# shuspace

# Assessment Brief

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| Module Leader: Dr Ra’ed Bani Abdelrahman | | Level: 5 | |
| Module Name: Introduction to Software Engineering | | Module Code: 55-508876 | |
| Assignment Title: Portfolio and Case-Study Report (Task 1 + Task 2) | | | |
| Individual / Group: Task 1: Group + Individual  Task 2: Individual | Weighting: 100% Task 1: 70%  Task 2: 30% | Magnitude:  Task 1: 3500 words or equivalent  Task 2: 1500 words or equivalent | |
| Submission date/time: 4th January 2024 | Blackboard submission: Yes Turnitin submission: No | Format: Software Design artefacts, source code, word/pdf document, digital media. | |
| Planned feedback date:  26th January 2024 | Mode of feedback: Written | In-module retrieval available: No | |
| In this assessment are students asked to consider: | Inclusivity and accessibility | | Yes |
| Sustainability | | Not applicable |
|  | | | |
| **Module Learning Outcomes**   * LO1: Describe key properties of software including its characteristics and qualities, and their measurement. * LO2: Understand and discuss software development life cycles and processes. * LO3: Explain the development of secure software and review the importance of information privacy in systems development. * LO4: Understand the use of analytical approaches to decision making throughout the systems development lifecycle. * LO5: Prototype a software application through planning, specification, design, implementation, validation, and verification, and reflect critically on experiences gained. | | | |

# Assessment Brief

This assessment evaluates your comprehension and application of software engineering processes. You are required to design a system using pertinent software engineering models, ensuring that you consider the diverse users of the system.

Your system design should cater to the requirements detailed in the attached case study (Assessment ItSE\_Case\_Study.docx). This case study was chosen for its multifaceted challenges related to design, development, security, privacy, and ethical matters.

Throughout the semester, please adhere to the roadmap provided in this document, which outlines the projected progression of your project. You'll also receive formative feedback at different intervals to enhance your work.

The assessment is divided into two main tasks:

## Task 1:

This task necessitates collaboration and will involve working in **teams of four students**. Despite the group-based nature of this task, each student must submit an individual portfolio. This portfolio should encapsulate the details of your collaborative efforts (which can be jointly documented) and a personal reflection on the experience.

All groups must also conduct and submit peer evaluations using the peer assessment form. Instructions and samples for this process are provided in Appendix 1.

In this task, you will assume the role of software developers, and your instructors will act as the clients. An initial draft of a modern Sport Gym Management system. Your goal is to evolve this system collaboratively, using the Scrum methodology. Completing at least two Scrum sprints, each with a sprint review and retrospective, is crucial as it not only allows the team to iteratively develop and refine the project based on feedback and lessons learned, but also facilitates a better understanding of the team’s velocity and potential areas for improvement, thereby enhancing the overall quality and success of the software development process. While it is not mandatory, you are encouraged to integrate other agile methodologies like Kanban if you find them beneficial. Make sure to employ version control, such as Git. Utilise GitHub as cloud-based service and grant repository access to your module tutors. Task 1 contributes to 70% of your overall assessment grade.

## Task 2:

In this task, you will investigate and reflect on the security, legal, ethical, and professional (SLEP) implications associated with the provided case study. It is crucial to not only identify these concerns but also discuss their relevance to your work in Task 1. Further, detail any modifications or strategies you have considered for your system design considering these implications. Task 2 accounts for 30% of your assessment grade.

# Task 1 and Task 2 details

# Task 1

In this task, using the case study material provided, you are required to apply gained knowledge to produce the portfolio of your project wok.

In this task, the following artefacts are to be produced:

1. A piece of production-quality software (developed as a group).
2. A video presentation that highlights the capabilities of software in (1) (recorded as a group, 5 minutes each).
3. A descriptive report, including artefacts produced at various stages in software development and response to formative feedback (written as a group) (2000 words).
4. A reflective account (written as an individual) (700 words).

These will be elaborated next.

## Production-quality software

You can develop your software application in any software tool/language or environment you want. You are expected to submit it, including all its components (e.g., codebase), compressed in a separate zip file (or 7z). The zip file will be uploaded to Blackboard as directed in the relevant submission point. We may at our discretion request a demonstration if we have difficulty in running your software. This section should include links for:

* Shared meetings minutes log (Must make sure your tutors have access).
* GitHub Repository (Indicate GitHub username for each team member and make sure your tutors have access).
* Screenshot of the GitHub project insights page.

## Video Presentation

Your software application needs to be showcased in a video recording of up to 20 minutes (5 minutes for each team member).

You are expected to upload your video files to Blackboard. The following format is required:

* Introduce yourselves and briefly outline the role of each team member in the context of Scrum and contribution of each team member to the project.
* Outline how you identified the sprints (or cycles) to develop your application using Scrum.
* Outline what development work each sprint encapsulates.
* Outline how you executed the running of your project using the Scrum methodology.
* Demonstrate the functionality of your software. You can use user stories as the basis of your demonstration if you wish. Explain each user story in turn with the chosen persona(s) and outline what should be expected after executing the user story. This is known as an *acceptance test*. During the demonstration, feel free to outline any assumptions you made and take the opportunity to ask questions to us as if you are in a structured walkthrough with us if you wish any aspects of your work to be clarified by us. Your questions may refer to the way you interpret user requirements, the way you designed your software or developed it. Furthermore, you may ask questions about the user interaction and the way you designed the user interface. Inclusion of questions and assumptions will effectively turn your presentation into a form of rehearsal session for user validation.

## Descriptive Report on Software Artefacts

1. Identify user personas.
2. Select two personas identified in (1) and produce two user stories for each chosen user in (1). Note that during the design and development of your application, you may identify many more than two user stories. For this report, you are expected to limit your attention to only two users of your choice and document two user stories for each chosen user (i.e., there will be four user stores in total). That said, your video demonstration needs to demonstrate other users and user stories associated with them as well as acceptance tests. This will enrich viewers’ experience with your product.
3. Identify A set of Functional and nonfunctional requirements.
4. A set of acceptance tests for each user story chosen in (2). These tests will help you at the validation stage (i.e., Are we building the right product?). You may focus on tests that lead to a positive outcome (i.e., “happy day scenario”) where a story has a successful conclusion as well as alternate courses (or outcomes).
5. Design Artefacts:
   1. System Context diagram
   2. A use case diagram (including actors, use cases and the boundary of the system). Your diagram should show relationships between actors (where appropriate) as well as some examples of “include” and “extend” between different use cases. Your use case diagram should reflect the entire functionality, including all the actors involved in your system. Therefore, it should not be limited to artefacts in (1) and (2).
   3. One Sequence diagram for a selected use case.
   4. A Container diagram.
   5. A Component diagram.
   6. A Class Diagram
   7. Entity Relationship Diagram
6. A light-touch test specification outlining how acceptance tests will be carried out.
7. Evidence of acceptance testing based on acceptance tests derived from user stories.

## Incorporation of formative feedback

Provide written evidence of how you evaluated and acted on the formative feedback you received from your user. Note that it is important that you receive some form of feedback at the end of each sprint from your user as per the Scrum methodology.

## Reflective account

To provide an in-depth understanding of your experience and learning throughout the project, you are required to compose an individual reflective account on your group work. Consider the following points when writing your reflective account on the group project:

* Your account should encompass both positive experiences and challenges faced during the project, striking a balance between constructive criticism and acknowledgment of successes.
* Dive deep into how you determined the quality of your application, incorporating both product and process perspectives.
  1. **Product Perspective:** This pertains to the application's ability to meet its intended purpose and its performance in terms of external software quality factors. Address questions such as:
     1. How did your application meet the defined requirements?
     2. Was it effective in satisfying user needs?
     3. How does your solution compare to other existing systems in the market?
     4. Beyond usability, what other external software quality factors, as discussed in the lecture, were crucial for your application?
     5. How did you determine the usability of your application? Were there specific tests or feedback mechanisms employed?
  2. **Process Perspective:** This centres around your approach to build the project. Address questions such as:
     1. Which aspects of the development process were executed seamlessly?
     2. What obstacles or challenges emerged during the project's lifespan?
     3. How did you adapt or overcome these hurdles? Were there any lessons learned?

The goal of this reflective account is not just to recount events but to illustrate the depth of your understanding, the decisions you made, and the insights you gained. It is about demonstrating growth, critical thinking, and a commitment to continuous improvement.

Appendices: Appendix 1: Peer Review form.

## Writing Style and Word Limit

* Your portfolio should ideally be written in passive voice as demonstrated in this sentence. Passive voice emphasises objects in a sentence rather than subjects. In scientific writing, what is being developed (i.e., artefacts) are deemed to be more important than who is developing them.
* As stated in the module’s descriptor, the word count of a portfolio should not exceed 3500 words, excluding references, diagrams and their descriptions.
* It is important that a portfolio should contain a reference list that contains citations to external sources that have been relied on throughout projects’ development. The citations should conform to the APA referencing system[[1]](#footnote-1).

# Task 2

You will submit an individual report for this task. In this task you will investigate security, legal, ethical, and professional issues (SLEP) and how to apply them to the system designed in task 1. Your report should identify and address the challenges of the technologies for the system along with the SLEP aspects. You will need to address these aspects in your report on how they reflect on your work in Task 1 and what plans and actions you will have to reflect on the system design. You are to address these aspects to meet the needs of the clients in the case study. The report is to present the suggestions and solution strategy to meet requirements. This report does not include coding.

You will have to submit your report as a word and pdf document (.docx, .pdf).

## Writing Style and Word Limit

* Your report should ideally be written in passive voice as demonstrated in this sentence. Passive voice emphasises objects in a sentence rather than subjects.
* As stated in the module’s descriptor, the word count of the report should not exceed 1500 words, excluding references, diagrams and their descriptions.
* It is important that the report should contain a reference list that contains citations to external sources that have been relied on. The citations should conform to the APA referencing system.

## Submission

The deadline for Task 1 and Task 2 is **3 pm on Thursday 4th January 2024**. There will be two separate submission points for Task 1 and Task 2 in Blackboard.

You should submit your work files in a zip file for each task. Documents should be submitted in two formats (.docx and .pdf) in the zip files. Please refer to Task 1 and Task two section for the deliverables’ details.

## **Indicative Roadmap/Milestone for Task 1**

The following table outlines a suggestion of weekly milestones that need to be adhered to complete the task 1 on time. This is a tentative plan; you can derive your plan from this. You are expected to manage your work as per your plan.

You can ask for formative feedback in each week’s lab session or drop-in sessions.

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| --- | --- | --- |
| **Date** | **Milestone** | |
| Week of 25/09/2023 | Form a team and draft your project vision. Next, create a GitHub repository for your project. Then, conduct your initial team meeting and document the minutes of that meeting. | |
| Week of 02/10/2023 | Define user roles and initial user stories | |
| Week of 09/10/2023 | Personas mapped with user roles, scenarios, and usability requirements. Refine user stories. Build Wireframes/Conceptual User Interfaces | |
| Week of 16/10/2023 | Write clear functional and non-functional requirements | |
| Week of 23/10/2023 | Create your initial backlog and plan your first sprint | |
| Week of 30/10/2023 | Define system architecture, create context diagram, use case diagram, and one sequence diagram. | System Implementation.  Define and conduct testing for the tasks completed in each sprint.  Ask for formative feedback in each week’s lab session or drop-in sessions |
| Week of 06/11/2023 | Create Container diagram, component diagram, class diagram and entity relationship diagram. |
| Week of 13/11/2023 | Sprint one review and retrospective completed and start second sprint. |
| Week of 20/11/2023 | Refine design (use design patterns where applicable). |
| Week of 27/11/2023 | Write reflective account of your group work |
| Week of 04/12/2023 | Sprint two review and retrospective completed and finalise project portfolio and add appendices |
| Week of 11/12/2023 | Conduct acceptance testing. Project deployment (optional). Record video presentation. |
| Week of 18/12/2023 | Student vacation | |
| Week of 25/12/2023 | Christmas Student vacation | |
| Week of 1/1/2024 | Final Submission on 4th January 3 PM | |

## Final Remarks

The data provided in the case study often mirrors the kind of preliminary information you might receive from clients. It can be incomplete, overly ambitious, ambiguous, and sometimes vague. This scenario is commonplace, challenging developers to discover and articulate the client's actual needs.

Engage with the module tutors during in-person sessions or our scheduled drop-in sessions. Their guidance will be invaluable in resolving uncertainties as you design and subsequently execute a functional system.

For guidance through various stages of your project, refer to the “[SHU Development Process](https://aserg.codeberg.page/shu-dev-process/en/introduction/)” It offers valuable insights into the typical phases of software engineering.

Bear in mind that while clients have a clear understanding of the functionality they desire, they may not be technologically experts. Thanks to search engines, they might be acquainted with various technical jargons, even if they do not always fit the context. Sometimes, the client's team might include seasoned developers, who often approach situations with a 'been there, done that' attitude. As software engineers, you have a key role to translate general ideas and requirements into concrete solutions, well-structured designs, and maintainable software packages.

## Student Support & Communication Guidelines

For queries or assistance, leverage the four-hour face-to-face lab sessions with your lab tutors. These sessions are also an excellent opportunity to obtain formative feedback regarding your assessment. Additionally, there is a drop-in session every Thursday from 16:00 – 19:00, starting on 26/10/2023.

Should an issue remain unresolved after consulting your tutors:

1. Reach out to the Module Leader, Ra’ed Bani Abdelrahman, at **r.bani-abdelrahman@shu.ac.uk.**
2. If you still require clarity, contact the Course Leader for Software Engineering, Jamie Hufford, at **j.hufford@shu.ac.uk.**
3. For further escalations, please contact the Deputy Head of Computing, Mark Jacobi, at **m.jacobi@shu.ac.uk.**

Please remember that grading is based on the collective judgment of your teaching team and is not open to debate. However, tutors are always available to discuss and clarify the feedback provided. If you believe there is an oversight in the assessment procedures, notify your tutor promptly to ensure timely resolution.

## Assessment Criteria

## Task 1 (Weight 70%):

|  | **FAIL**  (insufficient) | | | | **THIRD**  (sufficient) | | | **LOWER SECOND**  (good) | | | **UPPER SECOND**  (very good) | | | **FIRST**  (excellent) | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Zero | Low Fail | Mid  Fail | Marginal Fail | Low 3rd | Mid3rd | High 3rd | Low  2.2 | Mid 2.2 | High  2.2 | Low 2.1 | Mid  2.1 | High 2.1 | Low  1st | Mid  1st | High 1st | Exceptional 1st | Perfect 1st |
| Criteria and weighting | **0** | | **1-3** | | **4-6** | | | **7-9** | | | **10 -12** | | | **13-15** | | **16** | | |
| **C1: Production-quality software: 20%** | Some attempt has been made to tackle the assessment. The work has little or no merit. | | Product is not fit for purpose even though it may meet some of the requirements with some additional effort. | | There is evidence of credible attempt to produce a quality product.  However, by and large, work is of limited quality.  Peer assessment form shows at least 40% contribution to team effort. | | | Competent work, demonstrating some accuracy and appropriate skills.  The work as presented has some minor errors but is limited in scope. | | | High-quality work, demonstrating good accuracy and appropriate skills.  The work as presented has some minor errors, and there are some obvious areas where it could be extended/improved.  Peer assessment form shows equal or close to equal contribution to team effort. | | | Very high-quality work, demonstrating excellent accuracy and appropriate skills.  The work as presented is difficult to fault, but there are some obvious areas where it could be extended/improved.  The product is fit for purpose. Peer assessment form shows equal contribution to team effort. | | Exceptional work of the highest quality, demonstrating excellent accuracy and appropriate skills.  It is difficult to suggest ways that the product could be improved/extended without introducing concepts from higher levels of study.  The product is fit for purpose and can be used as the nucleus of an evolving system.  Peer assessment form shows equal contribution to team effort. | | |
| **C2: Video presentation: 20%** | Some attempt has been made to tackle the task.  The work has little or no merit. | | Work is not fit for purpose.  There may be evidence of some basic understanding of relevant concepts and techniques, but this does not meet the level that was taught in class. | | Work of limited quality.  Demonstrates some relevant knowledge and understanding.  Peer assessment form shows at least 40% contribution to team effort. | | | Competent work, demonstrating reasonable knowledge and understanding.  Some analysis, organisation, relevance, presentation, and appropriate skills are shown.  The work as presented has some minor errors but is limited in scope. | | | High quality work, demonstrating good knowledge and understanding, analysis, organisation, relevance, presentation, and appropriate skills.  The work as presented has some very minor errors, and there are some obvious areas where it could be improved/extended.  Peer assessment form shows equal or close to equal contribution to team effort. | | | Very high-quality work, demonstrating excellent knowledge, understanding, analysis, organisation, relevance, presentation, and appropriate skills.  Peer assessment form shows equal contribution to team effort. | | Exceptional work of the highest quality, demonstrating excellent knowledge, understanding, analysis, organisation, relevance, presentation, and appropriate skills.  There is extensive evidence of independent investigation, learning and thought.  Peer assessment form shows equal contribution to team effort. | | |
|  | | | | | | | | | | | | | | | | | | |
| **C3: Descriptive report on software artefacts: 30%** | Some attempt has been made to tackle the task. The work has little or no merit. | | Work produced is not fit for purpose.  There may be evidence of some basic understanding of relevant concepts and techniques, but this does not meet the level that was taught in class. | | Work of limited quality, demonstrating some relevant knowledge and understanding.  Users are mostly realistic.  Acceptance tests may cover only “happy days scenarios”.  Use case diagrams outline some of the actors.  Relationships between actors may be identified (where applicable).  Relationships between use cases may be outlined by means of either “Include” or “Extend”.  System boundary may be shown.  Peer assessment form shows at least 40% contribution to team effort. | | | Competent work, demonstrating reasonable knowledge and understanding, analysis and accuracy.  The work as presented has some minor errors but is limited in scope.  Users are realistic.  Acceptance tests may cover either “happy days scenarios” or negative situations.  Use case diagrams outline some of the actors and are mostly consistent with users identified in the context of user stories.  Relationships between actors are identified clearly (where applicable).  Relationships between use cases are outlined satisfactorily by means of either “Include” or “Extend”.  System boundary may be shown. | | | High-quality work, demonstrating good knowledge and understanding, analysis and accuracy.  The work as presented has some very minor errors, and there are some obvious areas where it could be improved/extended.  Users are realistic. Acceptance tests may cover both “happy days scenarios” and negative situations.  Use case diagrams outline most of the actors and are mostly consistent with users identified in the context of user stories.  Relationships between actors are identified clearly (where applicable).  Relationships between use cases are outlined satisfactorily by means of both “Include” and “Extend”.  System boundary is shown and is accurate.  Peer assessment form shows equal or close to equal contribution to team effort. | | | Very high-quality work, demonstrating excellent knowledge and understanding, analysis and accuracy.  The work as presented is difficult to fault, but there are some obvious areas where it could be extended/improved.  Users are realistic. Acceptance tests cover both “happy days scenarios” and negative situations.  Use case diagrams outline all the actors and are consistent with users identified in the context of user stories.  Relationships between actors are identified clearly (where applicable).  Relationships between use cases are outlined clearly by means of both “Include” and “Extend”.  System boundary is shown and is accurate.  Peer assessment form shows equal contribution to team effort. | | Exceptional work of the highest quality, demonstrating excellent knowledge and understanding, analysis and accuracy.  It is difficult to suggest ways that the work could be improved/extended.  Users are realistic. Acceptance tests are well written.  Acceptance tests cover both “happy days scenarios” and negative situations.  Use case diagrams outline all the actors and are consistent with users identified in the context of user stories.  Relationships between actors are identified clearly (where applicable).  Relationships between use cases are outlined clearly by means of both “include” and “Extend”.  System boundary is shown and is accurate.  Peer assessment form shows equal contribution to team effort. | | |
| **C4: Incorporation of formative feedback: 10%** | Some attempt has been made to tackle the task. The work has little or no merit. | | Some attempt was made to receive feedback, but no or little attempt was made to respond to it. | | Some attempt was made to receive feedback. Feedback received was documented. There is evidence of an action plan to address feedback, even though not all feedback was addressed.  Peer assessment form shows at least 40% contribution to team effort. | | | Adequate attempt was made to receive feedback. Feedback received was documented well. There is evidence of an action plan to address feedback. Some of the feedback was addressed. | | | Satisfactory attempt was made to receive feedback. Feedback received was documented well. There is evidence of an action plan to address feedback. Most of the feedback was addressed. | | | Excellent attempt was made to receive feedback. There is clear evidence of evaluation of feedback received (e.g., in the form of a “to-do-list” with priorities). There is also convincing evidence of successful execution of the action plan. | | Excellent attempt was made to receive feedback.  There is clear evidence of evaluation of feedback received (e.g., in the form of a “to-do-list” with priorities) and recording the action plan using a software tool, such as Trello.  There is also convincing evidence of successful execution of the action plan. | | |
| **C5: Reflective account: 20%** | Some attempt has been made to tackle the task. The work has little or no merit. | | Work produced is not fit for purpose.  There may be evidence of some basic evaluation, but this does not meet the expected level. | | Work of limited quality.  Reflective account is not of critical nature. | | | Competent work, demonstrating reasonable reflective evaluation.  The work as presented has some minor errors but is limited in scope.  Evaluation is of positive nature, neglecting any shortcomings. | | | High-quality work, demonstrating good reflective evaluation. The work as presented has some very minor errors, and there are some obvious areas where it could be improved/extended.  The following is executed satisfactorily:  Outlining how you evaluated your deliverables’ fitness for purpose.  Analysis of any potential gaps between your proposed solutions and the existing solutions (in the market).  Identify areas in which there is insufficient execution of the prescribed software development processes.  Identification of areas in which there is insufficient emphasis on software quality, or in which the notion of quality is deemphasised, and discuss why this might be.  Identification of areas in which there is insufficient validation or in which validation is insufficient. | | | Very high-quality work, demonstrating excellent reflective evaluation.  The work as presented is difficult to fault, but there are some obvious areas where it could be extended/improved.  The following is executed competently:  Outlining how you evaluated your deliverables’ fitness for purpose.  Analysis of any potential gaps between your proposed solutions and the existing solutions (in the market).  Identify areas in which there is insufficient execution of the prescribed software development processes.  Identification of areas in which there is insufficient emphasis on software quality, or in which the notion of quality is deemphasised, and discuss why this might be.  Identification of areas in which there is insufficient validation or in which validation is insufficient. | | Exceptional work of the highest quality, demonstrating excellent reflective evaluation.  It is difficult to suggest ways that the work could be improved/extended without introducing concepts from higher levels of study.  The following is executed competently:  Outlining how you evaluated your deliverables’ fitness for purpose.  Analysis of any potential gaps between your proposed solutions and the existing solutions (in the market).  Identify areas in which there is insufficient execution of the prescribed software development processes.  Identification of areas in which there is insufficient emphasis on software quality, or in which the notion of quality is deemphasised, and discuss why this might be.  Identification of areas in which there is insufficient validation or in which validation is insufficient. | | |
| **Overall Marks 100%** |  | |  | |  | | |  | | |  | | |  | |  | | |

## Task 2 (Weight 30%):

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|  | **FAIL**  (insufficient) | | | | **THIRD**  (sufficient) | | | **LOWER SECOND**  (good) | | | | | **UPPER SECOND**  (very good) | | | | | **FIRST**  (excellent) | | | | | | |
| Zero | Low Fail | Mid  Fail | Marginal Fail | Low 3rd | Mid3rd | High 3rd | Low  2.2 | Mid 2.2 | | | High  2.2 | Low 2.1 | Mid  2.1 | | | High 2.1 | Low  1st | Mid  1st | High 1st | Exceptional 1st | | | Perfect 1st |
| Criteria and weighting | **0** | | **1-3** | | **4-6** | | | **7-9** | | | | | **10 -12** | | | | | **13-15** | | **16** | | | | |
| **C1. Security**  50% | No Security investigation has been carried out. | | Some indication about the Security has been presented without much concrete evidence. | | A basic Security approach is presented, and some evidence of the carried-out investigation has been presented as per the approach. | | | A Security investigation approach is presented with justification and some evidence of the valuation metrics to be carried-out validation has been presented as per the approach. | | | | | The Security is investigated and addressed providing approaches. The validation metrics are presented. | | | | | The Security measures are present with approaches to implement.  The validation metrics are presented. A reflection is provided about the metrics and predicted results including discussion about changes arose due to validation. | | The security measures are present with the methodologies to implement. Validation measures are provided including best technologies to use. Predicted challenges and changes are discussed along with viable solutions. | | | | |
|  |  | | | | | | | | | | | | | | | | | | | | | | | |
| **C2 Legal, professional, and ethical issues**  50% | No issues have been presented. | | Some indication about user addressing of issues is presented without much detail. | | A basic addressing and discussion of issues is presented, with an approach to use to implement them. | | | A discussion of issues is presented with justification and some evidence of the valuation metrics to be carried-out validation has been presented as per the approach. | | | | | The issues are investigated and addressed providing approaches. The validation metrics are presented. | | | | | The issues measures are present with approaches to implement.  The validation metrics are presented. A reflection is provided about the metrics and predicted results including discussion about changes arose due to validation. | | The issues measures are present with the methodologies to implement. Validation measures are provided including best technologies to use. Predicted challenges and changes are discussed along with viable solutions. | | | | |
| **Overall Marks 100%** |  |  |  |  |  |  |  |  | |  |  | |  | |  |  | |  |  |  | |  |  | |

## University Grade Descriptor (UGD)

## Please find below the Grade descriptor for Level 5.

# Level 5 - Generic grade descriptor: relationship of degree classification to Grade Point and equivalent percentage

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Class** | **Category** | **Grade** | **Mark range** | **%** | **General Characteristics** |
| 1st | Exceptional 1st | 16 | 93 - 100 | 96 | Exceptional breadth and depth of knowledge and understanding of the area of study, **significantly beyond what has been taught in all areas**; evidence of extensive and appropriate selection and critical evaluation/synthesis/analysis and of reading/research beyond the prescribed range, in both breadth and depth, to advance work/direct arguments; excellent communication; performance beyond expectation. The ability to make decisions and carry out tasks/processes with autonomy; excellent leadership skills in group contexts; creative flair; extremely well-developed problem-solving skills; the ability to carry out sustained critical reflection on practical work within the wider context of industry/workplace. Fully meets expectations set by the industry/employment context. |
| 1st | High 1st | 15 | 85 - 92 | 89 | Outstanding/excellent knowledge and understanding of the area of study as the student is **typically able to go beyond what has been taught (particularly for a mid/high 1st**); evidence of extensive and appropriate selection and critical evaluation/synthesis/analysis of reading/research **beyond the prescribed range**, to advance work/direct arguments; excellent communication; performance deemed beyond expectation of the level. The ability to make decisions and carry out tasks/processes with autonomy; creative flair and the ability to (re)interpret predefined rules/conventions to select and justify individual working practice; highly developed problem-solving skills; accuracy and fluency; excellent command of skills appropriate to the task; the ability to reflect critically on practical work within the wider context of industry/workplace. Broadly meets expectations set by the industry/employment context. |
| Mid 1st | 14 | 78 - 84 | 81 |
| Low 1st | 13 | 70 - 77 | 74 |
| 2.1 | High 2.1 | 12 | 67 - 69 | 68 | Very good knowledge and understanding of the area of study as the student is **typically able to relate facts/concepts together with some ability to apply to known/taught contexts**; evidence of appropriate selection and evaluation of reading/research, some beyond the prescribed range, may rely on set sources to advance work/direct arguments; demonstrates autonomy in approach to learning; strong communication skills. Broadly autonomous completion of practical tasks/processes; ability to adapt in response to change or unexpected experiences; technical/artistic decision making is highly developed; a clear command of the skills relevant to the task/process; ability to reflect on practical work and set future goals within the wider context of industry/workplace. Adherence to standards set by the industry/employment context. |
| Mid 2.1 | 11 | 64 -66 | 65 |
| Low 2.1 | 10 | 60 - 63 | 62 |
| 2.2 | High 2.2 | 9 | 57 - 59 | 58 | Good knowledge and understanding of the area of **study balanced towards the descriptive rather than analytical**; evidence of appropriate selection and evaluation of reading/research but generally reliant on set sources to advance work/direct arguments; communication shows clarity, but structure may not always be coherent. A confident approach to practical tasks; a solid grasp of the related processes, tools, technology; creativity in the completion of the task; proficiency is demonstrated by an accurate and coordinated performance; tasks are completed with a good level of independent thought; some autonomy is evident; an ability to reflect on practical work and set future goals. General adherence to standards set by the industry/employment context. |
| Mid 2.2 | 8 | 54 - 56 | 55 |
| Low 2.2 | 7 | 50 - 53 | 52 |
| 3rd | High 3rd | 6 | 47 - 49 | 48 | **Knowledge and understanding sufficient to deal with terminology, basic facts and concepts** but fails to make meaningful synthesis; some ability to select and evaluate reading/research however work may be more generally descriptive; strong reliance on available support set sources to advance work; arguments may be weak or poorly constructed; communication/presentation is generally competent but with some weaknesses. Competence in technical/artistic skills; tasks/processes are completed with a degree of proficiency and confidence; tasks are completed with a basic level of independent thought; effective judgements have been made; basic evaluation and analysis of performance in practical tasks is evident. Errors in workflow or completion of the task; general adherence to appropriate rules/conventions set by the industry/employment context. |
| Mid 3rd | 5 | 44 - 46 | 45 |
| Low 3rd | 4 | 40 - 43 | 40 |
| Fail | Borderline Fail | 3 | 30 - 39 | 35 | Insufficient knowledge and understanding of the subject and its underlying concepts; **some ability to evaluate given reading/research however work is more generally descriptive; naively follows or may ignore set material in development of work**; given brief may be only tangentially addressed or may ignore key aspects of the brief; communication shows limited clarity, poor presentation, structure may not be coherent. Practical tasks are attempted; skill displayed in some areas; there are a significant number of errors; a lack of proficiency in most areas; guidance may be needed to reproduce aspects of the task and/or apply learned skills. Tasks may be incomplete; failure to adhere to some of the rules/conventions set by the industry/employment context. |
| Mid Fail | 2 | 20 - 29 | 25 |
| Low Fail | 1 | 6-19 | 10 | No evidence of knowledge or understanding of the subject; **no understanding of taught concepts, with facts being reproduced in a disjointed or decontextualised manner**; ignores set material in development of work; fails to address the requirements of the brief; lacks basic communication skills. A general level of incompetency in practical tasks; an evident lack of practice; set tasks are not completed; few or no skills relating to tasks are evident. No adherence to rules/conventions set by the industry/employment context. |
| Zero | Zero | 0 | 0-5 | 0 | Work not submitted, work of no merit, penalty in some misconduct cases. |

# Appendices

## Appendix 1: Peer Assessment Form

This form must be filled in as a group by honestly evaluating your contribution to the work. Each member’s contribution to the project must be clearly stated. Finally, each member must be rated out of 10 (10 being the highest contribution and 0 being no contribution at all). The highest mark must always be 10. Two different examples are shown below:

### **Example 1**

|  |  |  |
| --- | --- | --- |
|  | Team member + work done | Mark out of 10 |
| 1 | C H – Scenario Scripts, User Stories + acceptance tests, 50% of prototype | 10/ 10 |
| 2 | O H – Assumptions, Questions, 50% of prototype, further documentation | 10/ 10 |
| 3 | E S – joined discord and contributed a part of the scenario scripts and questions | 2/ 10 |
| 4 | S T – nothing. Did not even join Discord or reach out in any way. | 0/ 10 |

|  |
| --- |
| Add any comments you feel would be useful for the tutor to know about when assessing marks |
| With regards to the prototype development, work was split 50-50 between C H and O H, with C H responsible for the backend and O H for UI (User Interface). This was not as intended, as the spec states that all should contribute to programming tasks – unfortunately despite repeated efforts we could not get E S to contribute in any way to the prototype, and we were never able to even contact S T. As such, O H and C H took on significantly more work than originally planned due to the other two members not fulfilling any of their responsibilities, with both O H and C H frequently working into the night to complete the coding that should have been done by the other two members.    E H contributed on the day of hand-in by completing one of the scenario scripts he was supposed to complete: S T never turned up. As such, this project was entirely completed solely by C H and O H, with E S’s contribution minimal and S T’s non-existent. This had a significant impact on the time taken to complete with O H and C H having to make up everyone else’s work as well as their own and has impacted on the project significantly. |

### **Example 2**

|  |  |  |
| --- | --- | --- |
|  | Team member + work done | Mark out of 10 |
| 1 | **L C**  **Week 1:**  Understanding assignment doc research, schedule for group meetings, allocating work to everyone,  **Week 2:**  Class diagram for meeting scheduler with S C and A J to better understand the assignment requirements in terms of the prototype, discussing relationships between classes.  **Week 3:**  Started looking at user stories, wrote a list of questions to ask about the system requirements, started of the general assumptions to be made about the system  **Week 4:**  Worked on UI design, started work on creating a list of participants  Attending user story workshop  **Week 5:**  Implemented UI design on project in visual studio.  Wrote user stories for the non-important participants.  **Week 6:**  Finished displaying username in Combo Box.  Displayed user type in text box depending on the user selected. Added 2 more forms. 1 for the participant's page. 1 for initiator and 1 to display all the meetings.  created instances for meeting objects to be used for the system.  **Week 7:** Added back buttons to initiator and participant form, helped populate tables for meeting objects for initiator and participant, finished adding lists to initiator form and started adding labels to participant form.  Passed in user object to participant form, changed how the invited list is initiated, now created in participant constructor, populated meetings pending table, fixed list boxes.  Helped to add in checks for null value when in the table layout panel. Implemented button but needs fixing. adds to schedules list and displays it in the scheduled box however errors when trying to remove from invite list.  Fixed loading instances of participant forms so that tables were correct when edited  Fixed forms not loading properly, added pending list to participant, changed how accept button works.  populated the confirmed participants list, added slot buttons depending on list of slots  fixed error with slots buttons, null checks for initiator rows, created check slot's function  Fixed slot buttons not appearing and consideration of location | 10/ 10 |
| 2 | **S C**  **Week 1**  Worked on understanding of the assignment doc  Did research about prototyping - its purpose, lifecycle and how it should be done.  **Week 2**  Class diagram for meeting scheduler with L C and A J to better understand the assignment requirements in terms of the prototype, discussing relationships between classes.  **Week 3**  Worked on the User Stories - Written a list of questions to ask about the system requirements and general assumptions about the system.  **Week 4:**  Worked on UI design, started work on creating a list of participants  Attending a User Story workshop.  **Week 5:**  Implemented UI design on project in visual studio.  Wrote user stories for the non-important participants.  **Week 6:**  Finished displaying username in Combo Box.  Displayed user type in text box depending on the user selected. Added 2 more forms. 1 for the participant's page. 1 for initiator and 1 to display all the meetings.  created instances for meeting objects to be used for the system.  **Week 7:**  Helped Amina working on the code - creating table layout panel checks for both initiator and participant forms.  Worked on user stories and scenario test scripts.  Worked on the PowerPoint presentation | 10/ 10 |
| 3 | **S J**  **Week 1:**  Discussed the plan for the assignment with group.  Read the spec to gain a better understanding.  **Week 3:**  Worked on user stories within the meeting scheduler system.  **Week 4:**  Worked on UI design  **Week 5:**  Wrote user stories for important participants and disabled participants  **Week 6:**  Attended group meeting | 4/ 10 |
| 4 | **A J**  **Week 1:**  Did research as a group on call to understand the assignment.  Finished notes on assignment spec to understand what was needed to be done.  **Week 2:**  Class diagram for meeting scheduler with S C and L C to better understand the assignment requirements in terms of the prototype, discussing relationships between classes.  **Week 3:**  Implementing classes into VS.  Discussed user stories within the scheduler system.  Wrote a document about questions to ask whilst discussing with group mates.  Discussed and wrote down assumptions to be made about the system.  **Week 4:**  Worked on UI design and started creating a list of participants to be outputted in a list box.  Attended Workshop for User Stories on Friday the 20th of November.  **Week 5:**  Worked on UI (advised S C). Attempted finishing user stories (Initiator and Guest Speaker)  **Week 6:**  Finished displaying username in Combo Box.  Displayed user type in text box depending on the user selected. Added 2 more forms. 1 for the participant's page. 1 for initiator and 1 to display all the meetings.  Started creating instances for meeting objects to be used for the system.  **Week 7:**  Created table layout panels for initiator and participant forms.  Helped populate the table layout panels.  Added in checks for table layout panel in for both initiator and participant with Soraya.  Allowed meetings pending into a list box which when selected is able to be cancelled.  Implemented slot button functions in the initiator form.  Created a Meeting Button in the Initiator form which creates a new meeting and asks for location, title, participants, and slots.  Worked on User Stories with S C and L C.  Recorded part of the video on User Stories for the Initiator. | 10/ 10 |

1. [APA Referencing Guide](https://libguides.shu.ac.uk/ld.php?content_id=32537001) [↑](#footnote-ref-1)