

ABSTRACT

In the world of game players often find it difficult to resolve in one game. Although it can be solved, sometimes also it can takes long time and thought process is quite long. Solving problems in a game are considered important to help the user for finishing thias game in which there is a solution of the game is expected. There are many algorithms that can be used to create a solution as an example of A *.

To overcome the problem that is happening then made application of Algorithm A * On the Application Puzzle. There are some games that use a graph search such solution of this puzzle, by visiting the knot - a knot contained in a graph. Algorithm A * is included in this heuristic and assisted with the Manhattan distance calculations, will help in the search for a possible shift in the numbers. A * algorithm will visit the nodes that have been raised to reach the nearest solution. Heuristic will cause all likelihood not be visited by all. The process model used is waterfall model (Waterfall) by testing white-box testing, black-box testing and test of paired samples. White-box testing is testing conducted to test the application systems that have been made. While the Black-box testing is testing conducted for the user to use the A * algorithm implementation in the application puzzle. Paired sample test is used to test a hypothesis that can be made whether accepted or not.

With the A * algorithm implementation in applications of puzzle, the player who can not finish this game because it takes long time and thought. The player can use these applications and will make it easier for players to help complete the game easily without having to spend a long time.

Keyword:

Algorithm A*, Puzzle, Black Box, Heuristic