

Chameleon User's Manual

Please follow the instructions to play the most awesome game ever...
Chameleon!

1. Server Setup

Firstly, install SWI-Prolog on your computer, the program used to run our game. Then configure a web server, using for example the Web server extension of chrome and connect it to the port 8080. After launching SWIprolog, click on File > Consult and select the file `src/http.pl` that can be found inside the project's folder. To connect make the connection between the game logic and the GUI, type: `initializeServer.` after the `| ?-` mark appears.

Open the local host indicated by the web server in a browser of your choice.

```
% library(http/http_parameters) compiled in
% library(http/http_dyn_workers) compiled
% library(http/http_server) compiled into h
% library(http/http_cors) compiled into http
% c:/Users/Sofia/Desktop/LAIG_19_20/tp3/src/
?- initializeServer.
% Started server at http://localhost:8080/
true.
?-
```

2. Rules

Chameleon is a chess-like strategy game, played on a 5 x 5 grid, where each piece's movement capability changes based on the color of the tile where it stands.

Chameleon's pieces each have a central color (or "nature"). This nature changes the way each piece can move based on the tile where it sits.

All pieces can always move one space in any of eight directions like the King in Chess. According to their nature color and current tile color they can also move:

- Like a Bishop when the nature and tile colors are the same
- Like a Knight when on a square of the nature's opposite color

There are three winning goals:

- A player who captures all opponent's pieces wins the game.
- A player who moves any one of their own piece to the opponent's

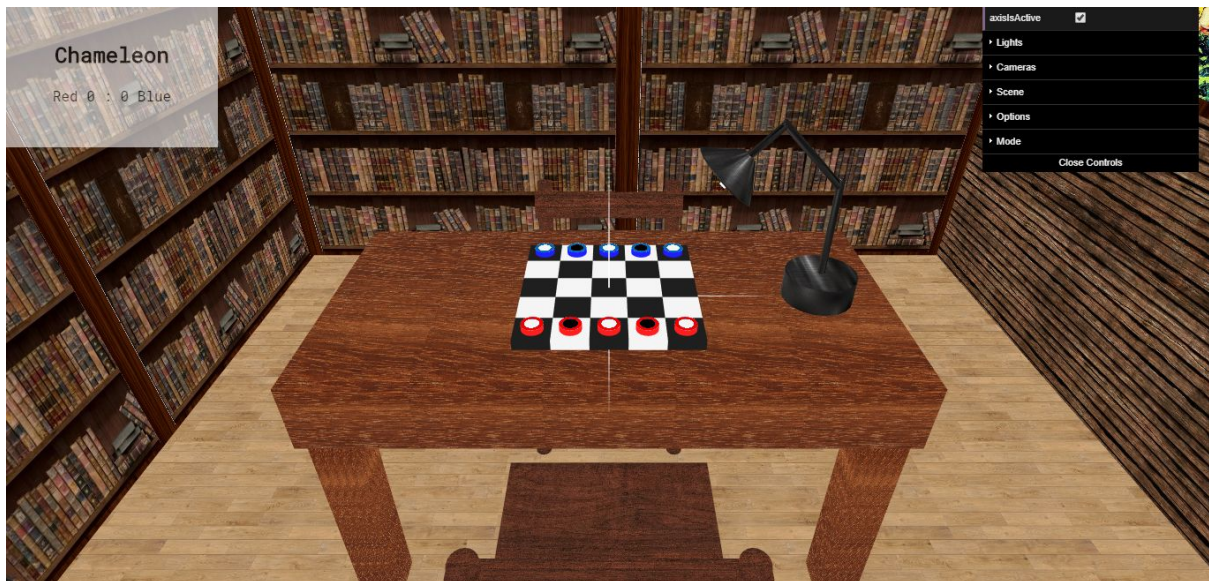


area (farthest five tiles), and it isn't recaptured immediately, wins the game.

- If a player who has only one active piece on the board and moves it onto the opponent's area they win the game immediately without waiting for the opponent's next turn.

3. Playing the Game

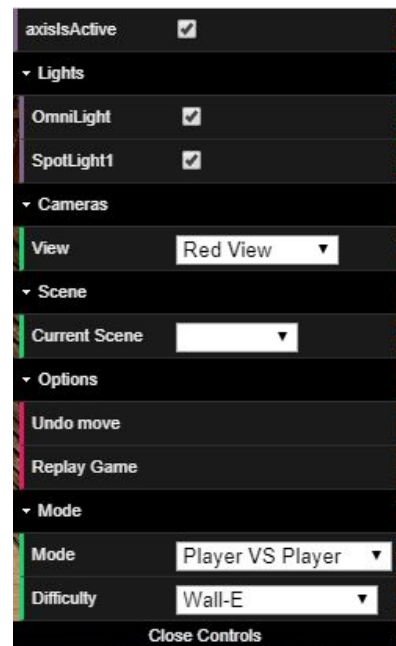
When the user runs the program, it is confronted with a beautiful game room, our default scene, and can immediately start playing. The red team always starts.



Everything must be controlled through the GUI Interface: lights, cameras, scenes, the ability to replay, undo the game and play the game against many artificial intelligence modes. "Wall-E" is the easy mode, "C-3PO" medium, "Terminator" hard, and the hardest one is "Deus Ex Machina". Any changes are automatically adapted to the game's state, which means, the game stays the same regardless superficial changes (except undo option).



Finally, there is a scoreboard that is updated with important messages and if a player wins. The camera rotates automatically.



Thanks for playing and good luck!