Generic Project Marking Criteria

There are 6 main aspects based on which the overall mark is given:

UG	MSc	Mark Band	Quality of Report
1st	Distinction	85-100	Exceptionally well-written and well-organized report. All main themes and issues are clearly identified. Exceptionally coherently presented background research interleaved with student's own creative commentaries and constructive criticisms. Student is able to present very challenging and complex background material in a precise and logical, yet concise manner. Exceptionally clear analysis and specification of the problem being solved. Exceptionally well presented account of the design and high-level structure of the product. Comprehensive and well-grounded justification of the main design decisions. Exceptionally clear appraisal of the project, including clear well-structured conclusions.
		78-84	Exceptionally well-written and well-organized report. Main themes and issues are clearly identified. Exceptionally coherently presented background research. Exceptionally clear analysis and specification of the problem being solved. Well presented account of the design and high-level structure of the product. Comprehensive and well-grounded justification of the main design decisions. Exceptionally clear appraisal of the project, including clear well-structured conclusions.
		70-77	Well-written and well-organized report. Main themes and issues are clearly identified. Very coherently presented background research. Very clear analysis and specification of the problem being solved. Clearly presented account of the high-level structure of the product. Well-grounded justification of the main design decisions. Very clear appraisal of the project, including clear well-structured conclusions.
2:1	Merit	60-69	Well-written and well-organized report. Main themes and issues are clearly identified. Background research present, although at times the presentation lacks coherence. Well-written analysis and specification of the problem being solved. However, the specification is not always sufficiently detailed. The high-level structure of the product and its design are clearly presented. Main design decisions are described, but some justifications are not convincing. Clear appraisal of the project, although the conclusions are not clearly structured.
2:2	Pass	55-59	Adequately written report. Most of the main themes and issues are clearly identified. Most of the relevant background material is adequately presented. At times the presentation lacks coherence. Acceptable account of the analysis and specification of the problem being solved. Both the analysis and specification are not sufficiently well described, but it is still possible to have a relatively clear picture of what has been solved. The high-level structure of the product and its design are adequately presented. However, they are either too brief, or too detailed to serve the purpose. Main design decisions are described, but the justifications are not convincing. Most appraisal issues are addressed but the conclusions are brief and at times not informative.
3rd		50-54	Poorly written, but still acceptable report. Some of the main themes and issues are not identified. Some relevant background material is poorly presented (or is absent). Both the analysis and specification are not sufficiently well described, and even though it is possible to understand what has been solved in broad

			terms, a clear picture is missing. Main design decisions are described, but no justifications are provided. Poorly presented appraisal. The conclusions are brief and mostly non-informative.
Fail		40-49	Poorly written, incoherent report. Only a few main themes and issues are clearly identified. Most relevant background material is poorly presented (or absent). Some of the analysis is presented in an incorrect or confusing manner. Some of the main design decisions are poorly described. Appraisal is either incorrectly presented or minimal. The conclusions are non-informative and some are wrong.
		15-39	Very poorly written and incoherent report. The main themes and issues are not clearly identified. Most background material is not presented. Some of the presented background material contains factual errors. Most of the analysis is incorrect or confusing. Most of the main design decisions are not described. Appraisal is virtually non-existent. The conclusions are non-informative and mostly wrong.
		0-14	Very poorly written and incoherent report. The main themes and issues are not identified at all. Most background material is not presented. Most of the presented background material contains factual errors. The analysis is incorrect or confusing. Main design decisions are not described. No appraisal. No conclusions, or the conclusions are wrong.

UG	**MSc**	**Mark Band**	**Quality of Product** The 'product' may or may not be a fully complete piece of software: for example, in a more research-oriented project or a project in which systems/business analysis forms the main part, it may be sufficient to produce a prototype as 'proof of concept'. In such cases the 'product' is a combination of the outcome of the research and analysis (e.g. the solution to the problem) and the prototype. The descriptors below need to be adapted appropriately.
1st	Distinction	85-100	The product is exceptional, with novel and original features. In the case of a research project, it makes a significant contribution to the state of knowledge. Where appropriate, the user interface and interaction are superior for their purpose, the product has excellent performance, and is stable and robust.
		78-84	The product is outstanding. In the case of a research project, it goes beyond the required objectives by incorporating new insights. Where appropriate, the user interface and interaction are superior for their purpose, the product has excellent performance, and is stable and robust.
		70-77	The product has all the required, or expected, features. Where appropriate, the user interface and interaction are excellent for their purpose, the product has excellent performance, and is stable and robust.
2:1	Merit	60-69	The product has almost all the required or expected features. Where appropriate, the user interface and interaction are good for their purpose, the product has good performance, and is mostly stable and robust.
2:2	Pass	55-59	The product has acceptable features. Where appropriate, the user interface and interaction are adequate for their purpose, the product has acceptable performance and is reasonably stable but not necessarily fool-proof or robust.
3rd		50-54	The product has minimal to adequate features. Where appropriate, the user interface and interaction are poor or inconsistent, the performance is possibly poor, but not entirely unacceptable, and the product tends to instability and lacks robustness.
			The product has inadequate features. Where appropriate, the user interface is

Fail	40-49	very poor or inappropriate, the performance is poor, and the product is unstable.
	15-39	The product has considerably fewer features than could be considered adequate. Where appropriate, the user interface is nonexistent or incoherent, and the product is highly unstable.
	0-14	The product achieves almost nothing and has almost no appropriate features, if any.

UG	MSc	Mark Band	Quality of Process Projects can be very varied in their nature. In each case, two extreme descriptors are presented here: one for projects which focus on software development where the end product is intended to be a fully functional computer system; and one for projects which focus on research and analysis, where the end product may be a requirements definition, a software specification or a design, coupled with sufficient implementation (e.g. a prototype) to achieve 'proof of concept'. Many if not most projects will fall between these extremes and the descriptors must be adapted accordingly.
1st	Distinction	85-100	• Novel or innovative software development process with exceptionally good results in terms of quality. Thorough analysis of requirements and well-defined system architecture. Outstanding application of software engineering techniques at every stage , including testing, verification and validation. An outstanding analysis of the product's suitability for its purpose. Well-defined project plan and evidence of its use. • Exceptionally clear and full statement of initial problem. Exceptionally methodical survey of previous work, tending to comprehensiveness in large part and being intellectually exceptionally well presented. Investigation or development of solution carried out exceptionally systematically, with outstanding application of software engineering techniques where appropriate. Evaluation of process of investigation or of development of solution carried out exceptionally well (e.g. to the level expected of a first year research student) and clearly related to the initial problem statement. [Work at this level could be considered for presentation at an international conference.]
		78-84	• Superior adherence to a systematic software development process. Thorough analysis of requirements and well-defined system architecture. Superior application of software engineering techniques at every stage, including testing, verification and validation. An excellent analysis of the product's suitability for its purpose. Well-defined project plan and evidence of its use. • Very clear statement of initial problem. Very methodical survey of previous work either comprehensive in important and relevant areas (e.g. in solving specific technical subproblems) or being exceptionally well (intellectually) presented. Investigation or development of solution carried out unusually systematically, with superior application of software engineering techniques where appropriate. Evaluation of process of investigation or development of solution carried out very well, clearly related to initial problem statement. [Work at this level could be considered for presentation at a national conference/workshop.]
			• Software development process implements a clearly identifiable software development model. Clear evidence of systematic specification and

		70-77	design. Thorough application of software engineering techniques at every stage, including testing, verification and validation. A thorough analysis of the product's suitability for its purpose. Well-defined project plan and evidence of its use. • Very clear statement of initial problem. Methodical survey of previous work, tending toward comprehensiveness in important and relevant areas (e.g. in solving specific technical subproblems) and well (intellectually) presented. Investigation or development of solution carried out very systematically, with thorough application of software engineering techniques where appropriate. Evaluation of process of investigation or development of solution carried out well, clearly related to initial problem statement.
2:1	Merit	60-69	• Software development process follows a methodical plan, even if it is not entirely systematic. Reasonable evidence of attention to specification and design. Methodical application of software engineering techniques at every stage, including testing, verification and validation, even if not entirely complete. A reasoned analysis of the product's suitability for its purpose. Realistic project plan and evidence of its use. • Clear statement of initial problem. Methodical survey of previous work without being in any way comprehensive, presented reasonably. Investigation or development of solution carried out reasonably systematically, with methodical application of software engineering techniques where appropriate. Evaluation of process of investigation or development of solution competent.
2:2	Pass	55-59	• Software development process shows some elements of specification and design and exhibits a tendency towards a systematic process. Evidence of the use of a project plan, even if the adherence to the plan was not entirely successful. Evidence of reasonable application of software engineering techniques at every stage, including testing, verification and validation, although only partial coverage achieved. An attempted analysis of the product's suitability for its purpose which may be missing depth. • Clear statement of initial problem. Survey of previous work not methodical in execution and/or presentation and not in any way comprehensive. Investigation or development of solution carried out with some systematicity, with reasonable application of software engineering techniques where appropriate. Evaluation of process of investigation or development of solution attempted, but may be missing depth.
3rd		50-54	• Poorly defined but minimal elements of specification and design. Skeletal project plan that appears feasible if not entirely successful. Some application of software engineering techniques at every stage, including testing, verification and validation, although not complete and possibly inappropriate. A limited analysis of the product's suitability for its purpose. • Statement of initial problem unclear or muddled. Survey of previous work chaotic or very week. Investigation or development of solution carried out in an unsystematic fashion, with some application of software engineering techniques where appropriate. Evaluation of process of investigation or development of solution partial and very weak.
		40-39	• Weak attention to specification and design. Ad hoc development process. Unrealistic or infeasible project plan. Inadequate application of software engineering techniques, including testing, verification and validation. No serious analysis of the product's suitability for its purpose. • Statement of initial problem poor. Survey of previous work very weak and very partial. Investigation or development of solution carried out very

		poorly with obvious lacunae and inadequate application of software engineering techniques even where appropriate. Evaluation of process of investigation or development of solution either very poor or missing.
Fail	15-39	• Inadequate attention given to specification and design. Obviously inappropriate or faulty development process and project plan. No real application of software engineering techniques, including testing, verification and validation. No or completely unrealistic analysis of the product's suitability for its purpose. • Statement of initial problem very poor. Survey of previous work negligible or severely biased. Little investigation or development of solutions carried out and no real application of software engineering techniques even where appropriate. Evaluation of process of investigation or development of solution extremely poor or missing.
	0-14	• No evidence of specification and design. No or insufficient evidence of any development process or project plan. No application of software engineering techniques, including testing, verification and validation. No or completely unrealistic analysis of the product's suitability for its purpose. • No recognizable statement of initial problem. Survey of previous work wholly missing or unrecognizable. Little investigation or development of solutions carried out and no application of software engineering techniques even where appropriate. Evaluation of process of investigation extremely poor or missing. (The evaluation of a solution would be impossible because of the weakness of the solution.)

UG	MSc	Mark Band	Quality of Demonstration
1st	Distinction	85-100	Exceptionally clear and comprehensive presentation. Exceptionally well-prepared demonstration slides/demos clearly showing the key ideas and a well-grounded appraisal of the project work. Capable of conveying even the most difficult issues concisely, logically and at appropriate level. Demonstrated deep and comprehensive understanding of theoretical and empirical aspects of the project. Questions handled exceptionally well and with ease.
		78-84	Very clear and comprehensive presentation. Very well prepared demonstration slides/demos clearly showing key ideas of the project. Well-grounded appraisal of the project work. Capable of conveying difficult issues concisely, logically and at appropriate level. Demonstrated deep understanding of theoretical and empirical aspects of the project. Questions handled very well and with ease.
		70-77	Clear and comprehensive presentation. Well prepared demonstration slides/demos clearly showing key ideas of the project. Well-grounded appraisal of the project work. Capable of conveying difficult issues logically and at appropriate level. Demonstrated very good understanding of theoretical and empirical aspects of the project. Questions handled very well.
2:1	Merit	60-69	Comprehensive presentation. Good demonstration slides/demos. Most of the key ideas of the project presented clearly. Some aspects of comprehensive appraisal of the project may be missing. However, the most important appraisal issues are properly addressed. Capable of conveying most of the difficult issues logically and at appropriate level. Demonstrated good understanding of theoretical and empirical aspects of the project. Questions handled well most of the time.
			Some major aspects of the project not covered in the presentation, e.g. due to

2:2	Pass	55-59	lack of time (bad timing). Adequate demonstration slides/demos. Most of key ideas of the project are presented, however not clearly. The project appraisal is incomplete, however, it is still possible to tell whether the project aims were met to a substantial degree. Capable of conveying most of the issues logically. Demonstrated adequate understanding of theoretical and empirical aspects of the project. Capable of answering most of the questions.
3rd		50-54	The project presentation is not well prepared and thought through (e.g. no introduction, abrupt switching between topics etc.). Little use of demonstration slides/demos. The project appraisal is incomplete. It is only marginally possible to tell whether the project aims were met to a substantial degree. Demonstrated only shallow understanding of theoretical and empirical aspects of the project. Answered most of the questions, however some of the answers were not convincing.
Fail		40-49	The project presentation is badly prepared. It has very little structure. Almost no use of demonstration slides/demos. Very little thought given to the presentation of project appraisal. It is not possible to tell whether the project aims were met to a substantial degree. Demonstrated little understanding of theoretical and empirical aspects of the project. Almost no convincing answer to the questions.
		15-39	No evidence of a major attempt to prepare for the project presentation. No use of demonstration slides/demos. It is not possible to tell whether the project aims were met. Demonstrated very little understanding of theoretical and empirical aspects of the project. Answered only few questions. The answers are superficial.
		0-14	Project presentation not prepared. No use of demonstration slides/demos. Demonstrated almost no understanding of theoretical and empirical aspects of the project. Not capable of answering the questions.

UG	MSc	Mark Band	Quality of Management
1st	Distinction	85-100	Exceptionally well prepared and appropriate project plan. Regular assessment of progress. When needed, prompt, precise and well-grounded modifications to the original plan prepared largely independently by the student. Capable of achieving even most complicated subgoals through independent work. The project is driven by the student - major initiatives generated and developed by the student. Regular contact with supervisor. Exceptionally systematic and consistent work pattern.
		78-84	Very well prepared and appropriate project plan. Regular assessment of progress. When needed, prompt, precise and well-grounded modifications to the original plan prepared in discussions with project supervisor. Capable of achieving most subgoals through independent work. The project is mostly driven by the student - major initiatives generated and developed by the student. Regular contact with supervisor. Exceptionally systematic and consistent work pattern.
		70-77	Well-prepared project plan. Regular assessment of progress. When needed, well-grounded modifications to the original plan prepared in close contact with project supervisor. Major initiatives generated and developed by both student and supervisor. Regular contact with supervisor. Systematic and consistent work pattern.
2:1	Merit	60-69	Well-prepared and appropriate project plan. Assessments of progress sometimes initiated by project supervisor. Modifications to the original plan are mostly well-grounded and prepared in close contact with project supervisor. Mostly regular contact with supervisor. Mainly systematic and consistent work pattern.

2:2	Pass	55-59	Some deficiencies in project plan. Assessments of progress are initiated by project supervisor and are not always carried through fully. Modifications to the original plan are sometimes not well-grounded. Sporadic contact with supervisor. Steady but not always systematic or consistent work pattern.
3rd		50-54	Project plan is largely superficial. Assessments of progress are initiated by project supervisor and are almost always not carried through fully. Most modifications to the original plan appear to be ad-hoc and are not well-grounded. Very sporadic contact with supervisor. Slow progress. Unsystematic or inconsistent work pattern.
Fail		40-49	Project plan is almost not existent. Very little assessment of progress. All modifications to the original plan are ad-hoc and are not well-grounded. The student cannot develop the project adequately, even after detailed explanations by the supervisor. Alternatively, almost no contact with the supervisor, despite the fact that the project is not going well. Very slow progress, unsystematic or inconsistent work pattern.
		15-39	No project plan. No assessment of progress. Erratic progress. No contact with supervisor. Almost no progress, unsystematic or inconsistent work pattern.
		0-14	No project plan. No assessment of progress. No progress. The student is not capable of properly developing any aspect of the project, despite active help by the supervisor. Alternatively, absolutely no contact with supervisor. Totally unsystematic and inconsistent work pattern.

UG	MSc	Mark Band	Substantialness of Achievement
1st	Distinction	85-100	Topic is exceptionally challenging and difficult. Essentially perfect and comprehensive understanding of theoretical and empirical issues based on independent study. High level of imagination and original thinking. A huge amount of work. The report could be used to prepare a paper acceptable by a high-ranking international journal or the product could readily be made into one which competes with the existing highest-standard alternatives.
		78-84	Topic is very challenging and difficult. Perfect and comprehensive understanding of theoretical and empirical issues based largely on independent study. Some key ideas and leads are suggested and explained by the supervisor. High level of imagination and original thinking in developing ideas suggested by the supervisor. A huge amount of work. The report could be used to prepare a paper acceptable at a well-established international conference, the product could readily be made into one that competes with existing high-standard alternatives.
		70-77	Topic is challenging. Project supervisor plays an active role in solving exceptionally hard problems. Comprehensive understanding of theoretical and empirical issues. Project supervisor explains difficult issues beyond the scope of student's undergraduate studies. Project would not be possible without original thinking on the student's side. A large body of intensive work. The report could be used to prepare a paper acceptable at a national or student conference. or the product could readily be made into a good and robust alternative to existing high-standard products.
2:1	Merit	60-69	Topic is suitable for a mature final year student. Project supervisor plays an active role in solving hard problems. Good understanding of theoretical and empirical issues. Project supervisor may need to explain difficult issues within the scope of student's undergraduate studies. A solid amount of work.
			Topic is not very challenging but some study of original material is still required.

2:2	Pass	55-59	Project supervisor may need to play an active role in solving some major problems. Limited original thinking. Adequate understanding of theoretical and empirical issues. Reasonable amount of straightforward work.
3rd		50-54	Topic is not very challenging and almost no study of original material is required. Project supervisor may play an active role in solving many problems. Limited original thinking. Shallow understanding of theoretical and empirical issues. Limited amount of work, but still acceptable.
Fail		40-49	There is work done, but the topic is too simple for the level/credit value. No study of original material is required. No original thinking. Some theoretical and empirical issues are not understood at all.
		15-39	Very little work done and the topic is too simple for the level/credit value. No study of original material is required. No original thinking. Most theoretical and empirical issues are not understood.
		0-14	Almost no work done and the topic is too simple for the level/credit value. No study of original material. No original thinking. No understanding of theoretical and empirical issues.