

ABSTRACT

The development of information technology and helps people to solve a problem. Artificial intelligence is a branch of science to help resolve the problem. Various algorithms have been developed to embed artificial intelligence in a machine. One of them is A * (A star).

A * algorithm is widely used in planning efficient paths that cross between the point and good in performance and accuracy. Examples such as routing, queuing problems, strategy games like chess, sos,etc. In this thesis the author implement and analyze the use of the A * algorithm in the movement of AI in a turn based strategy game (Turn-Based Strategy) with theme of Indonesian troops who struggling for freedom with fighting the colony which was given the name "Gerilya". A * algorithm implementation is expected for AI can figure where the troops will move and choose the best path towards the destination point to win the game.

The A * algorithm implementation in this game using Unity, which is software for game development. For making this game authors use the programming language C # of Unity. The game can be won by playersif they can beat the opponent king with troops that have been given just like imitating the human tactics and military operations.

Keywords: A *, Turn-Based Strategy, Unity, C #