

Project Description Phase2

Autonomous Multiagent Systems – AI314

Spring 2023

**Kindly do your preparations to show & discuss the following points in your presentation regarding SDLC final stages (implementation & testing stages):**

* *Stage#1:*
* Describe any information & assumptions needed to apply A\* on your case study, for example describe on what logical basis you assumed or calculated the heuristic function(s).
* Apply A\* search algorithm on the state diagram and / or state tree with initial state and goal state with respect to your case study (on paper or electronic document).
* Note if your case study has multiple objectives choose one of them that you can achieve by apply search.
* *Stage#2 (Implementation):*
* Implementation should be on MATLAB or Python only.
* Implement A\* search with dynamic input parameters for both initial state and goal state.
* Print the trajectory path of nodes (Solution / plan), after the execution of the algorithm.
* According to result you get from your code, illustrate from your own point of view if A\* was useful or not to solve your problem.
* Adding GUI (Interactive animations, game interface…etc.) is a bonus.

**Important Notes:**

* Deliver on Excel Sheet.
* All team members should contribute to discussion and presentation.
* Presentation time for each team is at maximum 15 minutes.
* Deadline 6-5-2023.