Final Submission

Final Submission Date	**By 17:00 (5pm) on 24 April 2024, you should submit the following:** - Final report - Github link of the code (the repo needs to be public) This may be extended if you have a support plan or extenuating circumstances
Late Policy	Late Policy Late submissions will incur a penalty of 5% per working day, up to 3 May 2024, after which you will receive a mark of zero.

Assessment Criteria	**Part 1: Project Implementation (30%)** • The agent successfully performs the assigned task and meets functional requirements. • The agent can adapt to different conditions, optimise decision-making, and respond dynamically. The project should include real-time adaptability where applicable (e.g., learning from traffic patterns, adjusting chatbot responses, or modifying warehouse navigation strategies dynamically). • The implementation goes beyond basic functionality (i.e., following simple rules or executing predefined actions) by incorporating advanced techniques such as optimising decision-making processes, improving efficiency, handling edge cases, or integrating multiple AI approaches. • The project includes structured testing, with appropriate evaluation metrics. Where applicable, experiments should be automated and parameterised to allow efficient testing with minimal manual configuration. However, for projects that inherently require human interaction (e.g., chatbots or user-driven simulations), automation should be applied to non-interactive components such as data preprocessing, logging, and evaluation workflows. **Part 2: Report (40%)** • A report, of appx 2000 words. The word count includes the main report body but excludes appendices, figures, and references. • Marking will take into account:

	○ Clear literature review and justification of selected AI methods. ○ Clearly defines the environment, task, and questions. ○ Well-planned experiments with rigorous testing and analysis to answer the defined questions ○ Effective interpretation of experimental results with appropriate metrics and comparisons. ○ Well-structured report with clear explanations, proper technical writing, and visual aids (e.g., charts, pseudocode). ○ The quality of reflection on the successes and limitations of the work. **Part 3: Presentation (30%)** The presentation component is crucial in assessing groups' understanding of their work. Each group will deliver a 20 minute presentation, followed by a 10 minute Q&A session where they must defend their design choices. Marking will take into account: • Logical flow of presentation, effective communication of key points. • Clear demonstration of knowledge of AI techniques used. • Ability to defend implementation choices and evaluation methods. • Depth and clarity of responses during Q&A. - Failing to attend the presentation will result in a mark of **ZERO** (0) for the coursework. The module convener will set a time slot for the presentations. More detail about the slot opening will be issued around the submission deadline.
Peer Assessment	Peer assessment is a key aspect of the overall assessment. It is used to distribute the collective group mark to each individual according to merit as perceived by the peers, i.e. the other group members. Each group member will be asked to rate each of his or her peers according to a number of aspects on a purpose-designed form. A written justification supporting the ratings is also required for each member. The peer assessment is expected to be conducted professionally, to be submitted in complete confidence by each individual via Moodle, and will not be seen by the other students.

	Each group member will be assessed according to the following aspects by his/her peers: • Research & Problem-Solving • Technical Contributions • Co-operation within group • Communication within group • Quality and quantity of concrete contributions to final deliverables • Attendance at meetings Each aspect is rated on a five-point scale ranging from “None” via “Adequate” to “Excellent”, where “Adequate” means that the assessed person has done what is expected for that activity: no less, no more. Assessing your peers is a privilege and a big responsibility so you have to be fair and objective in your evaluations. Peer Assessment Form is available on the module’s Moodle page. Be sure to read the instructions on the form carefully, as well as the instructions above before filling out the forms.

Assessment Rubrics	**Part 1: Project Implementation (30%)**	
	90-100 (Exceptional)	The agent is fully functional and performs beyond expectations. It demonstrates outstanding adaptability and decision-making, dynamically optimising performance in various conditions. Advanced AI techniques are effectively implemented, with innovative approaches that improve efficiency, handle edge cases, and enhance decision-making. Extensive and rigorous testing is performed with clear, well-documented evaluation metrics. Automation is used effectively where applicable. The project demonstrates research-level depth and could contribute to a publishable system.
	80-89 (Excellent)	The agent is fully functional and meets all key requirements, showing strong adaptability and optimization. The implementation includes notable advanced techniques and creative problem-solving. Testing is thorough, with well-executed evaluation metrics. Some automation is implemented where relevant. The project goes beyond standard expectations and demonstrates a deep understanding of AI methodologies.
	70-79 (Very Good)	The agent is functional and meets the required task objectives. It adapts to dynamic conditions but with some limitations. Advanced AI techniques are used, but their impact is moderate or not fully optimised. Testing is well-structured, with reasonable evaluation metrics. Some automation is present but may not be comprehensive. The project demonstrates good technical execution with room for further improvements.
	60-69 (Good)	The agent meets core functionality but has some weaknesses in adaptability and decision-making. Basic AI techniques are implemented, but their application lacks depth or optimization. Testing is conducted but may lack robustness or detailed analysis. Automation is minimal or partially implemented. The project is technically competent but does not demonstrate significant innovation.
	50-59 (Satisfactory)	The agent achieves partial functionality but lacks strong adaptability. Decision-making is simplistic, and implementation relies on basic rule-based logic without advanced optimization. Limited testing and evaluation metrics are used. Automation is minimal or absent. The project demonstrates technical competence but lacks depth.
	40-49 (Pass)	The agent has major limitations in core functionality, adaptability, or decision-making. It performs inconsistently or lacks a solid approach to real-time adaptation. Minimal testing is done, and evaluation metrics are weak or unclear. Little to no automation is used. The project demonstrates an attempt at implementation but lacks depth and refinement.
	30-39 (Unsatisfactory)	The agent is incomplete or non-functional in key areas. Adaptability is minimal, and decision-making is ineffective. The project lacks any advanced techniques, relying solely on predefined actions. Testing is weak or absent. No meaningful automation is implemented.
	20-29 (Poor)	A minimal attempt has been made at implementing the agent. Key components are missing, and the system does

	not perform the intended task. There is little understanding of AI techniques. No proper testing or evaluation is present.
10-19 (Very Poor)	Almost no functional implementation. The agent does not work as intended. No evidence of AI techniques, testing, or evaluation.
0-9 (No Attempt)	No significant attempt at implementation.

Part 2 Report (40%)

90-100 (Exceptional)	Marks in this range are reserved for a superb all-around performance. Work done in all aspects of the project go beyond even high expectations. The student has shown a thorough understanding of the problem. All expected tasks have been successfully completed, the project shows depth and engagement with research ideas, and everything has been completed to a high standard. The report could form the basis of a publishable conference/workshop paper.
80-89 (Excellent)	Excellent contributions to all areas of the project. The program and the report exceed expectations; for example, extra functionality is implemented, interesting analysis is performed, et cetera. Exceeded expectations in some areas. Demonstrates knowledge and understanding of the project beyond standard resources covered in the module. A clear appreciation of the project as a whole, its adequacies, limitations and possibilities for future development. The project demonstrates insight and depth beyond that usually expected in undergraduate work.
70-79 (Very Good)	Very good contributions to all areas of the project. All the requirements are met: the solver performs as expected, and the report adequately reflects the work. Able to reflect accurately on the adequacy and limitations of the project's achievements.
60-69 (Good)	Good appreciation of background. A good attempt at applying this to the task, with demonstrated ability to cope with difficulties. Good technical skills in several areas. While most of the requirements are met, the solver mainly performs as expected, and the report adequately reflects the work. It might come a little short in some areas—good reflective understanding of the project.
50-59 (Satisfactory)	The core task is met, albeit with minor weaknesses: satisfactory background reading and a competent attempt at their tasks. Reasonable technical competence demonstrated. Able to reflect satisfactorily on the project.

40-49 (Pass)	**Pass level.** Competent background reading and appreciation of the project area. Basic technological competence. Some core areas are met, but a decent attempt has been made at them, albeit with significant weaknesses. Able to reflect in a limited way on the project.
30-39 (Unsatisfactory)	Unsatisfactory. Some attempt has been made at the background reading but clearly, only a partial understanding of the project topic. An incomplete attempt at the core tasks. Weak technical competence. Little ability to reflect adequately on the project.
20-29 (Poor)	Inadequate background reading but shows some limited understanding of how ideas can be linked to the task. A minimal attempt at the core tasks, showing poor understanding. A substantial amount of work is still needed to achieve the core tasks. Minimal reflection on the project.
10-19 (Very Poor)	A minimal attempt at background reading, inappropriate use of material, and almost no attempt at core tasks. Very poor understanding of the problem. Minimal or no reflection on the project.
0-9 (No Attempt)	No or almost no significant attempt.

There are no restrictions for using publicly available code and/or formulations (subject to correct referencing); however, grading is still subject to your own contributions. Nevertheless, this should not discourage you from utilizing the advanced techniques from the literature as long as you can demonstrate a sufficient understanding of the relevant scientific literature.

Part 3: Presentation (30%)

90-100 (Exceptional)	The presentation is highly engaging, well-structured, and clearly communicates all key aspects of the project. The team demonstrates an in-depth understanding of AI techniques and implementation choices. Justifications for design decisions are exceptionally well-articulated and supported by strong evidence. Responses to questions are thorough, demonstrating deep knowledge and critical thinking. Visual aids (e.g., slides, charts, diagrams) are highly effective and enhance comprehension.
80-89 (Excellent)	The presentation is well-organised, logically structured, and effectively delivers the project's key insights. The team shows a strong understanding of AI techniques and design choices, with well-reasoned justifications.

		Responses to questions are clear and well-supported. Visual aids are well-designed and contribute positively to the presentation.
	70-79 (Very Good)	The presentation is well-structured and covers all major aspects of the project. The team demonstrates good knowledge of AI techniques and implementation decisions, though some explanations could be more detailed. Responses to questions are mostly accurate but may lack depth. Visual aids are effective but could be improved for clarity or impact.
	60-69 (Good)	The presentation follows a logical structure but may lack smooth transitions or clarity in certain areas. The team demonstrates a reasonable understanding of the project but struggles with explaining some technical aspects. Justifications for decisions are present but not always well-articulated. Responses to questions are mostly correct but may lack confidence or detail. Visual aids are present but may not be fully optimized for clarity.
	50-59 (Satisfactory)	The presentation is somewhat structured but lacks clarity in some areas. The team demonstrates a basic understanding of AI techniques but has difficulty explaining key concepts. Justifications for design choices are vague or insufficiently supported. Responses to questions show partial understanding but may include errors. Visual aids are present but may be unclear or underutilized.
	40-49 (Pass)	The presentation is difficult to follow due to weak structure or unclear explanations. The team demonstrates a limited understanding of AI techniques and struggles to explain the implementation. Justifications for design choices are weak or missing. Responses to questions are inconsistent, with some incorrect or vague answers. Visual aids are minimal or not well integrated.
	30-39 (Unsatisfactory)	The presentation lacks structure, making it difficult to follow. The team demonstrates little understanding of AI techniques and struggles to communicate their work. Justifications for decisions are missing or unclear. Responses to questions are weak, with many incorrect or poorly articulated answers. Visual aids are poor or absent.
	20-29 (Poor)	The presentation is very unclear, disorganized, or missing key aspects. The team shows minimal understanding of their project and AI techniques. Responses to questions are mostly incorrect or absent. Visual aids, if present, are ineffective.
	10-19 (Very Poor)	The presentation is extremely weak, with almost no meaningful content. The team shows little to no understanding of their work and cannot justify their decisions. Responses to questions are mostly absent or incorrect. Visual aids, if present, do not contribute to understanding.
	0-9 (No Attempt)	No significant attempt at the presentation. The team fails to deliver any meaningful content.

Academic misconduct	This is a group assessment that should consist of your own unaided work. While it is good practice to use your own word when explaining something from a primary source, if you are unable to paraphrase the statement, then you should quote the statements and cite the source accordingly. If you are building on someone else's code (e.g. our code from the classes, open- source projects, etc.), please make it clear which aspects of the code are your work through the use of comments. The University has detailed advice about academic integrity, and submissions that demonstrate a lack of that integrity will be treated under appropriate disciplinary procedures. The academic misconduct policy document can be accessed via: https://www.nottingham.ac.uk/qualitymanual/assessment-awards-and-degclassification/pol-academic-misconduct.aspx