

Lab9.Networked.Game

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1 Server Hosting

Depending on the type of game being created as well as the size of the business, buying servers may be required. This would typically only be able to be done by bigger companies as it would require a large amount of money to be able to buy and maintain the servers as well as having to hire employees to repair and maintain the servers. For a smaller company, it would be easier to either rent the servers from a third party company so you don't have to pay to maintain the servers yourself, or to use peer to peer networking instead as this will mean that you won't have to spend any money on the servers yourself. However, this may result in a lower level of security as players may be able to hack this type of connection for easily.

2 TCP Vs. UDP

Most games will probably work better with udp as it is a lot faster than tcp which is required for a lot of games as they occur in real time and it would be too slow to be able to use tcp. There are some types of games that could use tcp, such as strategy games, that use turn based combat which are able to trade the slower time to transfer data across the network for a more guaranteed that all of the data will actually be able to be sent properly. TCP is also better for chat messages and in app purchases as these need to make sure that they are sent properly and don't need to be as fast as the other parts of the game like the gameplay. If a game is more competitive, it might be good to use tcp for some parts of the game to make sure that all the information gets to the other users so that the game works properly, such as fighting games or other competitive games.

3 Cost and manpower on creating the server

To be able to create your own servers and to be able to maintain them properly, you will have to hire employees to first set up the servers and then to also maintain them. It also might take more effort for developers to set up the game

to work on your own servers instead of third party servers that already have their own way of interacting with them. You will also have to pay for developers to make sure that the servers are secure as well as to make sure that you have enough storage for all of the players data. For a smaller company it might not be possible to be able to spend all of the money on getting servers set up and then also maintain them as they might not make enough money to be able to keep them running compared to just being able to use a third party server where they only have to spend money on renting out the servers. For a bigger company it might be cheaper to make their own servers, as third party servers get more expensive if they have to rent out a large amount of servers as they will have a bigger playerbase trying to play their game. It will also be more secure to use their own servers as they will be able to store all of their data themselves instead of having to trust another company with their data. It also gives them more customisation to hire people to set up the servers for their specific needs as they also have the money to be able to host the servers and maintain them as well as hiring employees to write code for their specific needs.