REPORT COMPONENT (100%)

CAI3034N Autonomous Mobile Robotics
MARKING RUBRIC
ASSIGNMENT 1
Assignment Weighting (30%)

LEARNING OUTCOME	MARKING CRITERIA	SCALE					
		Fail (0-49)	**3rd Class (50-59)**	**2nd Lower Class (60-69)**	**2nd Upper Class (70-79)**	**1st Class (80-100)**	**YOUR MARKS/COMMENTS**
CO3: Implement intelligent control strategies, by programming autonomous mobile robots to perform complex tasks in dynamic environments including obstacle avoidance, planning and navigation, robotic mapping and self-localisation.(C3, PLO3)	Algorithm development (40%)	• ROS package is created but without launch file. Neither publisher nor subscriber nodes are created. • Fail to create and program multiple turtles to move. • The predator turtle fails to catch turtles, with the prediction and chasing logic not working.	• ROS package is created but without launch file. Only publisher node is created. • Multiple turtles are created to move but fail to avoid collision with borders and among the turtles. • The predator turtle catches some other turtles but struggles with predictions or sticking to them.	• ROS package and launch file are created. Publisher and subscriber nodes are created but with major flaws. • Multiple turtles are created to move across the environment but fail to avoid collision with the borders or among the turtles. • The predator turtle catches most other turtles, with minor issues in prediction or movement.	• ROS package and launch file are created. Publisher and subscriber nodes are created but with minor error. • Multiple turtles are created to move across the environment and avoid collision with borders and among the turtles but with minor error. • The predator turtle catches all other turtles, with minor issues in prediction or movement.	• ROS package and launch file are created. Publisher and subscriber nodes are created with no error. • Multiple turtles are created to move across the environment, and avoid collision with borders and among the turtles with no error. • The predator turtle catches all other turtles, sticking to each and chasing the next with smooth, accurate predictions.	
	Documentation (50%)	• Content is inaccurate. Information is incomplete, inaccurate, or not presented in a logical order, making it difficult to follow. • Do not provide details about techniques used in navigation, path prediction, and collision avoidance. • No results and discussion.	• Content is either questionable or incomplete. Information is not presented in a logical order, making it difficult to follow. • Little explanation on the techniques used in navigation, path prediction, and collision avoidance. • Results are presented but poorly discussed.	• Content is accurate but some required information is missing and/or not presented in a logical order, making it difficult to follow. • Reasonable explanation on the techniques used in navigation, path prediction, and collision avoidance. • Results are presented with reasonable discussion.	• Content is accurate but some required information is missing and/or not presented in a logical order, but it is still generally easy to follow. • Good explanation on the techniques used in navigation, path prediction, and collision avoidance. • Results are presented with good discussion.	• Content is accurate and all required information is presented in a logical order. • Excellence explanation on the techniques used in navigation, path prediction, and collision avoidance. • Results and discussion are very well presented which give the reader important information that goes beyond the obvious or predictable.	
	Code quality (10%)	• Very poor program structure and without code comments.	• Poor program structure but with some code comments.	• Clear program structure and appropriate comments.	• The program code is well structured and commented.	• The program code is efficient, well structured, and commented.	
						Overall score (100%)	