ABSTRACT

Technology has been very attached to human life. The growing need for human technology develops for the purpose of entertainment and human learning. The increasing popularity of digital games has caused interest and widespread use. Game Education is a game that is designed not only for entertainment purposes but will also get information or actual messages. Game-based learning approach method to assist the teaching and learning process. Game-based learning can teach Emotional, Intellectual, and Psychomotor stimuli, thereby increasing the absorption of learning through games. In this study, a game with the 2D side-scrolling platform Advanture genre with the theme Self-Concept introduction of the Doctor profession has been made.

One of the NPCs in this game is a Virus Infected Person, the NPC is programmed using the Intelligent Agent method. Infected people have three states, namely idle, chase, and cured. The idle condition is the NPC is idle waiting for doctor's cure, the idle condition will be true if the player is far from the infected person or the NPC encounters an obstacle in the game. Chase is a condition when the NPC asks for a doctor's help to be cured, this condition will be true if the player is near an NPC infected with the virus. Cured condition will give a random item drop. Drop items can be useful for players to complete challenges in the game Doctor vs Virus.

The results of this study provide interest, health education, virus introduction, self-concept education for the doctor profession, providing entertainment to players, and NPCs who behave infected with programmed with the Intelligent Agent method can run well in the game. The degree of reliability of the questionnaire results showed a very high interpretation with the number of respondents as many as seventy respondents.

Keywords: Game, Non-Playable Character, Intelligent Agent