

User Manual

For the application, the server must first be running. First install the mysql connector required to build the server application

```
sudo apt-get -y install libmysqlcppconn-dev libssl-dev
```

Then you can launch the server application, to do it, move to the **FourInARow** folder and run the bash **launchServer** script. When the server is in execution then you can start a client using the bash **launchClient** script. At the end of the compilation you will be prompted to insert a socket which will be used as a UDP port for playing games.

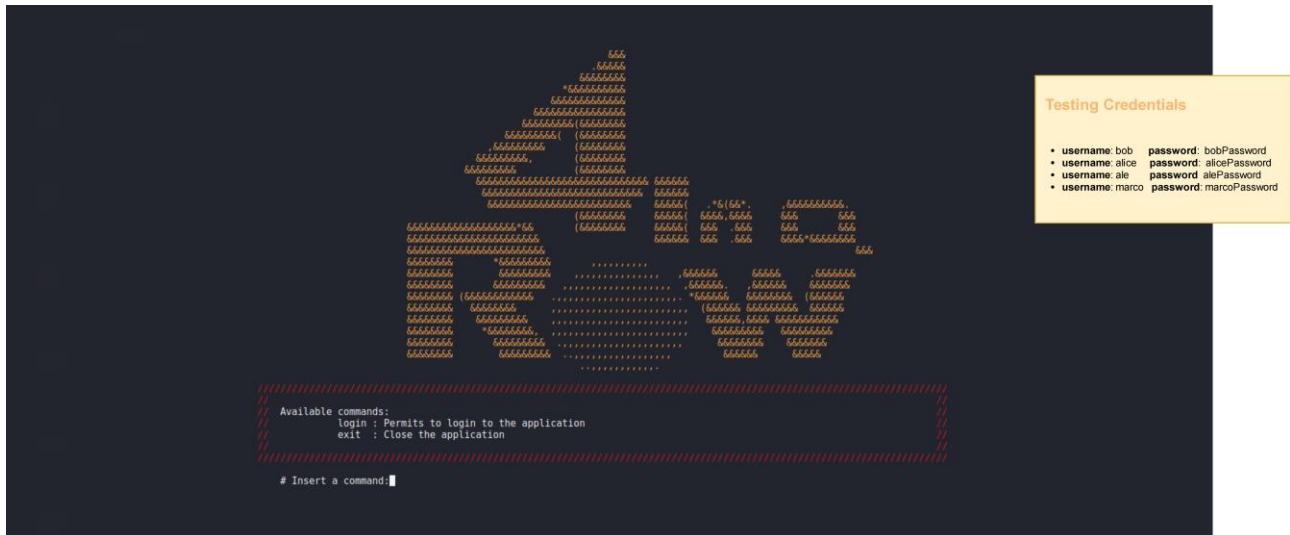
```
nico@kali:~/Documenti/CyberSecurity$ cd FourInARow/  
nico@kali:~/Documenti/CyberSecurity/FourInARow$ ls  
data  launchClient.sh  launchServer.sh  src  
nico@kali:~/Documenti/CyberSecurity/FourInARow$ ./launchServer.sh
```

The client on first launch will ask you to center the run page. You will only be asked the first time, the following will use the setting entered. To change it, you will need to delete the **screen_size.conf** cache file contained in the **FourInARow/data** folder.



```
CENTER THE PAGE USING THE ARROWS  
WHEN YOU HAVE CENTER THE PAGE PRESS ENTER TO CONTINUE
```

Apart from the first run the first page that the client will show will be the **login page** where you can access by providing a valid **username** and **password** or close the application.



Once logged in, the main page of the application will be shown. From the page you can challenge other users, see the available ones or those who have challenged you. It is also possible to see the ranking of the players.



Once a match has started by accepting a request received (or your request has been accepted by the challenger) the page for the game will be displayed. It contains a small chat to communicate with the opponent and a representation of the game table. It is possible at any time to cancel a match and return to the main page, but remember that you will be assigned a defeat

The screenshot shows a game interface with a dark background. At the top, there is a decorative header with orange and yellow patterns. Below the header, the interface is divided into several sections:

- Chat:** A purple-bordered box on the left containing a chat log. It shows two messages: "bob Muoviti a fare la mossa!" and "alice Colmino eh".
- Timer:** A small box on the right showing "Time: 7".
- Gameboard:** A 6x6 grid on the right showing the game state. Red tokens (0) are in the bottom row, and blue tokens (1) are in the second row from the bottom.
- Available commands:** A section at the bottom listing commands: "send [message] : Send a message to the other player", "put token [column] : Insert a token in an available column", and "quit : Exit from the game[you will lose]".
- Input prompt:** A line at the bottom says "# Insert a command:" followed by a cursor.

Callout boxes provide additional information:

- Chat:** It shows a simple chat where the users can talk. The chat can contain only two message then it removes the older message to insert the new one.
- Timer:** It shows a countdown which start from 15 and is decremented every second. It starts at the begin of your turn and when it reaches 0 the client will generate automatically a move and gives the control to the adversary.
- Gameboard:** It show the update state of the gameboard. The red tokens are from the adversary and yours are the blue-ones.