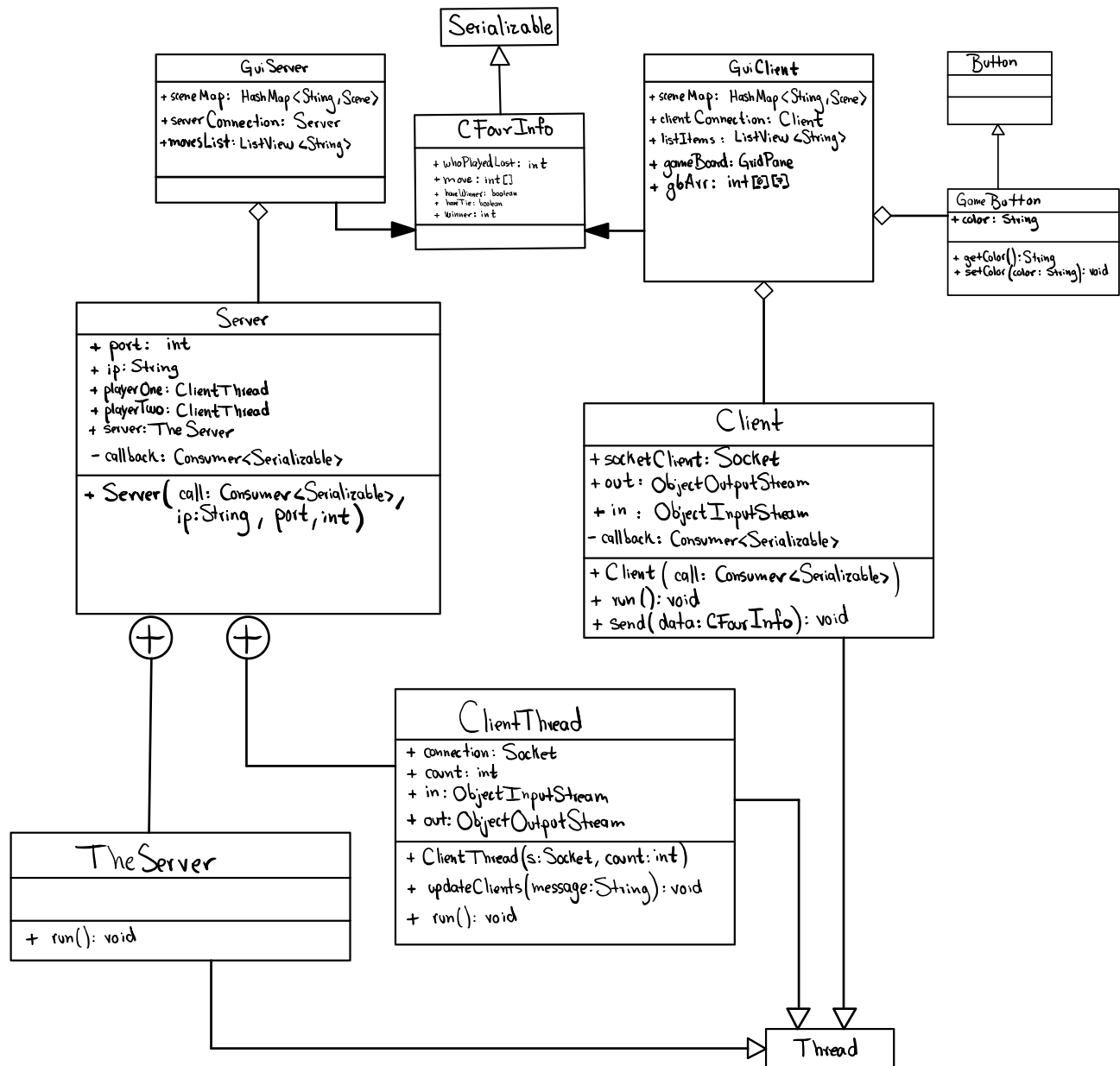


Project 3-Part I: Connect Four Game
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CS 342: Software Design
Fall 2022
Professor: Mark Hallenbeck

Class Diagram

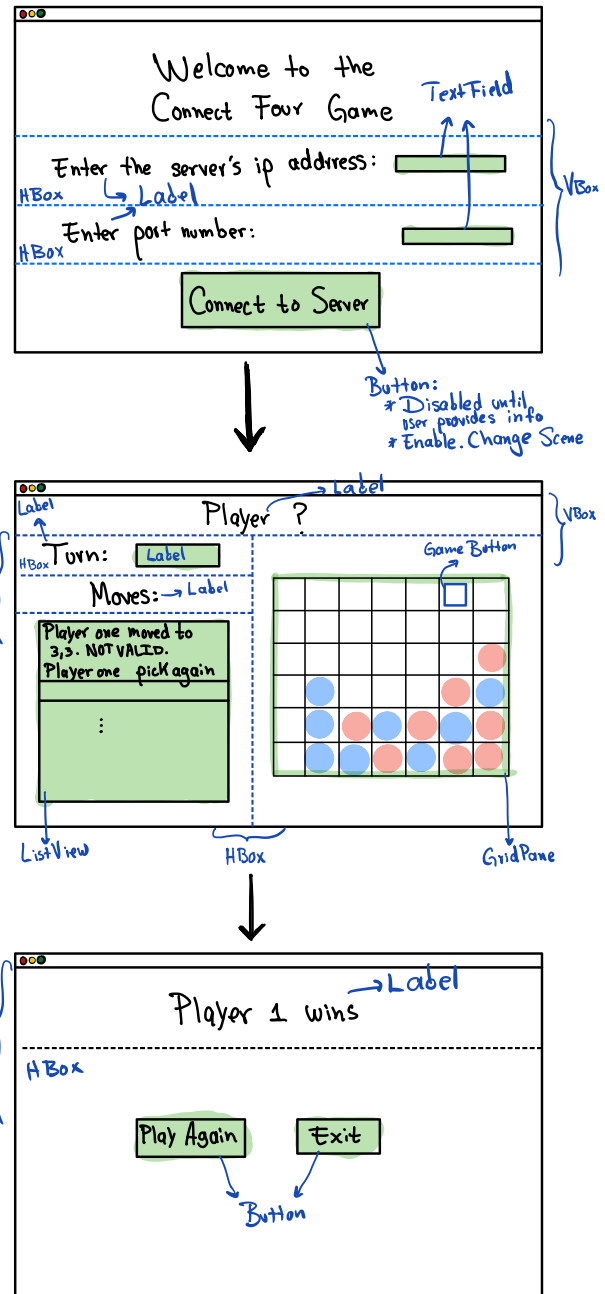
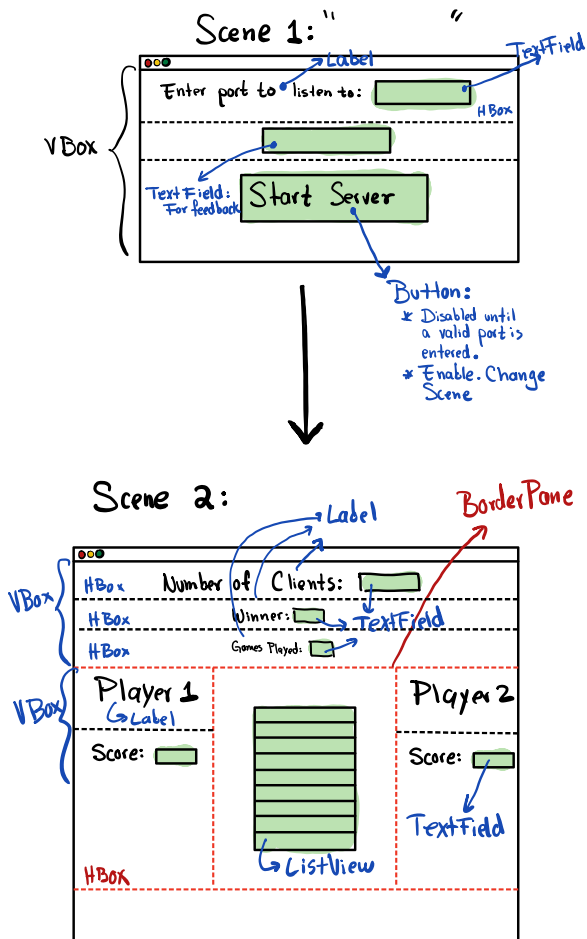


Wireframe

Server GUI

* Data Members are Highlighted

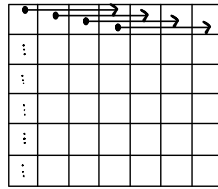
Client GUI



Checking for a Winner Algorithm

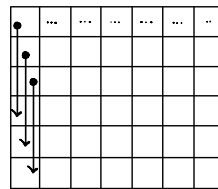


① Scan horizontally



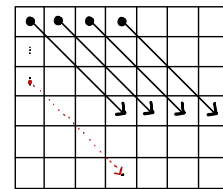
4x6 iterations

② Scan Vertically



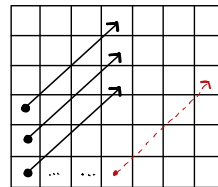
3x7 iterations

③ Scan Diagonally, down



4x3 iterations

④ Scan Diagonally, up



Networking Algorithm

Client makes a move	Server receives data	Client receives data
① Player presses an enabled button. Get the source of the event Get the row. Get the column ② Record the move in a 2D array ↳ Check if he won. ③ The GUIClient records the move in CFourInfo. ④ Send object to ClientThread via the send method inside Client. DISABLE. Wait.	① Server receives object via ClientThread inside run() ② Calls callback.accept(cFourInfo) to modify the Server GUI ③ Depending on who made the move, ClientThread will send the object to the other client: playerTwo.out.writeObject(cFourInfo) * Note that a ClientThread object has access to the other ClientThread because both are defined inside Server.	① Client receives object ② Calls callback.accept(cFourInfo) to update its GUI (including the 2D array) ENABLE.

Networking Algorithm Flow Diagram

