ABSTRACT

APPLICATION OF NAÏVE BAYES CLASSIFIER FOR LONG DISTANCE STRATEGY ON NPC (NON PLAYER CHARACTER)

The development of artificial intelligence at this time developed very rapidly, including game playing. Games usually consist of players and NPC (Non Player Character) which make game more appealing. NPC is useful as an enemy or friend in the game. With an algorithm applied inside the NPC, it can behave and have a player-like strategy. One of the existing studies implements the Naive Bayes Classifier method to establish NPC actions for melee strategies such as biting, kicking and hitting. The strategies undertaken in the study were limited to the short-range strategy and applied in enemy NPCs only. Therefore, researchers want to trace further to implement Naive Bayes method on NPC friends with long distance strategies such as shooting and searching items. The system is implemented in the form of a game with genre FPS (First Person Shooter) with the title Zombie Apocalypse. The system is designed using the waterfall method and made with Unity Game engine. The end result of this study is a game with the application of Naïve Bayes on NPC so it can behave autonomously with precision of 75% , 50% recall and accuracy of 42,85%.

Keywords: *game, NPC(Non Player Character), Naïve Bayes Classifier, long distance strategies*