

Xero _G LAIG

1. Run the game

To run the game you'll need SICStus and Python installed. Start by running SICStus and consulting the file 'server.pl' inside 'LAIG_TP3_T6_G08' folder. Then run the command 'server.'. After the server is opened, use python to open a server, using the command 'py -m http.server [port]'. Once that is done, open the browser on localhost:port, substituting port with the port used with python.

2. Rules

A detailed report about the game was written and is placed inside 'LAIG_TP3_T6_G08/PLOG/docs'. This is a strategy board game where the objective is to invade your opponent's base using your pieces.

In a board 8 by 6, from each player's perspective, the first row is their base and the second is the row where they start with their pieces. There are pieces of different types, 1, 2 and 3, this number is correlated with the amount of cells the piece can move.

Each player can make one move per turn, each turn being played by alternating players. One move consists of taking a piece from the nearest row that still has pieces (also called home row) and moving it according to its type. pieces of type 1 can only move 1 cell, while type 2 and 3 can move 2 and 3 cells, respectively.

The pieces cannot go through other pieces while moving. They also cannot go back to the cell they were just in. So if they move 1 cell to the right, they can only move up, down and right, left is blocked.

To win the game you must take a piece from your home row to the enemy's base.

3. Instructions

Once you start up the game, you will be met with a table and a board in the middle of a scene. This scene can be changed in the code of MyGameController.js.

The player A (yellow pieces) is the first to play. To play click on a piece or its equivalent tile of the board to select it. Then select an adjacent valid tile to move to piece tile by tile, until it can no longer move. If the move is invalid, it will undo itself. Then the camera rotates to player B (green pieces) and he can continue the game.

On the right side you can see a GUI. This GUI contains several parts to alter the game. The first one is a group of lights that can be activated/deactivated to increase/reduce the luminosity of the scene.

Then there is a camera selector. It has 3 cameras, 1 free camera that can be moved freely with mouse. The other two point to the board and are not movable with mouse. All will rotate throughout the game as the turns switch.

The camera is followed by 3 buttons: the first one is 'Undo' which nullifies the last move and switches the turn so the game will continue as if it never happened. If undoing only one move is not enough, there is also 'Reset' that will undo all moves, essentially restarting the game. Finally, we have 'Movie' button. It will go back to the beginning of the game and replay all the moves done until now.

Although not finished, we also have 2 cpu switches (one for player A, the other for B), by turn on these switches the corresponding player turn will be played by a bot, effectively allowing player v player, player v bot and bot v bot matches.