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| University of Central Lancashire logo  **Department of Computer Science** | UCLan Coursework Assessment Brief | | 2023-2024 |
| Module Title: The Agile Professional | | |
| Module Code: CO2403 | | Level 5 |
| **Agile Team Project: Computing** | This assessment is worth 60% of the overall module mark | |

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| THE BRIEF / INSTRUCTIONS **Scenario**  Your client (represented by your lab tutor) is the ChiCI Research Group at UCLan. This group frequently conducts research involving large numbers of children visiting the university and taking part in research activities with a range of technologies, which may involve different researchers each time. The research group already has a public-facing website (<https://chici.org/>) but would like to develop a web-based portal for research staff to support their work.  The ‘Mess Day’ format is usually that a group of children arrive at the university, and are split into groups. Each group takes part in a research activity for a length of time (usually between 10-30 minutes), then moves on to the next activity. Staff need to know where they are based, how long their session is, and where the children need to move next. This sometimes needs to be recalculated when children arrive late, technology fails, or a member of staff is ill at short notice. Not all sessions are the same length of time time. Researchers can often include new members of staff, research students, or visiting staff from other institutions, who may not have taken part in an event like this before. The children usually stay for a full day, with a break for lunch. The research group will usually run many of these sessions throughout a year, sometimes several in the same week.  The client would like the following tasks to be supported:   * Scheduling activities. When participants are visiting for a day, there needs to be a timetable created. Staff should be able to specify the length of time needed and any technology needs. Based on this, the timetable should allocate them to a room and show which groups of participants are in each room. * Keeping records. The timetable created should be stored so the research staff can look back and see what happened on a specific day. * Collecting research data. The researchers often use paper-based sheets to capture responses from participants (see <https://chici.org/wp-content/uploads/2021/12/the-CCI-UX-Playbook.pdf> for a description of the Fun Toolkit). These do not usually need to capture any sensitive participant data, but still need to be stored securely. Staff would benefit from a tool that allows them to gather data from all children at a session, and be able to access it in a way that allows them to analyse it. Ideally, they would also benefit from a way to visualise the research data. The data collection part of the tool needs to be usable and accessible by children.   Because of the nature of the events, and because staff will need to access data quickly, the portal will also need to be:   * Usable * Efficient * Suitable for mobile devices and tablets * Secured through a staff login   Your lab tutor will act as client for this project, and will be able to have input into the suitability of your requirements, but will not be expected to assist directly with the development. They may also identify additional requirements as the project progresses.  **Assessment Criteria**  This is a team project where work should be allocated with the expectation that all team members will receive the same mark for the group elements of this assessment. Each team member is responsible for making a valid contribution to the overall workload.  If a team member is not making an appropriate contribution, this should be identified in regular records of meetings. It is the group’s responsibility to manage this situation by acting to re-allocate duties and to ensure that other team members do not suffer. Staff reserve the right to interview individual students to determine final marks.   |  |  |  |  |  | | --- | --- | --- | --- | --- | | **Tasks** | **Task**  **Weighting %** | **Task Constraints** | **Task Type** | **Deadline** | | Deliverable 1 – Demonstration and retrospective | 50 | ~20 minutes | Team | To be confirmed | | Deliverable 2 – Critical report | 50 | 5-6 pages | Individual | To be confirmed |   **Learning Outcomes**  This assignment addresses the following learning outcomes:  1. Evaluate and apply appropriate Agile techniques to deliver a team project successfully, and critically review the processes, product and value delivered in a team-based Agile project.  2. Communicate effectively in a variety of situations e.g., team meeting, job application  3. Discuss the legal, social, ethical and professional issues relevant to a computing practitioner  4. Recognise the responsibilities, benefits and importance of supporting equality, diversity and inclusion  5. Research, synthesize and present information relevant to a given problem using appropriate literature |

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| PREPARATION FOR THE ASSESSMENT **Do not underestimate the effort required** to gain a good mark in this assignment. This is a large task and requires a significant amount of effort to complete to a high standard.  Tasks expected to be covered within the assessment;   1. **Demonstration and retrospective (Group Task)**   Each group will present and demonstrate their ‘product’ during classes in the week marked in the schedule. You should ensure that your implementation will run on the University network.  This is a 15-20 minute presentation of your team's design followed by brief questions. As well as assessing the suitability of your product, the assessment of this review will concentrate on the presentation skills displayed: the organisation of the material, appropriate use of the available time, the use of simple, clear slides, and the style of delivery.  Your presentation should be concise and cover the following:   * Analysis of the problem domain using diagrams where appropriate. Evaluate and justify how you have chosen to answer the brief. * Demonstrate the agile techniques used in your team project . * Design of your solution, with an evaluation and justification for choices. * Technical implementation and system architecture. Justify your choices of implementation tools and methods. * Full testing and evaluation of your prototype, including testing strategy, problems encountered and solutions. * A review of what was learnt from the development process regarding teamwork, technology, tools and techniques, including the use of Agile Development. Discuss what you have learnt for future projects and how you would have taken the project forwards if you had more time. * A demonstration of your product (either live or through video or screenshots)   **Marking scheme:**  **Planning and design (25%):**  Fail: little or no evidence of planning or considering how to follow the brief. An unclear or inappropriate design.  40-50: some evidence of designing a concept suitable for the brief. Consideration of the main needs and requirements.  50-60: good evidence of designing a concept suitable for the brief, using suitable design methods to ensure that the user needs are met.  60-70: very good evidence of careful product design and planning, with good use of design methods and careful assessment of the brief to benefit users.  70+: excellent design and planning of the development, with well justified approaches and full consideration of user needs and goals.  **Product (25%):**  Fail: little or no evidence of a developed product that is suitable for the brief.  40-50: evidence of development of a suitable product that can be demonstrated in some manner, although it may be incomplete.  50-60: a product is demonstrated which meets the brief appropriately, with some evidence of testing and/or evaluation.  60-70: a good quality product is demonstrated which meets the brief, with good evidence of testing and evaluation.  70+: an excellent product is demonstrated which is of professional quality, and which would be suitable for release or future development.  **Process (25%):**  Fail: little or no evidence of using suitable methods, or of understanding agile principles.  40-50: evidence of having followed some broad agile principles that are suitable to this project, perhaps with little understanding or reflection.  50-60: good evidence of having followed some established agile methods, with an understanding and reflection on how they have been used and why. Strengths and weaknesses are discussed.  60-70: very good evidence of having used a range of agile practices throughout the project, showing an understanding and appreciation of agile principles and an ability to justify and critique the actions taken.  70+: an excellent example of an agile development team, showing full understanding of suitable approaches, methods and frameworks. Different approaches are considered, with good justification for the approaches taken.  **Presentation (25%):**  Fail: no presentation.  40-50: a presentation which conveys the main points, but may be disorganised, poorly rehearsed, or contain unsuitable or unprofessional content. Little evidence of understanding how to present appropriately. May be reading from a script.  50-60: a suitable presentation, with a sensible structure and design. A concise presentation which keeps to time appropriately. Team members are able to answer questions and demonstrate understanding of their project.  60-70: a professional presentation, with a good clear structure and design. Team members are able to speak confidently with minimal use of notes.  70+: an excellent and engaging presentation in a fully professional style, with very good evidence of having put careful thought into the design, planning and rehearsal of the presentation. Team members are confident and professional throughout.   1. **Critical report (Individual Task)**   A detailed evaluation of the product and process of the group development. This should include the following:   * Literature review showing evidence of background reading on your topic. Your review should focus on peer reviewed research published in high quality journals or conferences. Some good starting points are the ACM Digital Library (<http://dl.acm.org>) and the IEEE Explore Digital Library (<http://ieeexplore.ieee.org>). All use of material obtained from other sources must be cited in the text and properly referenced at the end of the report. * A discussion and evaluation of the process taken. Justify and critique the agile techniques used by your team, including methods taken for planning, scheduling, groupwork and collaboration. Include evidence of any other professional measures taken, e.g. version control, use of IDEs, code validation etc. * A discussion and evaluation of the final product. This might include results from your group testing and evaluation, but should also include suggestions of what could be done in future development iterations. Any legal or ethical issues that should be addressed, as well as consideration of how to meet professional quality standards. * A critical reflection on your own personal contribution to the group project.   **Marking scheme:**  **Literature review and academic skills (25%):**  Fail: no citations/references, very poor spelling/grammar, unprofessional presentation  40-50: some evidence of background reading, acceptable spelling/grammar and presentation, including suitable referencing.  50-60: good evidence of background reading and understanding, good use of citations, good spelling/grammar and presentation as well as referencing.  60-70: very good evidence of background reading, with critical analysis and synthesis of ideas from good quality sources. No major issues with spelling/grammar, presentation or referencing.  70+: excellent analysis and assessment of topics in light of evidence from a good range of high quality sources. Very good academic skills throughout.  **Product evaluation (25%):**  Fail: little or no evaluation of the product. Insufficient evidence of understanding the requirements of product development.  40-50: some evidence of reflection on the product, with suitable consideration of strengths and weaknesses. Consideration of some testing/evaluation methods.  50-60: good evidence of product evaluation, in light of recognised methods. Consideration of what would be required for future development, including any legal/ethical issues.  60-70: very good evidence of product evaluation, using clear methods. Justification of methods and results in light of academic literature. A clear plan for future development.  70+: excellent product evaluation, with good use of well-justified and appropriate methods, and a justified plan for future development.  **Process evaluation (25%):**  Fail: little or no evaluation of the process. Insufficient evidence of understanding agile techniques.  40-50: some discussion of techniques used for planning, scheduling, groupwork and collaboration. Evidence of having engaged with sensible agile techniques throughout the project. Evidence of having made a personal contribution to a team development (e.g. git commits).  50-60: good discussion of agile techniques, with explanation of the methods used throughout the project. Evidence of suitable methods used for implementation, including methods for sharing and combining code.  60-70: very good discussion of agile techniques, with justification and critique of the methods used throughout the project in light of academic literature.  70+: excellent discussion of agile techniques, with clear justification and critical analysis of the methods used throughout the project, showing full understanding of agile project development.  **Reflection (25%):**  Fail: little or no personal reflection. Insufficient evidence of contributing to the team project.  40-50: some discussion of personal contribution, identifying strengths and weaknesses.  50-60: good personal reflection, showing a critical analysis of strengths and weaknesses.  60-70: a thorough personal reflection, with critical analysis of strengths and weaknesses justified in light of academic literature.  70+: an excellent and insightful personal reflection, showing full understanding of teamwork, agile methods and professional practice in the critique. |
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| RELEASE DATES AND HAND IN DEADLINE Assessment release date: 1st October 2023  Assessment deadline date and time: **Various – see schedule**  Please note that the dates/times are the final time you can submit – not the time to submit!  Your feedback/feedforward and mark for this assessment will be provided 15 working days after the deadline. |

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| SUBMISSION DETAILS Submissions should be in a suitable format and uploaded to the appropriate Turnitin submission point on Blackboard.  Any additional files needed to run/operate your prototypes should be forwarded to your tutor in good time using a pre-arranged upload location.  Deadlines for submitting deliverables:   |  |  | | --- | --- | | **Tasks** | **Deadline** | | Deliverable 1 – Demonstration and retrospective | Presentation in class in the week commencing XXXXXX. All presentation slides and artefact (e.g. code or development files) should be submitted to Blackboard by XXXXX. | | Deliverable 2 – Critical report | XXXXXXXXXXXXX |   Late work is subject to the penalties as described in the regulations:   |  |  | | --- | --- | | **Days Late** | **Penalty** | | 1-5 (working days) | maximum mark that can be achieved: 40% | | more than 5 | 0% given | |

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| HELP AND SUPPORT  * Support will be provided via Microsoft Teams and email. You will also have the opportunity to ask questions during lectures / labs. You may request a one to one meeting with a tutor during their office hours (as published on Starfish). * For support with using library resources, please contact our subject librarian [subjectlibrarians@uclan.ac.uk](mailto:subjectlibrarians@uclan.ac.uk). You will find links to lots of useful resources in the My Library tab on Blackboard. * If you have not yet made the university aware of any disability, specific learning difficulty, long-term health or mental health condition, please [let us know](https://msuclanac.sharepoint.com/sites/StudentHub/SitePages/Inclusive-support.aspx). The [Inclusive Support team](mailto:inclusivesupport@uclan.ac.uk) will then contact you to discuss reasonable adjustments and support relating to any disability.  For more information, visit the [Inclusive Support site](https://www.uclan.ac.uk/students/support/disability_services.php). * To access mental health and wellbeing support, please complete our [online referral form.](https://msuclanac.sharepoint.com/sites/StudentHub/SitePages/Wellbeing.aspx) Alternatively, you can email [wellbeing@uclan.ac.uk](mailto:wellbeing@uclan.ac.uk), call 01772 893020 or visit our [UCLan Wellbeing Service](https://www.uclan.ac.uk/students/support/wellbeing-service.php) pages for more information. * If you have any other query or require further support you can contact The Student Support Centre.  Speak with us for advice on accessing all the University services as well as the Library services. Whatever your query, our expert staff will be able to help and support you. For more information, how to contact us and our opening hours [visit Student Support Centre](https://www.uclan.ac.uk/students/library-it/library/the_i.php). * If you have any valid mitigating circumstances that mean you cannot meet an assessment submission deadline and you wish to request an extension, you will need to apply online prior to the deadline. | |
| Disclaimer: The information provided in this assessment brief is correct at time of publication. In the unlikely event that any changes are deemed necessary, they will be communicated clearly via e-mail and a new version of this assessment brief will be circulated. | Version: 1 |