

# TEAM EFFECTIVENESS REPORT

## TEAM #19

Name	Contribution	Percentage of Contribution	Electronic Signature
Meesum Ali Khan	<ul style="list-style-type: none"><li>• I built the Tree Class which would be used to generate the tree data structure for the MCTS Agent, and store the necessary information</li><li>• I worked on different tree functions to facilitate the MCTS process</li><li>• I wrote portions of the comparison of MCTS with other agents in the report, and also the conclusion</li></ul>	25%	Meesum Ali Khan
Siva Reddy Munaganuru	<ul style="list-style-type: none"><li>• I implemented the MCTS Agent using the four fundamental steps (selection, expansion, simulation, backpropagation)</li><li>• I was responsible for optimization of MCTS to make it run quicker so we can perform larger tests</li><li>• I wrote the report section on technical approach for MCTS</li></ul>	25%	Munaganuru Siva
Kesava Prakash Thatavarthi	<ul style="list-style-type: none"><li>• I wrote the heuristic function for evaluating the leaf nodes at simulation stage, and finding best moves to take during simulation</li><li>• I varied and adjusted different feature values for food count, scared ghosts, and ghost distance and tested until MCTS Agent was performing appropriately</li><li>• I wrote the abstract and introduction sections of the report</li></ul>	25%	Kesava Prakash
Satya Shreya Sri Reddy	<ul style="list-style-type: none"><li>• I incorporated various hyperparameters such as simulation depth, iteration count, adversarial ghost, exploration parameter, etc so we can experiment with different configurations</li><li>• I performed the testing and evaluation of MCTS agent against other agents, and performed ANOVA and T-Test for comparing results</li><li>• I wrote parts of the testing and analysis section of the report, mainly related to score based performance</li></ul>	25%	Satya Shreya Sri Reddy