

USERS MANUAL

Necessary actions to run program

In order to run the software, two steps are necessary:

1 – Having a local server running the visual interface, in the same manner as previous works.

2 – Running an open server on SICStus, executed in the folder named Prolog. In the program's interface two commands need to be run:

```
consult('server.pl').
```

```
server.
```

No further steps are required.

Basic rules of the game

Our game is called Latrunculi XXI. It is composed of 22 pieces, 20 pawns, and 2 Kings. The goal of the game is to immobilize the enemy king, this being accomplished by surrounding him on all sides. The King can be “smothered” by its own pieces, and the borders of the board also count for its immobilization. If this happens, or the player has no available moves left, he loses the game. Regarding the player movement, all pieces can be moved horizontally and vertically. If an enemy piece is surrounded by one of yours, and you place a piece on the opposite side of the capture, the enemy piece will be removed.

If your piece is close to an enemy piece it is said to be in “warfare”. This prevents it from moving, unless the move is offensive (attacks the King, or captures an enemy piece).

This game is quite complex, and it is nearly impossible to summarize all of its rules in under two pages, so if some rule is unclear, the complete rule set can be found on <http://www.chessvariants.com/invention/latrunculi-petteia-xxi>.

User Instructions

The first thing the player sees is the main options menu, which has three different settings, namely Player Vs Player, Player Vs Computer and finally Computer vs Computer. If the player chooses the first option, the game will commence. If the player decides on any of the last two, he will additionally need to press another plate, which establishes the AI difficulty.

There are two difficulty modes, Easy (random moves) and Hard (AI will aggressively attack the enemy player).

To play the game, if it is the player's turn, he will need to press the piece he intends to move, and the board cell to which he wants to move. If an object (piece or board cell) is pressed twice, it will be unselected. If there is already a piece selected and another is picked, the selection will change from the previous piece to the new one (the same to board cells). Once a piece and a board cell are selected, and the move is valid, an animation will commence. If not, the move must be remade. If the player desires to undo his latest move, he can click on the button “Undo”, in the interface, after the move has been completed.

A timer was implemented, to measure the time a player has to make a move. If this exceeds 10 seconds, he will lose his play, and the board will rotate to the opposing player.

There are two scenes available, and they can be changed on the interface displayed. Once a scene is selected, the game will reset and the player will be taken to the starting place, where he can choose the game options. It is also possible to choose to restart the game or to choose different game options at any point. These options are on the interface.