
Assessment Guidelines

Computer Science Team Projects

CS2TP 2022-2023

1 Assessment Elements

The Computer Science Team Project (CS2TP) is a 30-credit module. Teams in this module typically comprise students taking different programmes, who, as with software teams in the wider world, bring with them different backgrounds and areas of expertise. Therefore, students within a team may be assessed differently from each other, and may contribute in different ways. Your overall grade for the module is calculated from separate elements:

1. **Element 1 (80% of the module marks):** A grade that represents our assessment of **your team's performance and your individual contribution to it**, based on the evidence you present. This comprises the first four 'assessment aspects' described later in this document.
2. **Element 2 (20% of the module marks):** A grade that represents our assessment of your ability to engage in **individual critical reflection** on your experiences and learning in your team, and is based on the evidence in your individual reflective submissions. This assessment is based on your ability to articulate, discuss, analyse and learn from the experiences you have had during the team project.

Each element is assessed holistically, based on a range of pieces of evidence provided by the team throughout the project. These include technical reports, written reflections, source code, presentations and demos, and meetings with your technical mentor, as outlined in the separate Student Guidelines and Submissions Specification documents. This means that the academic staff will arrive at a **judgement of the extent to which you display the competencies described in this document**. It is your responsibility to demonstrate this, and provide evidence of doing so. Both formative feedback and clarification of the content of this document can be obtained from the module leadership team throughout the module. If in doubt: ask!

1.1 Element 1: Your Contribution to the Team's Performance

Element 1 assesses:

1. The **overall performance of the team** throughout the project.
2. **Your contribution** to that overall performance.

It embraces the range of work that effective software project teams typically engage in, and is based on *four aspects*, which are of equal importance (i.e. are each worth 25% of your grade for Element 1). The four aspects are:

1. *Software Quality & Scope*, which encompasses everything about the software artefact itself, and is assessed primarily through the demonstration and use of the software;
2. *Team Working*, which includes aspects relating to team culture, leadership, team roles, peer-learning and team development;

3. *Project Management & Process*, which includes the software engineering process, quality assurance, project management, and use of task and bug tracking tools, and version control;
4. *Exposition & Impact*, of all work presented, as well as relationships built and nurtured.

At the completion of the module, a formal grade for Element 1 for the entire team (the “team-level grade”) is given, derived from each of the above four aspects. From the point of view of the module, each of the four aspects is considered to be of equal importance, and therefore, are weighted equally in determining the overall team-level Element 1 grade. You should take this into account when planning how to deploy your team’s effort.

This team-level grade, as well as evidence of contributions to the team by each individual student, are then used to derive a final grade for each student for Element 1. Please note that, where the levels of contribution from individual students are unbalanced, **individual student marks may vary substantially from the overall team-level grade**. Note that it is not expected that all students contribute to all tasks, as this does not represent effective teambased project management. Therefore, it is expected that individual students may contribute to a greater or lesser degree to each of the Element 1 aspects. For example, some team members may take on more responsibility for the software artefact itself, while others may take on responsibility for the health of the team, for the project management process, the interaction design, or the way the work is presented. We use a number of sources of evidence, when assessing individual contributions, including (but not limited to) the views of the team members.

While the broad topic area for each project will be pre-defined by the module leadership team, through feedback, how the team tackles the project and precisely what is achieved will vary according to the team’s own decisions. Grades for Element 1 will therefore reflect the scope of what the team has aimed at, and achieved.

1.2 Element 2: Reflection

During the team project module, most of your learning is expected to be experiential. This means that you will learn from each other, from interactions with the module leadership team, and through self-study, typically by reading from a range of sources, and by trying things out and reflecting on them afterwards.

You are expected to be an active member of the team, and engage in project work in order to access these opportunities. You are expected to reflect on your experiences both formally and informally, to identify and articulate what you have learnt, and to feed this back into your work to enhance its effectiveness. This form of reflective practice is a key skill in professional individual and team-based work.

As outlined in the submissions specification document, you are also therefore required to submit written reflections at key points through the project. Element 2 assesses your ability to engage in effective reflective practice, based on the evidence in these submissions.

Element 2 is assessed individually.

2 Assessment Aspects in Detail

The following text describes the four aspects under which the Element 1 is assessed, as well as more detail on what is expected for Element 2. Note that in many cases, **you are expected to draw on what you have learnt in other modules**, and apply that learning effectively in the team project context. Remember, **each of these areas is weighted equally** in terms of its importance in the module, and in terms of how the final module mark is arrived at.

Software Quality & Scope is the core “produce valuable & high quality software” element. The module tutor will establish a brief at the start of the module, and you are expected to produce, as a team, software that meets that brief. It is expected that, at least by the end of the project, the software produced is at a user-ready quality. However, you are encouraged to deliver software incrementally, and reach this milestone much earlier in the project. Beyond this, merit will be given for teams that successfully deliver software with a greater scope. Note however that a piece of software that is larger in scope, but of a lower quality, will likely receive fewer marks than higher quality software that is more modest in scope.

Team Working is concerned with all the activities related to working together to achieve the project outcome. This includes aspects related to team culture, leadership, allocation and use of team roles (both functional and behavioural), collaborative working (e.g., pair-programming, joint presentations, collaborative report writing), and peer-learning. Effective teams will likely have sub-teams that deliver work to the main team after defining outcomes and milestones, and will engage in peer review of work. Higher performing teams will engage in activities designed to further develop the team, its culture, and behaviours, and will actively seek out and facilitate individual and team development opportunities.

Project Management & Process is concerned with how the team executed the software development and delivery process, and how the project work and production of deliverables was managed. It will involve a range of software lifecycle activities, including requirements elicitation and analysis, architecture and design, implementation and technical evaluation (i.e., verification and validation). A variety of artefacts may be produced and used to aid and evidence the project management and process, such as a user story map, story boards, requirements specification, detailed design documents, UML class diagrams, UML sequence diagrams, UML communication diagrams, and various types of test plans and associated results. It is expected that there will be several software iterations, and development of these will have been managed by effective use of version control and task management systems. All teams have access to a technical mentor, from whom feedback may be sought, and teams should make good and regular use of them to guide the project.

Exposition & Impact covers activities aimed at conveying evidence to others, expressing this in a way that is engaging and meaningful, and builds understanding and interest in the audience. The primary route is through written technical reports and demonstrations, which should be organised and clear, and (where appropriate) supported by suitable formal documentation (e.g. formal design artefacts, test cases). It is essential that work is presented in an appropriate context, and external sources of knowledge and prior work should be sought out and cited accurately. Particularly effective teams will exhibit a meticulous level of attention to detail in technical descriptions, while engaging and exciting the audience, using narrative to demonstrate what has been achieved, both in verbal and written forms.

A high standard of presentation and clarity is crucial: failure to achieve this may have significant impact on the ability of others (including assessors) to fully understand what is being conveyed under the other aspects, and thus may lead to a substantial loss of marks. As a bare minimum, reports and presentations should be organised, text legible, statements coherent and precise, and diagrams, presentation slides and demo screens fully readable.

Reflection is an individual task which requires you to describe and critically appraise the experiences gained during the project, and the impact they have had on your learning and personal development. Reflections should be structured (e.g. using Kolb's learning cycle (1)), evidence-based, critical, and relevant. The aim is to effectively articulate what has been learnt during the project, in a way that can be generalised beyond the project itself, and will be relevant for other future situations. The situation in which the learning occurred should be explained in terms of concrete experiences drawn from the project, and the learning should be used to identify resulting future plans.

3 Marking Process & Descriptors

3.1 Element 1: Team-level marks

Element 1 contains aspects that are shared across all study programmes. Assessor proceeds to determine an overall grade for the team for element 1, based on all sources of evidence available (e.g., demo, written submissions, code, evidence from version control, interactions in with the module leadership team), and with reference to the Grade Descriptors below. An assessor should in the first instance derive a numerical mark from the descriptors for each aspect in Section 3.2, then compare their initial overall mark with the overall descriptors given at the end of that section. Any substantial inconsistency suggests a need for further consideration. The mark should be supported by a brief written justification.

The two assessors will then attempt to reconcile their marks. If there is a discrepancy of 6% or more between the two assessors' overall team-level marks, then a written explanation of the discrepancy, and how it was resolved, must be made. If an agreed mark cannot be achieved, a third assessor (nominated by the Programme Director) will be consulted. If the three assessors thus involved remain unable to reach an agreed recommendation, the matter will be referred for resolution to the relevant examination board.

It is important to note that the grade given is not calculated as a combination (e.g., a weighted average) of any formative grades given during the feedback sessions after each submission. Instead, assessors consider the group's work holistically, evaluating the learning trajectory the team is on and where they are at the end of the project. This is used to arrive at a judgement of the competencies displayed by the team, according to the grade descriptors in this document. Assessors will pay particular attention to how the team responded to experiences and feedback. It is entirely acceptable for a team to disappoint on some individual submissions, if these are seen as learning opportunities that are effectively used. Indeed, this should be seen as a wholly positive thing.

3.2 Element 1: Detailed Grade Descriptors

In the following, the statement against the specific mark of 40 is an attempt to identify the pass threshold standard for the particular aspect. A mark of 30-38 should be given for an aspect where the relevant threshold is demonstrably missed but there is sufficient merit that the failure to reach the expected standard may reasonably be compensated by strength in other areas. Work more substantially short of a threshold should be given a mark below 30 that reflects the extent of the failure, having regard to the overall descriptors given for the ranges 0-19 and 20-38.

Descriptors pertaining to higher marks should be taken to include (at least) the level of achievement implied by descriptors given for lower marks for the same aspect.

3.2.1 Descriptors for Software Quality & Scope (SQS)

- 40:** Normally, there will be evidence that the group has produced some working software, that broadly meets the project brief, and is in line with the project's expected scope. Exceptionally, despite flaws, obvious gaps in functionality, or an excessively limited scope, the produced software offers some value to its intended users, and a rational, credible explanation for failure to achieve a suitable quality end product has been adduced.
- 41-49:** The developed software clearly meets the project brief, with a scope and quality that exceeds the threshold expectation.
- 50-59:** There is working software that meets the project brief in a meaningful way, offering value to its intended users. With "meaningful", we mean that all the requirements considered as a "must" (in the MoSCoW sense) are covered. The software is clearly in line with the project's expected scope, given the team size and number of learning hours. There are no obvious flaws or gaps in functionality, however, the software may be compromised by factors such as poor design or implementation, leading to e.g., slowness, an inappropriate or confusing mode of use, inconsistent or poorly chosen system behaviour, or poor visuals.
- 60-69:** There is software that clearly meets the project brief well, in terms of both expected scope and quality of the software's design and implementation. With "well", we mean that all the "must"s are covered, as well as a large proportion of the "should"s. The software has a sense of completeness, such that no aspect of the software appears unfinished; scope has been controlled to ensure this. The software has clearly been designed with its users in mind, and is featureful and valuable to them. Any flaws are of a minor nature only, such that they do not interfere with normal usage of the software by end users. The software is nearing release readiness, and exhibits a consistent level of high quality.
- 70-79:** In addition to the 60-69 descriptor having been met, the software represents an innovation in terms of how it meets the project brief. It displays strong evidence of consistent attention to quality, and this is clear to see. The software is release ready.
- 80-90:** In addition to the 70-79 descriptor having been met, the produced software is characterised by a very high standard of functionality and usability, coupled with originality and substantial value to its intended users, such that it may typically be of genuine interest to people in the wider world.
- 90+:** In addition to the 80-89 descriptor having been met, the software is clearly release quality, with an identified user base who might reasonably be expected to adopt the software in its current form. The scope of the final product is beyond normal expectations for the module, and attention to quality is meticulous.

3.2.2 Descriptors for Team Work (TW)

- 40:** Normally, all group members have contributed towards intellectual and practical work directed towards meeting the project's goals. Exceptionally, some team members have not fully participated, but some of the remaining team members have made a credible attempt to engage them.
- 41-49:** Normally, all group members have attended regular team meetings at which decisions are made, and are contributing intellectually and practically throughout the project, to work directed towards meeting the project's goals. However, contributions may be unbalanced, and the team as a whole has not made a meaningful attempt to address this. Exceptionally, some team members have not fully participated, but some of the remaining team members have made a credible attempt to engage them.
- 50-59:** Normally, all group members are attending regular team meetings, both for decision-making and for joint work, and are contributing both intellectually and practically in a valuable way. Team members are making joint decisions (technical and/or management), and delivering work accordingly. Team roles are clearly established, and are determined based on clear reasons (e.g. prior experience / skills, personal interest). Team members demonstrate an awareness of others' skills, contributions and progress. Exceptionally, some team members have not fully participated, but the remainder of the team as a whole has made a credible attempt to understand and rectify the situation.
- 60-69:** In addition to the 50-59 descriptor, sub-teams have been formed and function well to deliver valuable work. Individual strengths and weaknesses have been articulated to the team, and these have formed the basis of role assignments. There is a culture of collaboration in the team, where joint working is adding value to the project, and team members can rely on each other for timely work and support. There is minimal project management input from outside the team. The team as a whole takes responsibility for any non-engagement, possibly under the guidance of the technical mentor or others.
- 70-79:** The team is performing very effectively, and team members can demonstrate an awareness of how the team as a whole is performing and behaving. There is evidence that collaboration includes team members learning from each other through joint work. Some individuals are intentionally taking the opportunity to develop their weaker skills, and the team supports this. The team has an agreed process to deal with non-engagement and imbalance in contributions, and this is used where necessary.
- 80-90:** There is evidence of sustained high performance in the team, driven by effective interactions between the team's members and a strong understanding of how the team's values and agreed processes support the project. Individuals within the team are demonstrating leadership, and team members are developing their weaker skills with the support and encouragement of from other team members. The team actively monitors workload and its own health, and engages in corrective action as appropriate.
- 90+:** The team actively supports the principle that individuals can explore new leadership roles and develop their abilities accordingly. There is a culture of reflective practice in the team, which feeds back to direct the team's behaviour and development. Innovative team-working practices are being explored and reflected upon.

3.2.3 Descriptors for Project Management & Process (PMP)

- 40:** There is a project plan that is largely credible, although it may be lacking in detail or be infeasible in places. The team has a process for tracking tasks completed and to be done, as well as for allocating them to team members. Normally, each of the submissions was delivered on time, or exceptionally, a credible explanation for failure to achieve this was given.
- 41-49:** The project plan has been followed, as appropriate, over the course of the project. Each of the submissions has been delivered and meaningfully engages with what is required, such as to exceed the threshold expectation. There is a record of key project decisions (e.g., in minutes of meetings), and key responsibilities of team members. The design of the software has been considered according to recognised software engineering principles, and at least two phases of the software lifecycle are evident.
- 50-59:** In addition to the 41-49 descriptor, the project plan includes a clearly described software development process, and this has been followed, and adapted where necessary, with some success. Technical reports are used to explain how relevant software engineering practice has been used to ensure and enhance the quality of the software, according to recognised quality concepts (e.g., maintainability, usability,

reliability). This is evidenced using appropriate and recognised standards and tools (e.g., UML class, sequence and communication diagrams). The quality of the software has been evaluated, at least through some unit and system testing. There is some use of version control, and a process to track tasks, features and issues has been used.

60-69: In addition to the 50-59 descriptor, project management is clearly designed to support the team in achieving the brief well, given known resources and constraints. The process is designed to enable the incorporation of sources of feedback into the software development. Recognised software development processes have been proficiently applied, and supported by effective use of tools including version

control and task tracking. The software itself is well evaluated in terms of verification against formal requirements, and through a range of appropriate tests. The technical reports draw on a range of recognised formal evidence (e.g., architecture and other design diagrams, evidence of systematic testing, API documentation), as well as appropriate literature, in order to explain and evidence the software's quality and how it was achieved.

70-79: In addition to the 60-69 descriptor having been met, project management and/or software development processes are highly effective and adaptive, based on the changing needs of the team and the project. The reports and oral presentations convey insight into the workings of a well-functioning software team. There is strong evidence of a consistent focus on enhancing quality throughout the project, evidenced and justified systematically and comprehensively in the technical reports and presentations.

80-90: In addition to the 70-79 descriptor having been met, project management is highly effective, adaptive and tailored to the resources available within the team. The team's culture includes the ownership of responsibility and a can-do attitude, which enable the team to self-organise in order to overcome obstacles and make best use of its resources. Explanations and justifications of quality in processes and outputs contain real depth. Artefacts and evidence are comprehensive and of a consistently high standard. Other teams in the wider world are likely to be interested in the way this team works.

90+: In addition to the 80-89 descriptor having been met, this is an exceptionally high-performing team, characterised by a culture of innovation, trust and productivity. The team's innovative software engineering, and project management processes are challenging established norms elsewhere.

3.2.4 Descriptors for Exposition & Impact (EI)

40: Written material and presentations secure meaningful communication of the content and outcome of the work. There may be the presence of major defects, (e.g., errors in spelling, grammar or typography; substantial repetition and/or irrelevance; substantial gaps in the account; poor ordering of material; poor standard of verbal presentation). However, these do not substantially detract from communication of the subject matter.

41-49: Written material and presentations have an apparent structure and though they address what is required, they may be unbalanced and exhibit some of the flaws given in the threshold descriptor.

50-59: Work is presented in a logical order with well-balanced attention given to all major areas of activity. There will be very few errors, and essentially no major defects. Presentation is clear, well planned and succinct. Reports contain useful diagrams, and while these may contain some flaws (e.g., in notation), they will all be fully readable. Use is made of formal references and bibliography, where appropriate. Presentations and demos conveyed the key elements without the need for substantial prompting.

60-69: Reports include well-articulated reasoned argument, based on statements of facts. The style of writing is appropriate to formal scientific or business communication. There may be very occasional English or spelling errors, but essentially it will be clear that documents will have been carefully proof-read. Diagrams are employed as a systematic aid to effective communication, and use correct notation. Structure of documents is apparent (i.e., by section/subsection and slide numbering), and use is made of formal references and appendices as appropriate. In presentations, the group showed a good grasp of the work at overview and detail levels, was able to give reasoned answers to questions, and delivery and content were appropriate to the audience.

70-79: Reports can be described as very well written: all relevant material is expounded in a clear, succinct and well-organised manner. Arguments demonstrate careful, systematic and/or innovative thought, and are

supported by well-chosen evidence and literature. The presentation of reports is of a consistently high standard. Presentations are clear, focussed, and interesting.

80-90: Writing is concise (even elegant) as well as thorough and precise. There are essentially no flaws in English, typography or presentation. Examples and diagrams are truly illuminating. Where appropriate, use of formal references is meticulous. Presentations are illuminating and convey work done exceptionally well.

90+: All aspects of the work have been presented such that they not only meet the 80-90 criteria, but also generate genuine broader interest in the work. Presentation may be described as captivating at times, as readers and audiences are eager to learn more. The group's depth of insight into the work and capacity for innovation and/or original thought was easy to see.

3.2.5 Overall Team-level Descriptors for Element 1

0-19: Fragmentary or almost wholly ineffective activity.

20-29: There is some evidence of limited engagement with the project brief, and with each other, and typically some elements are successfully completed. However, there are substantial gaps in what has been produced, compared to the normal expectations for such a project.

20-39: There is work that provides evidence of some relevant knowledge and skills and also some lack of understanding. However, work is of such a limited scope, delivered in such an ineffective manner, or targeted in such a wrong direction, that the threshold standard for the module has not been achieved. For example: i) software lifecycle activities have been undertaken, but satisfy few or none of the identified objectives (e.g. producing something that clearly does not meet the brief); ii) technical reports lack any coherent structure or totally fail to address major areas of the expected activities, iii) team members have a strong lack of awareness of the team and its members, iv) the team is wholly unbalanced.

40-49: All expected activities have been undertaken, but at a minimal standard of competence and understanding leading to barely acceptable outcomes, e.g., the team has pursued the expected activities, but in such a way as to lead to an end product that only minimally meets the objectives or expected scope of the module. The work has been meaningfully described.

50-59: The team has undertaken all expected activities in a manner that shows a clear grasp of what is required, leading to a broadly acceptable outcome. Reflections are present and demonstrate learning that has been clearly articulated. The work has been systematically reported. However, the practical work and/or the reports show significant weaknesses, e.g., limited scope of work, unsatisfactory quality, poor organisation.

60-69: Engagement and work producing a sound outcome, for example a contribution towards an effective team, producing an end product substantially meeting the project brief. The scope of the work reasonably reflects the student hours appropriate. Both the work and the student's learning has been carefully reported, with evidence and reasoning.

70-79: A team characterised by a high level of self-awareness, producing work showing a deeper level of understanding, insight and innovation, and with very few (if any) obvious flaws.

80-90: Exceptional project work and team behaviour, leading to a product with a very high standard of quality.

90+: The project work and team behaviour is clearly beyond the normal expectations of the programme, and has enlightened the module staff.

3.3 Element 1: Deriving Individual Student Marks

Following the above process, the assessors have arrived at a overall team-level mark for the project. The Module Tutor then facilitates a further evaluation process where the team-level mark, student feedback, module tutor feedback, and evidence from the submissions themselves are considered to formulate individual student marks for Element 1. The

marks of individual students will be based upon their team's overall mark, as well as the level of contribution of that team member, across all aspects of the project.

Note: It is not expected that all team members engage in all activities carried out by the team, as this is not a scalable way to run a project and will likely lead to a lower overall scope for the project. Individuals' contributions should normally be focussed on specific areas, as agreed by the team, and be of an equivalent level as each other.

3.4 Element 2

Formative feedback will be given to students based on their individual reflective submissions during the module. All of these submissions will also be considered when deriving a mark for each student for Element 2. However, the majority of consideration should be given to the student's final reflection, especially where this represents a positive trajectory in the student's ability to engage in reflective practice, relative to earlier work.

Element 2 is assessed primarily by the team coach, with second marking carried out according to standard University guidelines.

3.4.1 Element 2: Descriptors for Reflection

- 40:** All required reflective accounts have been submitted, and contain at least relevant statements of observed experience, and some opinion concerning them.
- 41-49:** There are descriptions of relevant observed experiences, and some personal opinions and/or feelings expressed about them. Reflections through the project identify at least two separate statements of what has been learnt during the project, as well as some indication of how this will affect future behaviour.
- 50-59:** There is evidence of systematic reflection (e.g., following Kolb's learning cycle or similar) on the student's own individual behaviour, with opinions expressed as to impact of the student's behaviour. Reflections clearly articulate what has been learnt from the experience, in a way that generalises beyond the project. Some resulting ideas about future behaviour have been identified, and the intended impact of that behaviour. There is recognition the learning journey that self-reflection facilitates, and how past learning can be used to impact future goals and aspirations.
- 60-69:** Reflections are systematic (e.g., following Kolb's learning cycle or similar) and based on relevant concrete evidence. Opinions are expressed as to how the team and the student operated, and what the impact of these were on each other. There is a salient discussion of what was learnt, that abstracts the ideas to (e.g.) teamwork, software development or project management in general. Here there may be discussion about personal attitudes, and how, through reflection, there is acknowledgement of how personal attitudes direct one's own behaviour, and this indirectly impact the team. There is evidence of the student reflecting on how their behaviours impact the dynamic of the team. There are specific, identified action points resulting from these reflections.
- 70-79:** Reflections are systematic (e.g., following Kolb's learning cycle or similar) and compare and contrast several experiences and opinions in order to arrive at an in-depth understanding and higher level of self-awareness. Reflections conceptualise what has been learnt in terms of general notions, documented practice or theory, and draw on appropriate literature in order to support this discussion. There is a deeper insight about how beliefs and values influence our behaviour, and that adjusting these can lead to profound changes in behaviour. The learning in the group project is extrapolated to the broader aspects of life, reflecting on how the learning might be impacting behaviour in other teams, families and socially.
- 80-90:** In addition to the above, evidence is very clearly and concisely articulated, and conceptualisations are used to identify areas for future personal development, exploration and challenge. There are links made to one's identity and how self-concept impacts how we behave in certain contexts. There is an awareness of taking responsibility for intended and unintended impact, and the self-empowerment that creates. There is at least an articulated intention to change specific attitudes and beliefs. There is evidence of development through continuous reflective practice and implementation of actions identified in

previous reflections. There is a strong understanding of how the individual and the team impact each other.

90+: All the above has been undertaken to a high standard and demonstrates openness and profound thoughtfulness. There are deep insights which show innovative thought. Taking full responsibility for their impact, experience in itself is seen as a 'teacher', moving beyond 'success' and 'failure', each experience is an opportunity to grow and develop the self. A characteristic of this individual is that they take joy from seeking out new opportunities for personal development by challenging themselves and reflecting upon the impact of the challenge.

3.5 Individual Overall Grade Descriptors

Following the combination of all marks from Element 1 and Element 2, each student's proposed grade for the module as a whole should be compared against this set of individual grade descriptors. Any substantial inconsistency suggests a need for further consideration.

0-19: No meaningful activity or engagement.

20-35: The student has not meaningfully contributed to the intellectual or practical development of the project, or to its presentation. There is only minimal engagement with team colleagues, and/or no sustained genuine attempt to complete work allocated to them. Reflections, if present, are purely reports, and contain no opinion pertaining to experiences during the module.

35-39: As 20-35, however this may reasonably be expected to be compensated for by effective performance demonstrated in other modules.

40-49: Either:

- The student has engaged with the team, and expected activities are pursued, but in such a way as to lead to a contribution that only minimally meets the objectives or expected scope of the module. Some learning has been articulated.

Or:

- The student has performed well at some aspects of the module, but in other areas has not contributed in such a way as to exceed the threshold level. However, in the round, their contributions can be expected to compensate for shortcomings present in such a way that, across the range of work done, the module's learning outcomes have been met.

50-59: Either:

- The student has engaged consistently with the team, and expected activities have been undertaken in a manner that shows a clear grasp of what is required, leading to a broadly acceptable outcome. Reflections are present and demonstrate learning that has been clearly articulated.

Or:

- The student has performed well in some aspects of the module, but has barely (if at all) achieved the threshold in some others.

60-69: Either:

- The student has made a substantial contribution towards an effective team, producing an end product substantively meeting the project brief. The scope of the student's work reasonably reflects the number of hours appropriate. Both the work and the student's learning has been carefully reported, with evidence and reasoning.

Or:

- The student has excelled in some aspects of the module, but performance was unbalanced across all learning outcomes and assessment aspects. In some aspects, this was only broadly successful or not sufficiently undertaken to warrant a first-class mark for the module as a whole.

70-79: Commitment to the team across both technical and non-technical aspects, contributing to work distinguished by evidence of a deeper level of understanding, insight and innovation. Essentially no obvious flaws.

80-90: A strong contribution to exceptional project work and team behaviour. Their work has led to a product with a very high standard of quality.

90+: Performance and impact clearly beyond the normal expectations of the programme, that has enlightened the module staff.

References

- [1] David A. Kolb. *Experiential Learning: Experience as the Source of Learning and Development*. Prentice-Hall, 1984. ISBN: 978-0132952613.