

Project Evaluation FIT5226 for (Group) Please note that Q-learning stands for tabular Q in Stage 1 and Deep Q in Stage 2.		insufficient	satisfactory	good	very good	outstanding	
NOTE all descriptors are cumulative		a higher performance standard implicitly comprises all criteria of the lower standards in the same category					
G n e	Solution and Functionality	30%	The implementation does not compile/run	The implementation in-principle performs basic Q-learning but fails to learn the general problem to a reasonable performance level or the agent only performs for a fixed source location.	The implementation performs Q-learning and learns the problem to a reasonable performance level for randomised source locations. The reward structure only uses information observable by the agent	Reward structure and parameters are adequately tuned so that learning is efficient	Learning procedure, evaluation, and visualisation are fully integrated so that testing can be performed with minimal user interaction
	Implementation and coding style	20%	General lack of structure. Bare code without any comments.	Clean code with some level of comments but no self-sufficient documentation.	The code can be completely understood from the comments and documentation in the notebook alone. The notebook makes good use of Jupyter's support for literate programming.	The code is modularly well-structured: all model elements are cleanly separated and explicitly represented in the code (gridworld, agents, reward structure, action effects, etc)	The implementation is easily generalisable to variations of the problem (different grid sizes, different reward structures, new grid elements, such as blocked cells, etc.)
	Visualisation	15%	No visualisation provided	Individual agent behaviour can be visualised but the connection to learning is not made explicitly	The visualisation clearly documents differences between the “naive” agent and the agent after learning but may require additional explanation to be interpreted in the right way.	The visualisation is easily understandable and documents the learning convincingly without requiring additional explanation	The visualisation functionality does not require additional user intervention (such as selecting points in the learning)
	Evaluation metrics, procedure & description	20%	No evaluation metrics provided	metrics and procedure provide limited evidence of learning but are not beyond doubt	metrics and procedure provide solid evidence of the learning (“proof”)	metrics and procedure are fully explained and documented; examples are provided	metrics and procedure can be used to assess the performance level of the learning and to compare variations of the implementation.
	Demonstration and Explanation	15%	Only a basic run of the program is offered with no explanation	The learning process is demonstrated, the progress of the learning (or lack thereof) are clearly demonstrated and a basic explanation of the implementation is given	Most question about the implementation are clearly answered.	All aspects of the code are explained in detail .All question are answered documenting a full understanding of the complete implementation and functionality <i>by all group members</i>	The learning process & outcomes are fully demonstrated & explained including adequate use of the metrics and visualisation. Limitations (if any) are fully explained