ABSTRACT

Games are a form of entertainment media that can also be used as learning media, games can be used as learning media and also as entertainment media to prevent boredom while learning, games can also be used as a means of interacting and socializing with the surrounding environment. One of the learning methods is game-based, therefore the author makes educational games related to self-concept.

The game "The Doctor vs Virus" was created to answer this problem, the game "The Doctor vs Virus" was made using the FSM or Finite State Machine method. FSM is a control system design that describes the behavior of NPCs to the surrounding environment by using state or state and also transitions as a links

The results of this study provide interest to players, provide understanding to players about viruses, and the NPC Boss Virus can be programmed using the Finite State Machine method based on. Using the Finite State Machine provides an interesting level of difficulty and Using Reliability the results of the questionnaire show a very high interpretation with a total of forty-four respondents.

Keyword: *Game, Finite State Machine, Side scrolling game.*