ABSTRACT

The development of the game industry has entered a new phase. Games that were previously used as a means of entertainment are now widely used as simulations of conditions in industry and research. More natural. Especially in making this game, the author designed a game concept that started by studying the theory of AI, and background design. For a Random Walk method, a lot of modeling is needed so that the random walk can move randomly or flexibly, without reducing the essence of the natural movement of the random walk.

The method used in making this game is using the random walk algorithm. Which is the application of the theory of random walk is very wide in a particle velocity with random impulse forces acting on a line. In a one-dimensional random walk, the particle only has two positions around it, namely, if the direction of the path is to the right, the other path is to the left. The Random Walk algorithm can help NPCs to find random movements in the water to find food or bait with the presence in the water provided.

The result of making the game is a simulation game of keeping food, which is equipped with features such as animals (flies), donut objects, object blood, and scores which will make the level of difficulty in a game.

Keywords *: gamemaker studio 2, NPC, Random Walk Algorithm*