

Chameleon User's Manual

Follow the following rules in order to enjoy Chameleon.

1. Server Setup

This game was firstly build using SWIprolog, so, you will need this tool; you will also need a web server and the game's code.

First, launch SWIprolog, go to File > Consult and select the file `http.pl` that can be found in the `src` folder inside the project's code folder. After it is completely loaded, type: `"initializeServer."` after the `"| ?- "` mark appears.

```
% 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.
?-
```

Finally, launch your web server in the main folder containing the main code folder and CGF lib.

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

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.



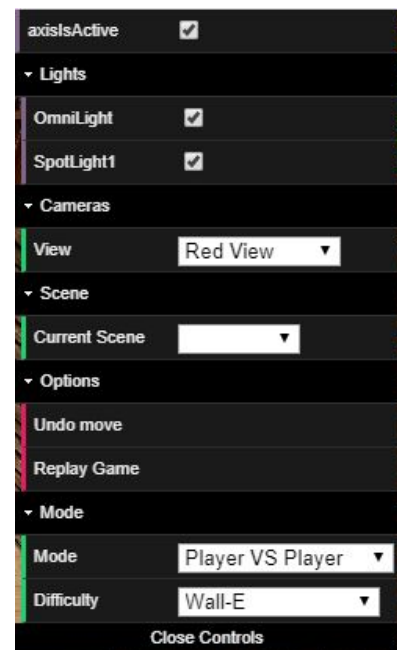
- If a player who has only one active piece on the board and moves it onto the opponent's area they win the game immediately without waiting for the opponent's next turn.

3. Playing the Game

The game has no menus, so it instantaneously presents the default scene and the board using the first player's view (Red).



Everything must be controlled through the GUI Interface: lights, cameras, scenes, options (to undo or replay the game until then) and game mode (if it is "Player VS Player" or "Player VS Computer" and, if so, what is the game's difficulty: "Wall-E", "C-3PO", "Terminator", "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).



Note that the cameras are set to change depending on the player that has next move and that the game will go on indefinitely.

At last there is a scoreboard that shows the score and if an invalid move was made, so the user can be aware of it.