ABSTRACT

The development of the game is very fast because the game is a medium of entertainment, that is liked by all generations from young to old. The game usually has NPC (Non Playable character). To make the game more interesting and challenging behavior of NPC controlled with AI (artificial intelligence).

This final project will be designed and implemented a game on a mobile phone, named Running Mouse. Running Mouse game consists of three objects, there are mouse as a player, cat as an enemy, and cheese as feed. In this game, player should to avoid pursuit the NPC. Artificial intelligence to controls the NPC is backtracking algorithm. NPC can detect and chase player with this algorithm..

From the analysis, this game show dynamic response as expected. The Results showed that the Running Mouse game has varied responses to some input. there are the cat speed and the update time to search solution. Base on the input can be concluded that the backtracking algorithm is optimal when value of the cat speed from 5 to 10. From the survey result 76.67% of respondents said that the application of Running Mouse game has an interesting to play.

Keywords: Running Mouse Games,*Bactracking Algorithm,* NPC.