ABSTRACT

Development of the game these days is very modern, besides in terms of graphics, a gameplay even more dynamic. Dynamic gameplay can makes user will not get bored while playing the game. However, if a game is too difficult to play or too easy to play normally user will feel tired or get bored. Therefore, the author would like to try to make a study to examine the extent which the implementation of fuzzy logic can vary based on the difficulty level which is determined by location of the obstacle so that the gameplay becomes more interesting and dynamic.

This research will be implemented fuzzy logic for determining the position of the obstacle. The position are divided into three area, namely far, medium, and near. As for the determination of the position of obstacle is determined from the score and time that is obtained at the end of each level. The results of the calculation of fuzzy logic is the value that determine in what obstacle's positions area user will play in the next level.

According to the test results, the implementation of fuzzy logic in determining the position of the obstacle varies produce quite output than if they were not using fuzzy logic. Without using fuzzy logic the obstacle will static in their default position. The use of inference type will also produce different output variations. Total 56,67% of respondent stated that the game hungry pigs is more dynamic by using fuzzy logic. While 23,33% of respondent stated that the game is more dynamic without using fuzzy logic and 20% respondent don't feel any difference by using fuzzy logic or not.

Key Word: *Gameplay, Fuzzy Logic, Position, Obstacle*