ABSTRACT

Corona virus disease 2019(Covid-19) hit the world and until 2022 covid is still not gone. The difficulty of eradicating covid-19 is if the citizens do not comply with the health protocols that have always been notified by the government, either by ignoring it, not knowing, or not believing in the existence of covid-19. Games are a means that can attract someone's attention, games are not always about playing but games can spread information indirectly or directly to the public. It is hoped that by making games, players who play games can be interested, understand, and understand the dangers of a virus.

Making 2D games using gamemakerstudio 2 as a game engine that will be used in making games, making games usually begins with designing the initial concept of the game after that developing the game you want to make. In game development, of course, there will be a connection with NPCs. The NPC virus will use the multi-agent method with the A^* algorithm. the A^* algorithm on this virus NPC later on, the virus will be able to find the fastest and shortest path so that it can approach the player's position later.

Players who played the game doctor vs virus were entertained with a percentage of 87.42%. The use of the A^* algorithm has succeeded in making the virus approach the player's position and can avoid existing obstacles.

Key Word: Virus, Game, multi-agent.