitigating circumstances, this will be your replacement assessment attempt.  Reassessment details will be announced on Blackboard after June when the normal teaching period ends.  Assessment marking guide is on the next page | | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Assessment Criteria for Semester 2.**  You should attend all lectures and workshops to fully understand what is required from work. All AJAX work should use native JS calls such as HTTPRequest or fetch, **not jQuery**.  You should look at the assessment criteria to gauge your solution and progress. **Note that this is only a guide to marking – credit will be given where appropriate.**   |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | **Mark range %** | **100-80%** Outstanding to Excellent  *(60-48 marks)* | **79-60%** Very Good to Good  *(48-36 marks)* | **59-40%** Fair to Adequate  *(36-24 marks)* | **39-20%** Unsatisfactory to Poor   *(24-12 marks)* | **19-0%** Very poor to Extremely poor *(12-0 marks)* | |  | **“An excellent system ready to deliver to the customer”** | Related image **“A system with useful features”** | **Image result for vauxhall white  background “A minimum viable system with basic features”** | Image result for nissan micra 1998 **“Incomplete features”** | **“Non- functioning system”** | | Realtime tracking **required feature**  60 marks | **Industry ready** application with **excellent performance** and **efficient data usage**.   * Excellent OO code structure including reusable **classes**, design pattern(s) in both JavaScript and PHP as appropriate. ***(up to 10 marks)*** * Extensive use of **HTTPRequest** on **three or more** features of the solution UI to improve efficiency and performance using AJAX. ***(up to 10 marks)*** * Excellent and **secure input** validation, and demonstration of **security protection** such as URL tokens. ***(up to 10 marks)*** * **JSON or XML** data formats used for AJAX. PHP DB classes modified/extended to produce JSON/XML as necessary. ***(up to 10 marks)*** * **Sophisticated** real-time map tracking system with AJAX driven **real-time notifications** and **map updates**. ***(up to 10 marks)*** * Excellent commented code. ***(up to 10 marks)*** | * Reusable JavaScript **functions** or **classes** added to perform robust input validation and displaying data to the users **dynamically**. * At least **two** AJAX type data transactions to acquire data from the PHP backend. * **JSON or XML** data formats used for AJAX. * **Useful** live map tracking system functioning using **AJAX**. * AJAX driven user notifications in the system. * Good comments evident throughout. | * Some JavaScript added to perform input validation and/or displaying data to the users dynamically. * At least **one** AJAX type data transactions to acquire data from the PHP backend. * Plain text data format used for AJAX. * Basic map/list tracking system functioning using AJAX. * Some useful code comments evident. | * Some JavaScript added to perform basic input validation and/or displaying location data to the users from PHP backend but non- functioning or incomplete/has issues and unsatisfactory live tracking system. * **Significant amounts of code taken from internet sources.** * Minimal code comments. | * Little or no JavaScript or extra features added to your semester one work. * **Significant amounts of code taken from internet sources.** * No code comments. | | **Mark range %** | **100-80%** Outstanding to Excellent  *(40-32 marks)* | **79-60%** Very Good to Good  *(32-24 marks)* | **59-40%** Fair to Adequate  *(24-16)* | **39-20%** Unsatisfactory to Poor   *(16-8 marks)* | **19-0%** Very poor to Extremely poor *(8-0 marks)* | | Chosen feature  40 marks | **Industry ready** feature with **excellent performance** and **efficient data usage**.   * **Excellent** OO code structure including reusable **classes**, design pattern, in both JavaScript and PHP as appropriate. ***(up to 8 marks)*** * Extensive use of **HTTPRequest** on different features of the feature to improve efficiency and performance using AJAX. ***(up to 8 marks)*** * Excellent and **secure input** validation, and demonstration of **security protection** such as URL tokens. ***(up to 8 marks)*** * JSON or XML data formats used for AJAX. PHP DB classes modified/extended to produce JSON/XML as necessary ***(up to 8 marks)*** * Excellent commented code ***(up to 8 marks)*** | * Reusable JavaScript **functions** or classes added to perform robust input validation and displaying data to the users **dynamically**. * At least **two** AJAX type data transactions for your chosen feature. * JSON or XML data formats used for AJAX. * Good comments evident throughout. | * Some JavaScript added to perform robust input validation and displaying data to the users dynamically. * At least **one** AJAX type data transaction for a chosen extra feature. * Plan text data format used for AJAX. * Some useful code comments evident. | * Some JavaScript added to perform basic input validation or displaying data to the users but non- functioning, incomplete and unsatisfactory extra feature. * **Significant amounts of code taken from internet sources.** * Minimal code comments. | * Little or no JavaScript or extra features added to your semester one work. * **Significant amounts of code taken from internet sources.** * No code comments. | |