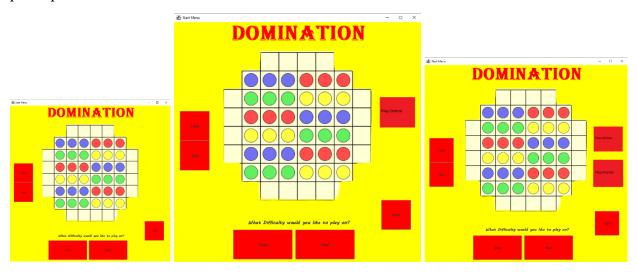
## **Game Networking**

To play the game over the internet, we would change the interface in such a way that will allow players to create or join a game. We could add a button to the interface that would allow the user to go online and choose a game that they wish to join or create a new multiplayer game and could invite other players. In this case other players could be previously added in a database; if the user only wishes to play with their friends; or they can make the newly created game visible globally so anyone can join. Initially everyone will have the same interface, with the buttons that would allow them to go online. But then it would vary to the game creator/host to the game participant.



Information and controls can be passed between several computers by using the client-server system. Where a dedicated server would distribute and co-ordinate all the events that is happening in the individual client's game. We could use an Event handler class that would work as a bridge between the client and server. In that way the event handler class would focus on the events and the server would collect the data and manage accordingly.

To save the state of the game while it's playing, we could use the dedicated server mentioned earlier and connect the server with a database where the state of the game could be saved. In this way a player can record their state and could share and not share that state with other player's/computers. A better design would be where a player is not connected directly to the database where the data is saved (security breach). The server could limit or not limit the passing of information between computers, depending on the design. Server could also retrieve this information from the database connected to the server.

Since this is a turn-based game and since the server with the help of the event handler class and database can retrieve and co-ordinate moves and events, the server shall display correctly which player is to make the next move. If any other player decides to make a move other than what the interface suggested, then that shall be an illegal move and that player will not be able to make that move. Control to create or join a game can start on individual client computers, but once joined or once a game has started, then depending on the rules and design the server will determine and distribute the controls of the game to individual clients while playing.