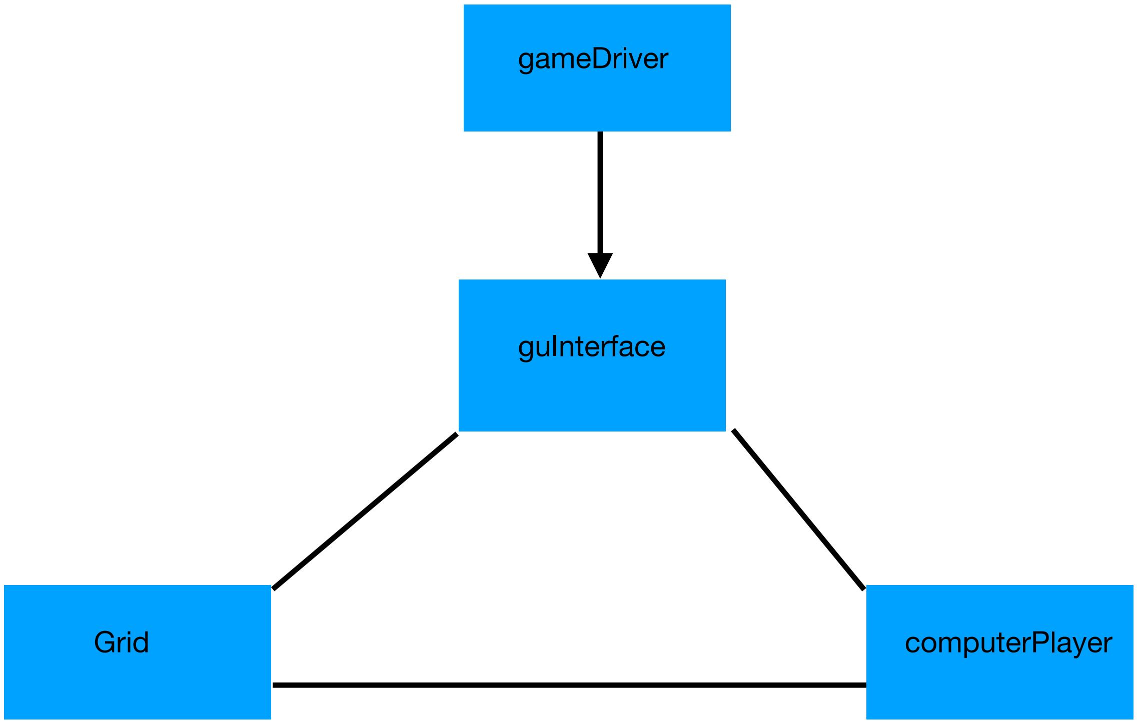
KF7010 Report - Piotr Kozak

Class diagram:



The game of Noughts and Crosses.

The application I've written is a simple game of tic tac toe aka noughts and crosses. It's has a simple GUI and computer player class that allows to play on a 3x3 grid. It's made so that computer should win with the user most of the time. User can also start a new game at any given time.

Description of classes:

gameDriver: Class used solely to initiate the game by calling a start method on newly created guInterface object. That creates a user interface and adds a listener to allow user to take moves.

guInterface: Class responsible for the user interface as well as mechanics for when to call getMove in computerPlayer, ending the game, printing out the grid from Grid, getting user input.

Grid: Responsible for holding the data on which the game is actually played. Holds values for every cell on the board. Contains methods allowing for placing pieces in the grid at selected position, checking if the position is available, checking winners, copying the grid in it's current state, clearing up all the cells.

computerPlayer: Responsible for computer player AI. Determines best next move either to advance into winning or to stop player from winning and takes a move.

Known shortcomings:

- No multiple computer player profiles
- Rather simple GUI design

Could be implemented:

- Win counter for both players