**2024/25 ASSIGNMENT REMIT – DOCUMENT UPLOAD**

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| **Programme Title** | BSc (Hons) Computer Science | |
| **Module Title** | Agile Software Development | |
| **Module Code** | 2073 | |
| **ASSIGNMENT TITLE** | **Software Development Project** | |
| **Level** | 6 | |
| **Weighting** | 100% | |
| **Lecturers** | Hummara Bhatti | |
| **W/C Hand Out Date** | 03/03/2025 | |
| **Due Date** | **By 17:00** on15/05/2025 | |
| **Cut-off Date for Late Submissions (10 working days after the due date)** | **By 17:00** on30/05/2025 | |
| **Feedback Post Date** | 20 working days after due date | |
| **ASSIGNMENT FORMAT** | **FILE UPLOAD (DOCUMENT)** | |
| **Essay/Report Format** | Formal Report | |
| **Assignment Word Count** | An individual 3000 word report (100%) Covers Learning Outcomes 1, 2 and 3). | |
| **Submission Format** | e-Submission | Individual |

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| **Permitted use of Artificial Intelligence within this assessment** | **Delete as required:**  For this assignment, Artificial Intelligencecan **ONLY** be used as stated within ***Using AI Ethically within Assignments*** document. <https://rise.articulate.com/share/4h250QmyY8hNnsQ9HS7B702dJedhlsM6>.  For this assignment, Artificial Intelligence canbe used to*: [insert, with approval from a Deputy Dean]* |

**ASSIGNMENT TASK:**

**Task 1: (1000 words)**

Write a report that will:

1. Explain the key concepts of agile software development. (500 words)
2. Analyse the benefits and challenges of using agile methods compared to Waterfall Model in software development. (500 words)

Weighting: 35% (a: 15%, b:20%)

**Task 2: (1500 word)**

You work in a company which develops software solutions for gyms and fitness centres using the Agile methodology. Your client has requested you to develop a software which has the following key features:

1. **Manage Member profiles and Subscriptions** – gym members should be able to create and manage their profiles, check membership plan and track their subscriptions.
2. **Class and activity scheduling** – gym staff should be able to add, and mange class schedules and members should be able to sign up for classes.
3. **Assign trainers and track hours –** gym staff should be able to assign trainers to classes and track their working hours.
4. Develop a project plan using your chosen agile method. This should include breaking down the overall project into manageable user stories, defining clear product backlogs and prioritising user stories, planning and outlining iterative sprints, estimating tasks and selecting appropriate tools and techniques for managing your agile project e.g. Kanban boards, sprint charts.
5. Implement the software documenting the progress for each sprint cycle showing how the user stories are completed, and the backlog is updated.

You can use the following sprints:

1. Member Management Functionality – Register and Login.
2. Membership Plans and billing.
3. Class and Activity scheduling - adding classes, class registration, scheduling.
4. Assign trainers and track hours.
5. Demonstrate testing methods including user acceptance testing to be performed at the end of each sprint. Include the test plan together with screenshots in your report along with the output from various test cases.

**Complete the above tasks for your role in the project.**

Weighting: 35% (a: 10%, b: 20%, c:5%)

**Task 3:**

Evaluate the stages of the agile software development process used in the development of your program discussing its effectiveness, potential improvements and challenges. (500 words)

Weighting: 20%

**MARKING CRITERIA:**

* Below are the marking criteria that align with both the task(s) set **and** the quality of your document. Clear weightings/marks will be noted for each criterion.
* The overall mark awarded for this assignment will explicitly show how the mark was calculated based on your performance against each criterion.
* **Task 1:** 35%
* **Task 2:** 35%
* **Task 3:** 20%
* **Structure/Clarity Of Communication/ Flow Of Discussion:** 10%

**TASK AND DOCUMENT FORMAT GUIDANCE:**

* Focus on attention to detail, quality of work and overall academic standards.
* **Specific Guidance for this assignment** (include guidance on each task and the format of the document):
* For additional guidance on this assignment, please access the assignment vodcast available on Canvas.

**E-SUBMISSION GUIDANCE:**

* This assignment will require you to submit your work by uploading a document in Word or PDF format to Canvas. [Please follow this online guide on document submissions](https://rise.articulate.com/share/3UNnspc3e4kokH3J-9gjk5WfEmJ4YnZR#/lessons/_3huktaXeCGEPferCg_bGTcYjWppQ2Bj) and contact the DICE team on [dice@ucb.ac.uk](mailto:dice@ucb.ac.uk) if you need any further support.

**LEARNING OUTCOMES:**

1. Explain the concept of agile development within a software development environment.
2. Apply agile methods to solve business problems.
3. Analyse the stages in the agile software development process.

**ACADEMIC SKILLS OUTCOMES:**

* The Academic Skills Outcomes to be ***developed***by completing this assignment [can be found here.](https://rise.articulate.com/share/7sBv8lbi0i2WczF7WTGE0t8osauZRRvX#/)
* For Apprenticeship programmes, identify the applicable Knowledge, Skills and Behaviours the assignment seeks to test.

**GENERAL ASSIGNMENT GUIDANCE:**

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| **UCB standards for presenting your written work** | Please use the standards within this link about text size, line spacing, margins, headers, page numbering, embedding quotations within your work and appendices. <https://ucbirmingham.instructure.com/courses/26756/pages/presentation-of-submitted-work> |
| **Using Artificial Intelligence (AI) ethically within your assessments** | Please read the information below on how to use AI **ethically** within your assignments, including Grammarly. Please ask your lecturer or CASE if you are unclear about any information within this link. If a marker has questions about how you have used AI within your assignment, you may be invited to a meeting to discuss your work. https://rise.articulate.com/share/4h250QmyY8hNnsQ9HS7B702dJedhlsM6 |
| **Teamwork Assessment** | Should this assignment require you to work as part of a team, you will receive an individual grade based on your performance and personalised feedback. The assignment brief will provide clear details on how your individual grade and feedback will be determined against the task and marking criteria. |
| **Importance of Word Count** | Assignment word counts should always be observed. Ignoring a word count significantly increases the risk of your work losing marks because it will likely lack focus and clarity, and/or you would have gained an unfair advantage over others who have completed their work within the word count.  **Students will be required to state their word count on all submissions.** A 10% leeway will be allowed – so the **maximum** a student should submit will be the **word count + 10%.** The word count will **exclude:**   * + The title page   + The contents page   + Models, graphs, calculations, data tables, and other exhibited figures or images   + Lists of references   + Appendices (these should be kept to a minimum) |
| **E-submission** | See the guidance below on e-submitting your assignment: <https://www.ucb.ac.uk/higher-education-student-handbook/assessment-issues/> |
| **Cut-off date for late submissions** (including for students with ECs and/or Support Plans) | The cut-off time for late submissions is 10 working days (UCB working days) after the original assessment hand-in/due date. After this time, you cannot submit any late assessments, even if you have Extenuating Circumstances to cover them. <https://www.ucb.ac.uk/higher-education-student-handbook/assessment-issues/> (See Additional Information Section, ‘Assignments and how to Submit them’)  Students with **Support Plans** may have additional time to submit their work after the formal submission date. |
| **Generic Grading Criteria** | The Generic Grading Criteria (GCC) are the generic features and expectations of work at a given level on your programme. The GCC per level is used in conjunction with the assignment marking criteria to determine the mark for your assignment. For more information on the GCCs for Levels 4-7, please click on this link. <https://www.ucb.ac.uk/higher-education-student-handbook/assessment-fairness-and-marking/> |
| **Plagiarism and Academic Misconduct** | Please read the policy on Plagiarism and Academic Misconduct below. UCB will be robust in ensuring that marks awarded for assignments are based on fair and ethical assessment and referencing practices by students. <https://www.ucb.ac.uk/higher-education-student-handbook/essay-writing/plagiarism/> |
| **Extenuating Circumstances** | Extenuating Circumstances (ECs) are significant personal difficulties which adversely impact your ability to complete your assignment. Please read the supporting information below if you have ECs impacting your ability to complete this assignment. <https://www.ucb.ac.uk/higher-education-student-handbook/assessments-if-things-go-wrong/> |
| **UCB Referencing Guide** | You are required to reference your sources within your assignments appropriately. Please click on the link below to learn how to reference various sources of information. This Guide also includes how to **acknowledge all Generative AI** used within your assignment, ensuring that you comply with the ***Using AI Ethically within your Assignments*** policy (as covered above). <https://portal.ucb.ac.uk/download/referencing/referencing-guide.pdf> |
| **Access the Assignment Life Cycle** | The Assignment Life Cycle offers you additional support at each stage of the assignment process. Please click on the link below:  [https://ucbirmingham.instructure.com/courses/37413](https://eur03.safelinks.protection.outlook.com/?url=https%3A%2F%2Fucbirmingham.instructure.com%2Fcourses%2F37413&data=05%7C02%7Che-quality%40ucb.ac.uk%7C7447f823bd5d45aca28d08dcf403ae7c%7Ca39505537d10400bbc8d89c957233230%7C0%7C0%7C638653543845136983%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C0%7C%7C%7C&sdata=lcpQPwjPwungy5HFOknuqhXL1EZ5XIRfvOHwSiZ7cUA%3D&reserved=0) |