Sequence Diagram

Participants: OtherClients, Client, VirtualView, GameController, Model

- **VirtualView → Client:** NewTurn(player, BooleanBoard)
- **VirtualView → OtherClients:** NewTurn(player)
- **Client → VirtualView:** SelectColumn(num)
- **VirtualView → GameController:** handleCommand(SELECT_COLUMN)
- **GameController → Model:** player.selectColumn(num)
- **GameController → VirtualView:** sendResponse(RESULT)
- **VirtualView → Client:** SelectColumnResult(outcome)
- **Client → VirtualView:** SelectFirstTile(x, y)
- **VirtualView → GameController:** handleCommand(SELECT_TILE)
- **GameController → Model:** player.selectTile(x,y)
- **GameController → VirtualView:** sendResponse(RESULT)
- **VirtualView → Client:** SelectTileResult(outcome, UpdatedBooleanBoard)
- **Client → VirtualView:** SelectSecondTile(x, y)
- **VirtualView → GameController:** handleCommand(SELECT_TILE)
- **GameController → Model:** player.selectTile(x,y)
- **GameController → VirtualView:** sendResponse(RESULT)
- **VirtualView → Client:** SelectTileResult(outcome, Buffer, UpdatedBoard)
- **VirtualView → Client:** UpdateBoard(UpdatedBoard)
- **VirtualView → OtherClients:** UpdateBoard(UpdatedBoard)

loop {while the buffer is not empy}
- **Client → VirtualView:** PutInColumn(index)
- **VirtualView → GameController:** handleCommand(SELECT_TILE)
- **GameController → Model:** player.putInColumn(bufferPos)
- **GameController → VirtualView:** sendResponse(RESULT)
- **VirtualView → Client:** PutInColumnResult(outcome, UpdateBuffer, UpdatedShelf)
- **VirtualView → Client:** UpdatePlayerShelf(player, UpdatedShelf)
- **VirtualView → OtherClients:** UpdatePlayerShelf(player, UpdatedShelf)

- **GameController → VirtualView:** sendResponse(NEW_TURN)
- **Model → Model:** nextTurn()
- **VirtualView → Client:** NewTurn(player)
- **VirtualView → OtherClients:** NewTurn(player)

Notes:
NewTurn() communicates to all the clients the current player.
The BooleanBoard specifies all the pickable tiles.
The outcome signals the result of the action, either success or error.
SelectFirstTile() and SelectSecondTile() indicate the first and the last tile selected, they are implemented with a unique command type SelectTile().
PutInColumn picks the tiles from the buffer and put them on the shelf.
All the commands from the client to the virtual view are sent using the sendCommand(Command c) method.
All the responses from the virtual view to the client are sent using the sendResponse(Response r) method.