Blokus Networking Scheme

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Introduction

This project contains an implementation of a computerized version of the famous Blokus Board Game. This presents a potential networking opportunity as there are currently no available online versions of this game. With a revolutionization in technology and a shift into a more technologically compatible world. The current iteration of the Blokus Game could be future expanded to include more intricate features and has a potential networking benefit.

Networking of the Blokus Game

To set up an online version of the Blokus game, there are possible risks and challenges. Therefore, there would be a need for more iterations to get it published across the web and playable online. Some things to consider about the design is whether the game will be implemented at the High- or Low-Level. Based on the current iteration of the project Low-Level Design would be ideal. Another thing to consider would be the protocol used to send the data across the network.

The current implementation of the Blokus game works on a turn by turn basis so using Transmission Control Protocol (TCP), would be a more viable option over protocols such as the User Datagram Protocol (UDP). Considering TCP ensures reliable packet delivery it would be best to use this protocol to avoid packets being lost which would be detrimental to a game that works on a turn by turn basis such as this. Assessing its counterparts such as UDP, reliability of data is not a major point of concern so this would prove difficult implementing a game like this over the network using UDP.

The software relies on data and behavior so there needs to be a way to integrate the state of objects across the network and it must be written to a socket. So, there is a need to implement some sort of client-server architecture. So that both parties are aware of changes and updated. Example: the server sends out a message to indicate whose turn it is. This minimizes the risk of clients playing out of turn or cheating etc. These are foresight of the things that should be considered or accounted for possible future networking of the Blokus Game.