

## ABSTRACT

The gaming industry to date has never diminished even further increased demand from time to time . One of the many genres of games played is a turn-based strategy , the game ( which is usually a war , especially a war strategy game ) where players alternately set the strategy for approaching the opponent . In addition to playing with another player, usually the game with this genre was could be played by the NPC or so-called non-playable character . Therefore, it needs a smart npc that can compete like men who play it . Making the smart NPC requires algorithms that can facilitate the search path to reaches the NPC enemies with precise and fast way. To create the appropriate NPC needed an algorithm that can determine the optimal route that can be implemented for the case of more than one character. In general, the algorithm A \* (A Star) is often used in games to the case of search paths. Implementation A\*(Star) algorithm with heuristic point that obtained from combined every single straight line that crossed from each goals felt able to resolve the case of multiple-goal with complete and optimum result.

**Keywords** :*algorithm, path, fastest, optimal, multiple-goal, non-playable character, A\*(Star), heuristic, mobile game*