

Abstrak

The development of game applications is currently so rapid, one of the most popular game genres is the Arcade Game. Flappy Bird is a game with a very popular arcade genre. Flappy Bird game attracted many people. Even so in reality, this game has shortcomings such as simple mechanical games and game modes that are only available single player. Therefore the author was inspired to develop the game Flappy Bird even further. This game is named "Gatca", which is given the addition of game features to be played multiplayer. Between players can play at the same time in a game. The development of the game called 'Gatca' is divided into several modules, while the final project focuses on developing a multiplayer network in the multiplayer tapping game "Gatca". In this final project, the application of the method to realize the multiplayer features will use a combination of the Unity Engine with the Photon Unity Network framework and integrated with Photon Cloud. The results of the testing of the functional aspects of the multiplayer tapping game "Gatca" have a success rate of 100% according to the scale of feasibility testing, that number is included in the excellent category. The results of the Quality of Service analysis on the "Gatca" multiplayer tapping game network has a transfer rate of 0.006425 Mbps, a delay of 187.00 ms, and a packet loss of 0%.

Keyword: Tapping game, Multiplayer, Arcade Game, Unity, Photon Cloud, Photon Unity Networking.