AIRA – GROUP ASSIGNMENT (10%): RUBRIC

Wall-Following Behavior

CLO3: Demonstrate orally or in written form the solution steps in solving robotics problems using Artificial Intelligence techniques. (A3, PLO4, LOD-C3C)

MARKS: 15 Marks

1) Problem understanding & analysis: 2 marks
2) The 7-steps design (see Chapter on Designing Reactive Systems): 7 marks
3) Design challenges & limitations of the approach/design tool(s): 3 marks
4) A short video and several related figures (e.g., flowchart, systems diagram, behavior tables, finite state machine diagram, etc.): 3 marks

No.	Criteria	0	1	2	3	4	5	6	7	Marks
1.	**Problem understanding & analysis**	No discussion on the given problem or analysis presented in the report	Discussion on the given problem and **BASIC** analysis are provided in the report with **A FEW** assumptions or simplifications proposed	Discussion on the given problem and **EXCELLENT** analysis are provided in the report with **CLEAR** assumptions or simplifications proposed						
2.	**The 7-steps design**	No technical explanation of the project processes is provided in the report	Provided **A FEW** of the 7-steps in project processes with a **BASIC** technical explanation	Provided **A FEW** of the 7-steps in project processes with **ACCEPTABLE** technical explanation	Provided **MOST** of the 7-steps in project processes with a **BASIC** technical explanation	Provided **MOST** of the 7-steps in project processes with **ACCEPTABLE** technical explanation	Provided **ALL** the 7-steps in project processes with a **BASIC** technical explanation	Provided **ALL** the 7-steps in project processes with **ACCEPTABLE** technical explanation	Provided **ALL** the 7-steps in project processes with **EXCELLENT** technical explanation	

No.	Criteria	0	1	2	3	4	5	6	7	Marks
3.	**Design challenges & limitations**	No discussions on implementation issues, challenges encountered, or limitations of the approach provided in the report	Provided **BASIC** discussions on design issues, challenges encountered, **OR** limitations of the tool(s) in the report	Provided **ADEQUATE** discussions on design issues, challenges encountered, **AND** limitations of the tool(s) in the report	Provided **EXCELLENT** discussions on design issues, challenges encountered, **AND** limitations of the tool(s) in the report					
4.	**A short video and several related figures**	No video and related figures are provided in the report	**One VIDEO and A FEW** related figures are provided in the report to support the explanation	**One VIDEO and an ADEQUATE** number of related figures are provided in the report to support the explanation	**One VIDEO and an EXCELLENT** number of related figures are provided in the report to support the explanation					
									TOTAL (Full mark: 15)	
									FINAL MARK (10%)	