

## ABSTRACT

Game is a kind of art, where participants are called players make decision to manage the resources to achieve the goal. Beside that another purpose of the game is to pour an idea of the mind into the program. Those games are: RPG (Role Playing Game), racing, simulation, and fighting. The games usually require a placement handler to allocate each object (player or opponent). These objects will certainly interact with other objects, the way object interacting is to find pathways to a position near the target. By approaching the location or position of the target ,the object then will be easier to perform an action either attack or another.

One method to find the position or location of the target is to do a search technique. Search technique that used here is heuristic search technique, the search technique that contain additional information. One method of heuristic search techniques is A\* algorithm . The algorithm will find a path from start point to goal point that specified earlier. The algorithm works by forming nodes as the representation of the search area. while searching the algorithm uses the cost as its parameter. The expected cost is the optimal cost so that the tracing path becomes more efficient. To find out about the advantage of A \* algorithm then it will be comparison with another heuristic search algorithm. Then after testing the cost generated by the A \* algorithm is more optimal than the other. That is because the algorithm A \* consider two parameters such as actual cost and heuristic cost.

For the future are expected to do development of this method so that it can provide more optimal results.

**Keyword** : Artificial Intelligence, Heuristic Searching, A\* Algorithm, Mobile Game, J2ME