



## CMP2020-22-23 Artificial Intelligence Assessment Item 2

Learning Outcome	Criterion	Pass	2:2	2:1	1
LO1 Explain the theoretical capabilities of Artificial Intelligence	Produce a software solution that autonomously controls a team of agents with the aim of winning the Pac-Man Capture the Flag game. (70%)	<p>The pacman agent can successfully navigate the environment and eat the food.</p> <p>The description of the implemented solution is vague and/or partially incorrect.</p>	<p>The pacman agent can successfully navigate the environment and eat the food and deposit the food. An improvement has been made to how ghost agents are controlled.</p> <p>The description of the implemented solution is adequate.</p>	<p>The pacman and ghost agents act efficiently and effectively. The implementation demonstrates a reasonable understanding of an AI approach.</p> <p>The solution is applicable to various sizes of environments, any number of ghosts and any number of pellets.</p> <p>The code is appropriately written and commented.</p> <p>The description of the implemented solution is clear.</p>	<p>The pacman and ghost agents act efficiently and effectively. The implementation demonstrates a good understanding of an AI approach. The approach is well aligned to the problem and shows ingenuity.</p> <p>The solution is applicable to various sizes of environments, any number of ghosts and any number of pellets.</p> <p>The code is clearly written and well commented.</p> <p>The solution is very well described.</p>
	Provide a justification for your chosen approach. (30%)	<p>A vague justification has been provided.</p> <p>References have been used where appropriate.</p>	<p>The report presents an justification of the chosen approach.</p> <p>Alternative methods, the limitations of the chosen approach and the technical challenges faced are mentioned.</p> <p>References have been used where appropriate.</p>	<p>The report presents an appropriately written justification of the chosen approach. Alternative methods and the reasons they were not chosen are clearly described.</p> <p>The limitations of the chosen approach and the technical challenges faced are mentioned.</p> <p>References have been used where appropriate.</p>	<p>The report is well written and presents a convincing justification of the chosen approach. Alternative methods and the reasons they were not chosen are very clearly described.</p> <p>The limitations of the chosen approach are very clearly described.</p> <p>The technical challenges faced and how they were overcome are mentioned.</p> <p>References have been used where appropriate.</p>
<b>Weighting is 60% of the module.</b>					