Abstract

Most of Game Theories and Artificial Intelligences nowadays cover the characters in the game as individual not a team. Whereas, there are several games with team work needed for running the characters.

This final essay covers the development on a MAS (Multi-agent System) to control the behavior of characters in Squad Game. The system design by using Prometheus Methodology as the model, and Q-Learning as the learning method. This system is designed by using Prometheus Design Tool (PDT) that will generate the JACK code, which is transformed to C# programming language.

Overall, up to 80% of the tests in all scenarios succes to solve all problems faced in the game.

Keywords: agent, multi-agent system, prometheus, q-learning, observer pattern.