

MANCHESTER METROPOLITAN UNIVERSITY
DEPARTMENT OF COMPUTING AND MATHEMATICS

Unit Code and Title:	6G6Z0019 Synoptic Project
Assignment set by:	N. Costen
Assignment ID:	2CWK65
Assessment Weighting:	65% of 30 credits
Assignment title:	Report
Type:	Individual
Hand-in deadline:	Friday 9th May 2025, 21:00
Hand-in format and mechanism:	Via Unit area on Moodle

Learning Outcomes Assessed: This assignment will assess your ability to:

- implement a substantial project using a defined project management methodology;
- develop a product utilising established tools and techniques;
- test a product to ensure it meets required standards;
- evaluate a product and project to assess the extent to which they met defined objectives.

Note: it is your responsibility to make sure that your work is complete and available for marking by the deadline. Make sure that you have followed the submission instructions carefully, and your work is submitted in the correct format, using the correct hand-in mechanism (e.g., Moodle upload). If submitting via Moodle, you are advised to check your work after upload, to make sure it has uploaded properly. If submitting via OneDrive, ensure that your tutors have access to the work. Do not alter your work after the deadline. You should make at least one full backup copy of your work.

Penalties for late submission

The timeliness of submissions is strictly monitored and enforced.

All coursework has a late submission window of 7 calendar days, but any work submitted within the late window will be capped at 40%, unless you have an agreed extension. Work submitted after the 7-day late window will be capped at zero unless you have an agreed extension. See ‘Assessment Mitigation’ below for further information on extensions.

Please note that individual tutors are unable to grant extensions to assessments.

Assessment Mitigation

If there is a valid reason why you are unable to submit your assessment by the deadline you may apply for Assessment Mitigation. There are two types of mitigation you can apply for via the module area on Moodle (in the ‘Assessments’ block on the right-hand side of the page):

- **Non-evidenced extension:** does **not** require you to submit evidence. It allows you to add a **short** extension to a deadline. This is not available for event-based assessments such as in-class tests, presentations, interviews, etc. You can apply for this extension during the assessment weeks, and the request must be made before the submission deadline. For this assessment, the non-evidenced extension is 2 days.

- **Evidenced extension:** requires you to provide independent evidence of a situation which has impacted you. Allows you to apply for a longer extension and is available for event-based assessment such as in-class test, presentations, interviews, etc. For event-based assessments, the normal outcome is that the assessment will be deferred to the summer reassessment period.

Further information about Assessment Mitigation is available on the dedicated Assessments page: <https://www.mmu.ac.uk/student-life/course/assessments#ai-69991-0>

Plagiarism

Plagiarism is the unacknowledged representation of another person's work, or use of their ideas, as one's own. Manchester Metropolitan University takes care to detect plagiarism, employs plagiarism detection software, and imposes severe penalties, as outlined in the Student Code of Conduct and Regulations for Undergraduate Programmes. Poor referencing or submitting the wrong assignment may still be treated as plagiarism. If in doubt, seek advice from your tutor.

As part of a plagiarism check, you may be asked to attend a meeting with the Module Leader, or another member of the module delivery team, where you will be asked to explain your work (e.g. explain the code in a programming assignment). If you are called to one of these meetings, it is very important that you attend.

Use of generative AI

The use of generative AI is not permitted for this assessment. This includes but is not limited to tools like Microsoft Copilot or ChatGPT (please see What is Artificial Intelligence? if you are not sure). All submitted work must be your own original content, created without the aid of generative AI. Failure to adhere to this policy may constitute academic misconduct and result in serious consequences. If you have been advised to use a specific tool as part of a personal learning plan, you should continue to use it.

Module Compensation

In the taught modules, it is possible if an overall module mark is just below the pass mark and other performance is acceptable to deem that the module has still been passed. For undergraduate modules, this is the 30% to 39% range, and the marks across level of the module must be at least 40%. However, this does not apply to this module, as it is a major project. In particular, British Computer Society accreditation requires that the major project not be compensated. **Thus the pass mark for this unit is 40%, regardless of performance in other units.**

If you are unable to upload your work to Moodle

If you have problems submitting your work through Moodle, you can send your work to the Assessment Management Team using the Contingency Submission Form. Assessment Management will then forward your work to the appropriate person for marking. If you use this submission method, your work must be sent **before the published deadline**, or it will be logged as a late submission. Alternatively, you can save your work into a single zip folder then upload the zip folder to your university OneDrive and submit a Word document to Moodle which includes a link to the folder. **It is your responsibility to make sure you share the OneDrive folder with the Module Leader, or it will not be possible to mark your work.**

Assessment Regulations

For further information see Assessment Regulations for Undergraduate/Postgraduate Programmes of Study on the Student Life web pages.

Assessment Criteria:	Indicated in the attached assignment specification.
Formative feedback:	Written and spoken feedback will be provided in the weekly tutorial sessions as detailed in the attached assignment specification.
Summative feedback format:	Marking grid and written feedback (specified in a separate document) will be provided within 4 weeks of submission.

6Z0019 Synoptic Project - Report

The Project unit has a single piece of work, an exercise to specify, investigate and solve (through the implementation of a “Creative Piece”) an agreed challenge. This is assessed through two elements; the Creative Piece and Report. The requirements and procedures for Project as a whole, and its constitute parts are set out in a separate document (the “Project Handbook”); this document describes the marking criteria for the Report.^{4a}

The Report is a description of the project achievements containing, as a minimum requirement, a discussion of the problem being addressed, a critical review of relevant literature and related work, and a description and critical evaluation of the solution proposed. Normally, a project Report is expected to contain 8,000 to 14,000 words.

The Report must have, on a separate page following the title, a declaration that the work was undertaken by the student independently and in accordance with the University ethics procedures. This must include the project ID number from EthOS. Failure to do so will be treated as evidence of an attempt to subvert the University’s Research Ethics and Governance regulations and will be treated appropriately.

Submission Arrangements

Final submission will occur on the evening of Friday 09/05/25, at 21:00. By that point, you must have uploaded your Report onto Moodle. Work uploaded after this time will be treated in accordance with the University regulations. Some students may be given an additional period to complete their project, as a consequence of a Personal Learning Plan, or a delayed deadline, as a consequence of Evidenced Extensions.

File names All of the documents you submit should follow a consistent naming convention. They should be identified by your full name, and University Identity Number and the type of content they contain in form the: `Lastname_Firstname_UID_Document.Type`. Thus for his Report, Nicholas Costen would upload a PDF, named as `Costen_Nicholas_01900261_Report.pdf`.

Student effort As a 30 credit unit, the Project requires that you undertake 300 hours of work. These are allocated as 25% (75 hours) summative assessment (direct production of materials yielding marks), 5% (15 hours) directed study (meetings with your Theme lecturers, drop-in sessions etc.) and 70% (210 hours) of student-centred work (independent research, design, development and testing). Note that some of this time will have to be undertaken over the vacation.

Feedback Formative feedback will be given informally in the supervision sessions, and also formally on the various components. This will occur through Moodle and subject to the normal feedback deadlines.

Assessment Criteria

Your work will be marked by a member of academic staff drawn from the Theme supervising your work. A proportion of the Reports submitted by students in each Theme will be second marked by other members of the Theme to ensure consistency. The criteria for different levels of success in the Project are given in the next two pages. Note that the columns are independent, so different boxes may apply to the various components of the overall mark.

The assessment of the Report will relate to the following sections or topics within the document, and will be given the weightings specified here. Note that the number of sections does not imply a particular Report structure, and they do not necessarily imply the precise length of text involved. They have the following detailed descriptions, which include the relevant British Computer Society criteria:

1. Introduction and Literature Survey (20%).

This will provide the background to the project. It will set out:

- an explanation of the problem and the objectives of the project;

- a description of the research hypothesis if applicable;
- an in-depth investigation of the context and literature, and where appropriate, other similar products;
- a consideration of ethical issues (including, but not limited to data-protection, participant consent and equality, diversity and inclusion issues) associated with the project.

After reading this section, it will be possible to understand what you set out to do, and why it was appropriate. Aspects of this section will relate to BCS criteria 2.1.1, 2.1.5, 2.1.7, 2.1.10, 2.1.13, 2.2.5, 2.3.2, C4, C5, C8, C10.

2. Design and Implementation (20%).

This will explain the technical aspect of the project. It will set out:

- a clear description of the stages of the software life cycle undertaken;
- a description of the use of tools to support the development process;
- suitable figures and diagrams which describe the procedure by which the Creative Piece was designed and implemented;
- samples of code generated, with particular reference to elements which were difficult and/or required revision within the implementation;
- an explanation of how software robustness and Equality, Diversity and Inclusion were included in the implementation.

After reading this section, it will be possible to see what you have done and how you did it. Aspects of this section will relate to BCS criteria 2.1.2, 2.2.1, 2.2.4, 2.2.5, C3, C5, C7, C11, C13

3. Results and Evaluation (35%).

This will explain the scientific aspect of the project. It will set out:

- a clear description of the procedures used to ensure the Creative Piece operates correctly;
- a clear description of the procedures used to investigate the performance of the Creative Piece, in comparison with other pieces of work, as appropriate to the topic;
- where appropriate, a clear description of the statistical tests used to assess the findings of these procedures;
- suitable tables, figures and/or values which report the findings;
- an evaluation of the findings, assessing their quality and allowing conclusions to be drawn.

After reading this section, it should be possible to see how you have investigated the effectiveness of your Creative Piece and what the findings of the investigation were. Aspects of this section will relate to BCS criteria 2.1.11, 2.2.5, C1.

4. Conclusions and Academic Quality (25%).

This rounds off the Report, relating your findings to the initial aims and allowing you to reflect on the outcomes of the project. It will include:

- an evaluation of the degree to which the project's aims were achieved, in the light of the findings;
- a consideration of the implications of the findings, in the topic's area;
- a reflection on your own performance, what you have learned about yourself and how the project could have been improved;
- suggestions for follow-on work on this topic.

In addition, the whole text of the Report will be considered in the light of:

- the structure, length and balance of content of the text;

- the quality of the English used;
- the quality and comprehensibility of figures, tables, diagrams and equations included;
- the number, accuracy and completeness of the references to sources made.

After reading this section, it should be possible to see what you have learned from the project, and where you would go now on this topic. To aid this, the whole of the Report should be well-written and easy to comprehend. Aspects of this section will relate to BCS criteria 2.1.11, 2.1.12, 2.2.5, C1, C3, C4, C17.

Mark Steps	Introduction and Literature Survey (20%)	Design and Implementation (20%)	Results and Evaluation (35%)	Conclusions and Academic Quality (25%)
85, 95, 100%	The introduction and literature survey were innovative and meticulous, using relevant information from a large range of appropriate sources, which were assessed to synthesise a coherent view.	A complex and innovative product was planned, designed and implemented meticulously to produce original outcomes of publishable quality.	The limits of established knowledge were challenged in considering results and outcomes. The analysis involved original insights and considered the wider context originally with reference to theory and practice.	The work's implications are considered, yielding original insights into the field. The work was presented creatively and fluently, showing exciting development of professional skills and standards.
72, 75, 80%	The introduction and literature survey were innovative and meticulous, using relevant information from an appropriate range of sources which were assessed to synthesise a consistent view.	A complex and innovative product was planned, designed and implemented meticulously to produce original outcomes of significant quality.	Critical insight was shown in considering results and outcomes. The analysis was insightful and considered the wider context diligently with reference to theory and practice.	The work's implications were considered, showing critical insight into the field. The work was presented fluently, showing stretching development of professional skills and standards.
62, 65, 68%	The introduction and literature survey were thorough, using relevant information from an appropriate range of sources which were assessed to synthesise a consistent view.	A complex product was planned, designed and implemented carefully to produce outcomes of significant quality.	Thorough and critical evaluation of results and outcomes was undertaken. The analysis was clear and considered the wider context with reference to theory and practice.	The work's implications were considered, showing critical insight into the field. The work was presented coherently, showing well structured development of professional skills and standards.
52, 55, 58%	The introduction and literature survey were accurate, using relevant information from an appropriate range of sources which were assessed to synthesise a view.	A product was planned, designed and implemented carefully to produce outcomes of reasonable quality.	Careful evaluation of results and outcomes was undertaken. The analysis was careful and considered the wider context with reference to theory and practice.	The work's implications were considered carefully. The work was presented carefully, showing convincing development of professional skills and standards.
42, 45, 48%	The introduction and literature survey using relevant information from an appropriate range of sources, which were assessed.	A product was planned, designed and implemented competently to produce outcomes of acceptable quality.	Accurate evaluation of results and outcomes was undertaken. The analysis considered the wider context with reference to theory and practice.	The work's implications were considered accurately. The work was presented acceptably, showing plausible development of professional skills and standards.

Mark Steps	Introduction and Literature Survey (25%)	Design and Implementation (25%)	Results and Evaluation (25%)	Conclusions and Academic Quality (25%)
35, 38%	The introduction and literature survey used inadequate information from an inappropriate range of sources, which were partly assessed.	A product was planned, designed and implemented to produce outcomes of unacceptable quality.	Partial evaluation of results and outcomes was undertaken. The analysis considered the wider context in very basic terms.	The work's implications were partly considered. The work was presented haltingly to show limited development of professional skills and standards.
22, 25, 28, 32%	The introduction and literature survey used inadequate information from an inappropriate range of sources, which were barely assessed.	A product was implemented with little or no planning and design to produce outcomes of unacceptable quality.	Very little evaluation of results and outcomes was undertaken. The analysis did not correctly consider the wider context.	The work's implications were considered in very limited terms. The work was presented haltingly to show limited development of professional skills and standards.
2, 5, 8, 12, 15, 18%	The introduction and literature survey used very inadequate information from inappropriate or no sources, which were not assessed.	Little or no product was implemented, using little or no planning or design, producing outcomes of unacceptable quality.	Evaluation of results and outcomes were absent or wrong. Any analysis did not consider the wider context.	The work's implications were not considered. The work was presented incomprehensibly, presenting no evidence of the development of professional skills and standards.
0%	No introduction or literature survey submitted.	No design or implementation submitted.	No results or evaluation submitted.	No conclusions submitted, no text to assess quality.