## Concerns

- Whether to have 2 TCPs or 1 TCP. More specifically whether to have a separate connection for getting updates of the game from the server.
- Maybe multi-threading on client be useful (thread-1: user input, thread-2: updating the suduko)
- Maybe multithreading (for every session one thread)
- GUI: look for the libraries pyqt for gui (maybe?)
- Sudoku Logic: look for some libraries

## **Abstracts Classes**

session

## Classes on Server side

### Game/Session

Properties: session/game\_state, game\_id, game\_name, game\_solution, maximum\_num\_of\_players

Method: update(game\_id), initiate\_session(), add\_player(), remove\_player(), terminate\_session(), game\_start(), game\_finish()

### Player

Properties: score, id, current\_session, client\_ip, nickname, Methods: change\_game\_state()

## Methods on Server

#### variables:

- List of sessions
- List of players

#### Methods:

- list sessions()
- process\_message()

# Client Side

# Game/Session

Properties: current\_game, scores, max\_num\_of\_players, game\_id, game\_state, Methods: update()

## Requests to server:

- list\_of\_current\_games/sessions()
- join\_a\_session()
- create\_session()
- leave\_session()

send\_request()
process\_response()