

ONLINE CHESS GAME

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HMI MINI PROJECT PRESENTATION

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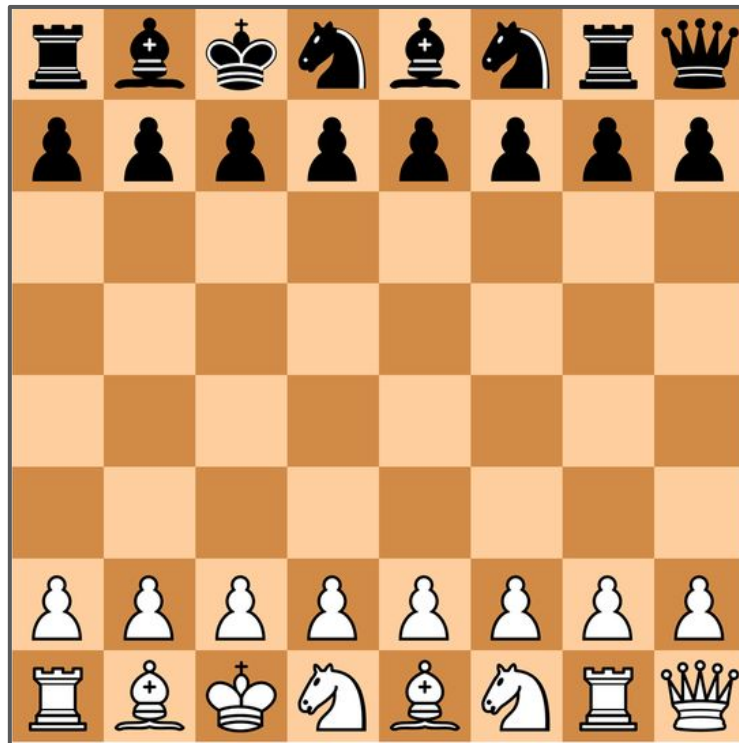
AGENDA



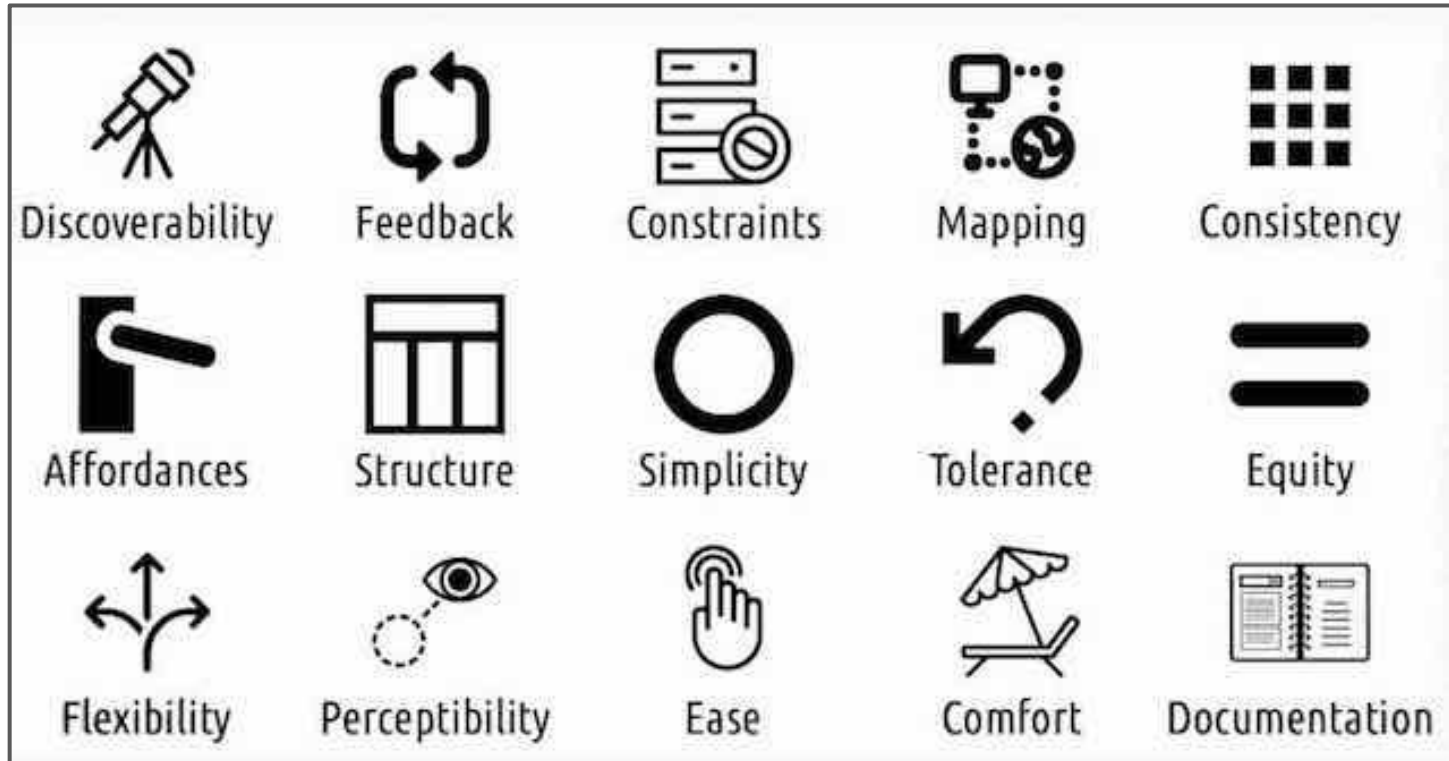
1. What is Chess?
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What is Chess?

- Chess is a game for 2 players each of whom moves 16 pieces according to fixed rules across a checkerboard and tries to checkmate the opponent's king.
- Chess is a mind game that involves a lot of thinking and time.
- It requires prediction and problem-solving skills.



Human Machine Interaction Design Principles



Tools and Framework Used

NodeJS

- Node.js is an open-source and cross-platform JavaScript runtime environment.
- Nodejs was used for developing the application and creating the whole game.

Socket Programming

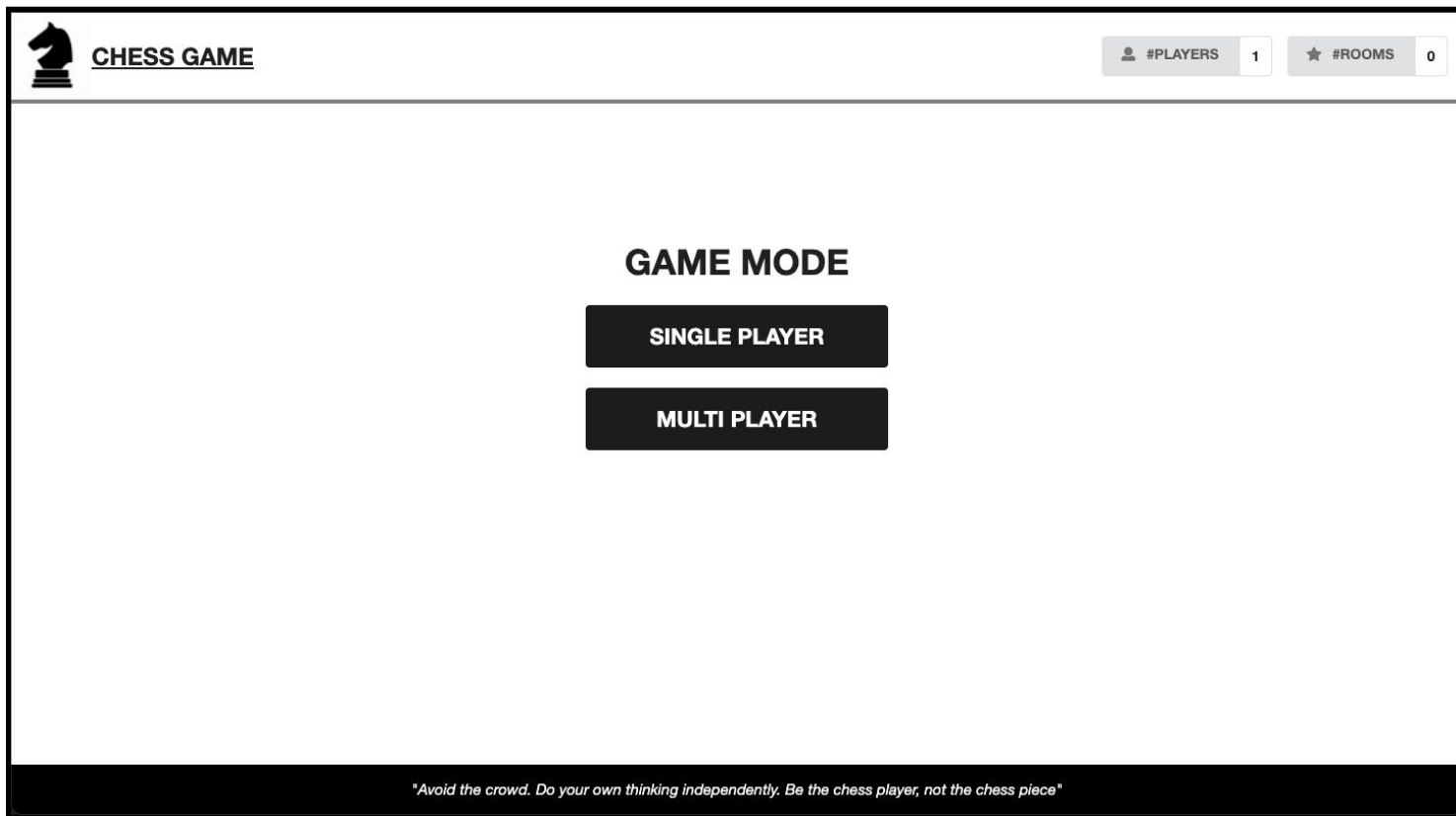
- Socket programming shows how to use socket APIs to establish communication links between remote and local processes.
- The concept of socket programming was applied here as the players can discuss with each other while playing chess.

Heroku

- Heroku is an open-source software platform for machine learning and data science that makes it simple to develop and publish attractive, bespoke web apps.
- The project was deployed on Heroku platform.

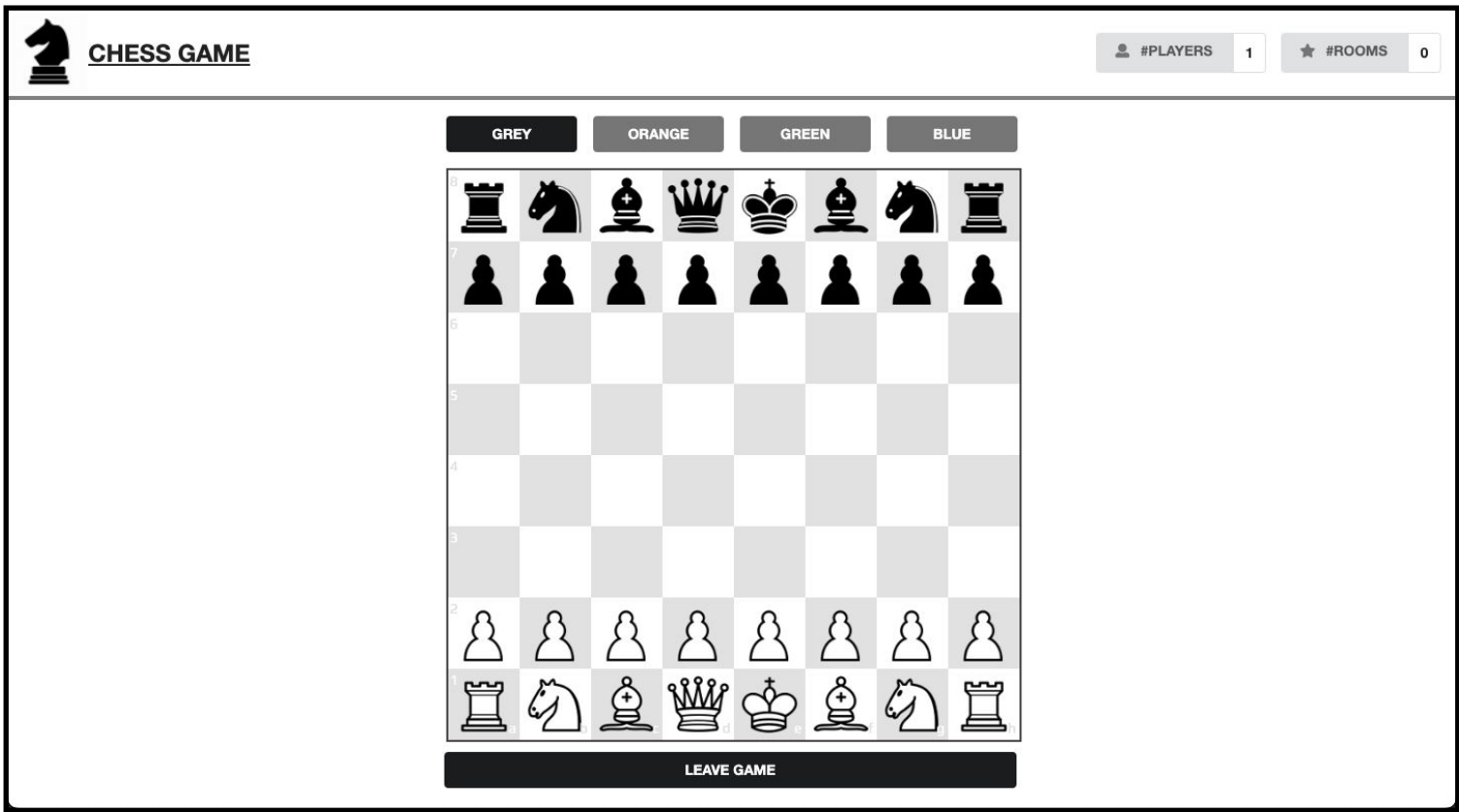
Snapshots

Home Page




Snapshots

Single Player Mode



Snapshots

MultiPlayer Mode

 CHESS GAME

#PLAYERS 1#ROOMS 0

START GAME

Name

Room


SELECT ROOM ▾

JOIN

"Avoid the crowd. Do your own thinking independently. Be the chess player, not the chess piece"

Snapshots

MultiPlayer Mode

 **CHESS GAME**

#PLAYERS 1#ROOMS 0


START GAME

JOIN

"Avoid the crowd. Do your own thinking independently. Be the chess player, not the chess piece"

Snapshots

MultiPlayer Mode

 CHESS GAME

#PLAYERS2

#ROOMS1

START GAME

Amey

1

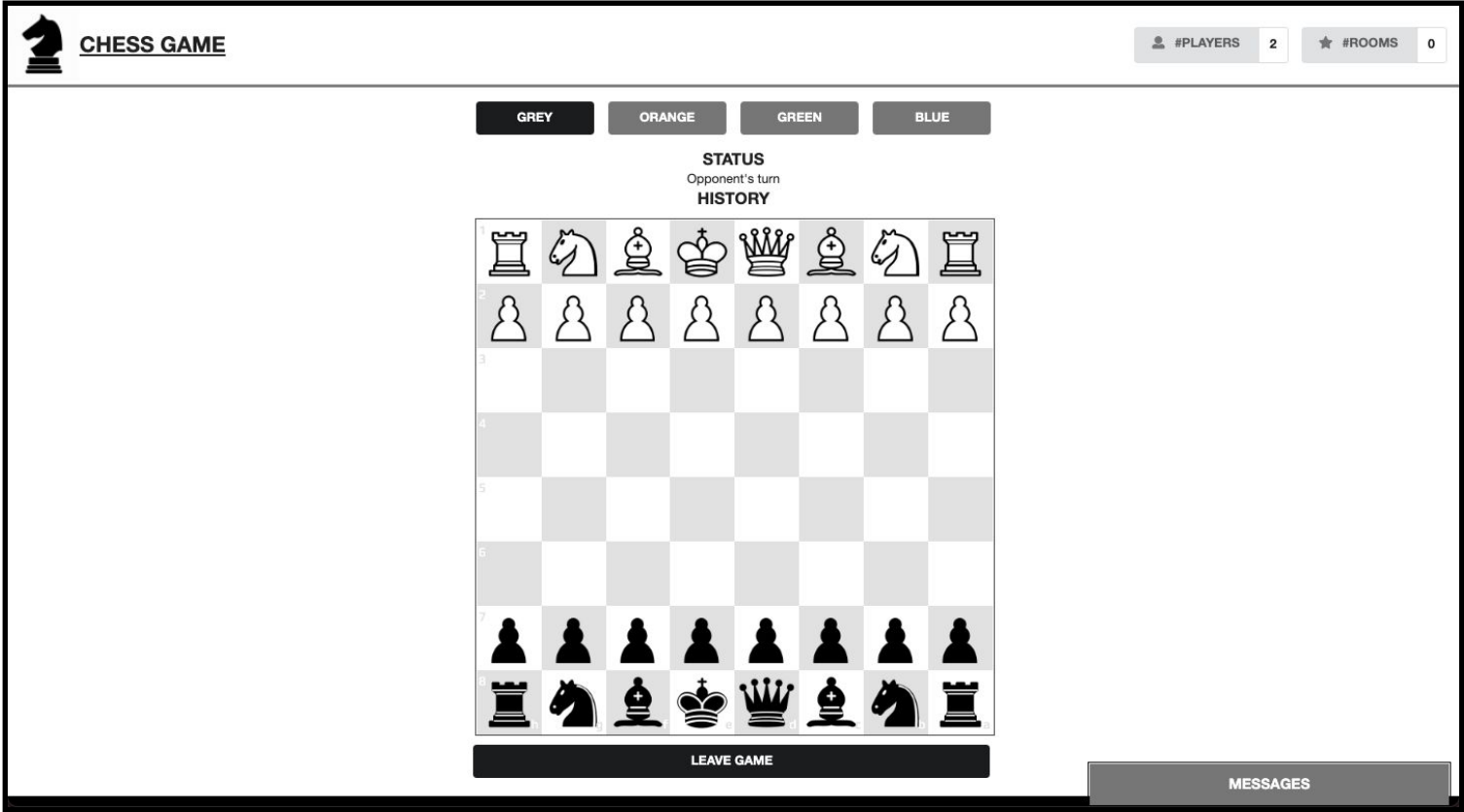
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JOIN

"Avoid the crowd. Do your own thinking independently. Be the chess player, not the chess piece"


Snapshots

MultiPlayer Mode



Snapshots

MultiPlayer Mode



CHESS GAME

































#PLAYERS2#ROOMS0

GREYORANGEGREENBLUE

STATUS

Opponent's turn

HISTORY

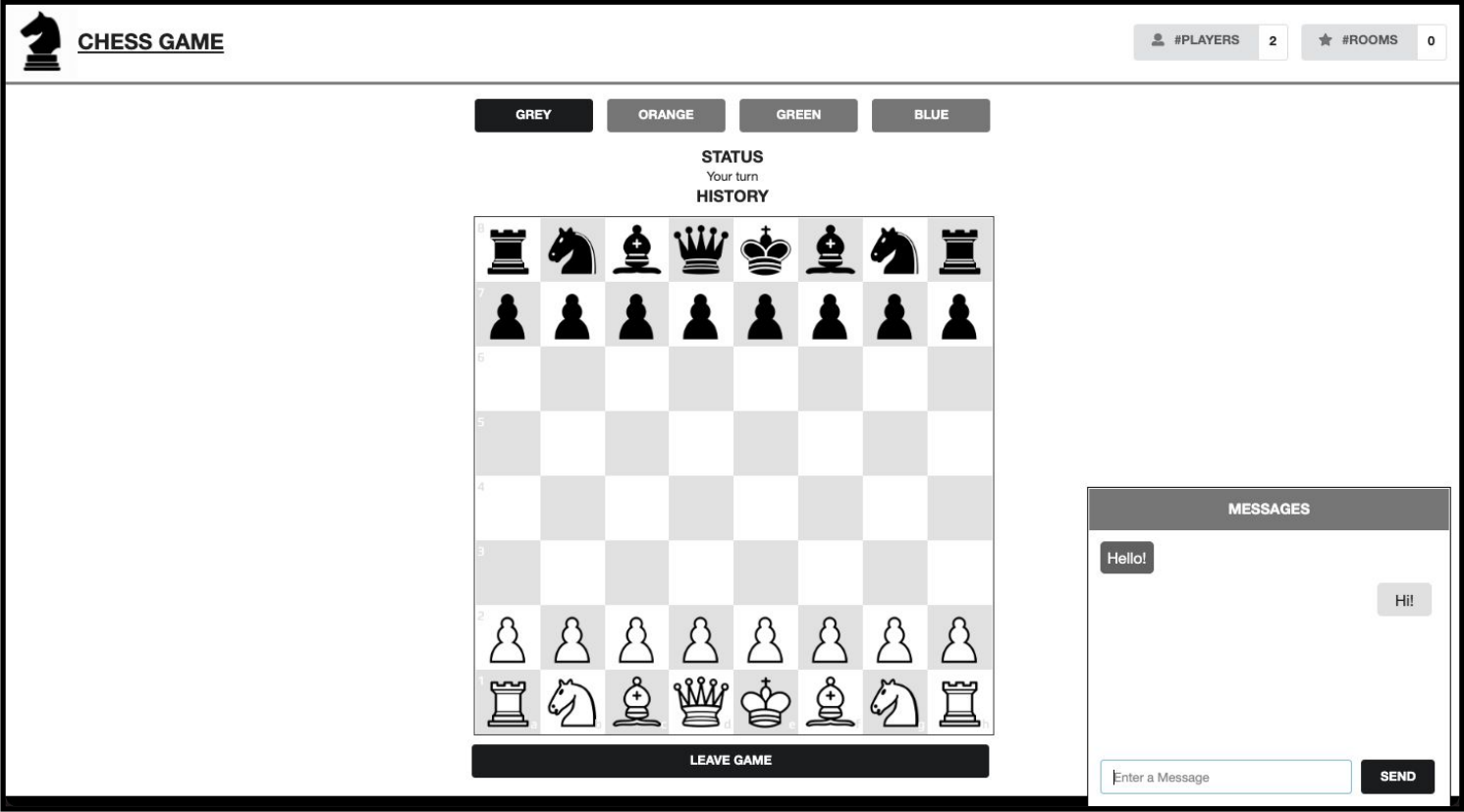
								
2								
3								
4								
5								
6								
7								
8								

LEAVE GAME

MESSAGES

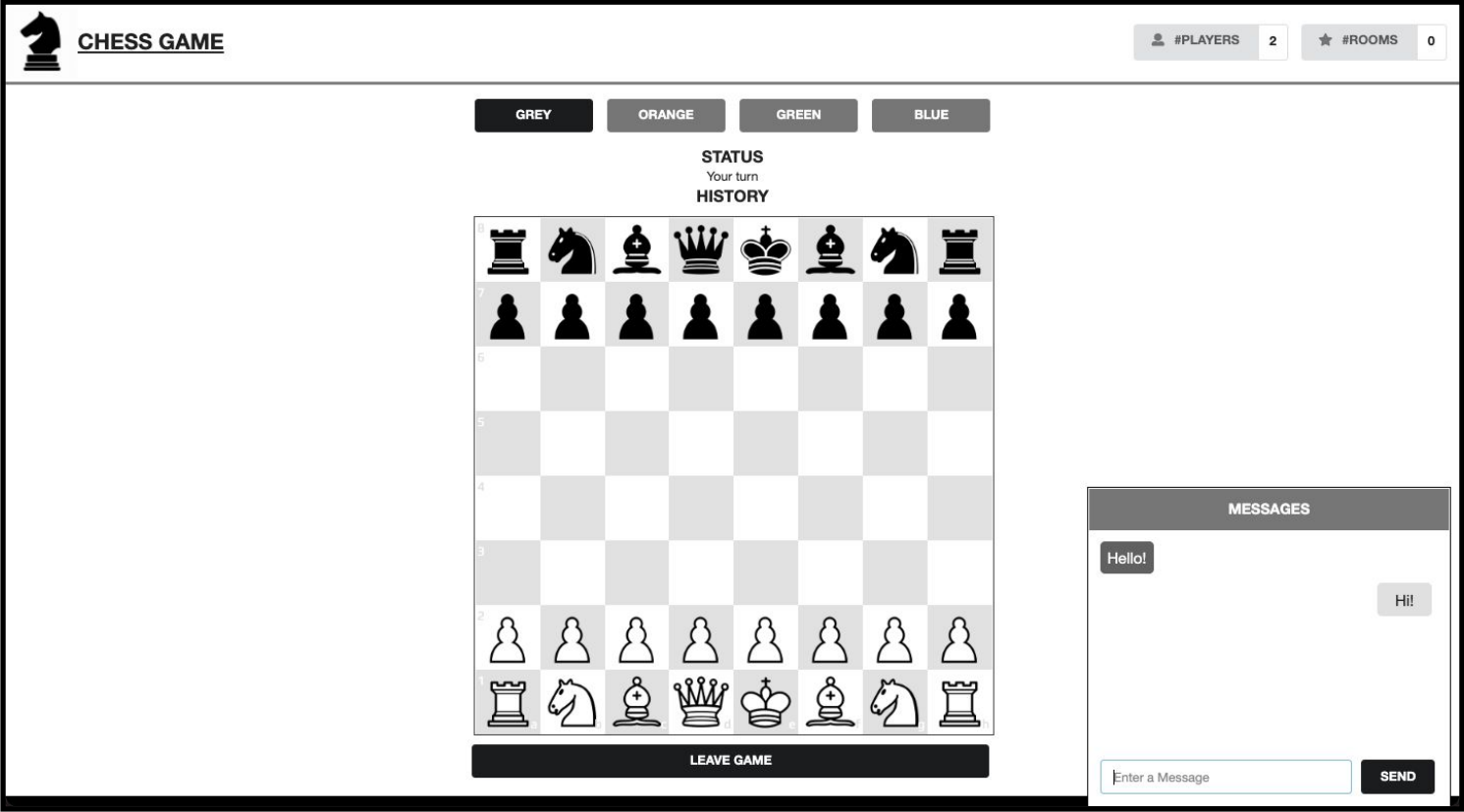
Snapshots

Chat window for players to send message to each other



Snapshots

Chat window for players to send message to each other



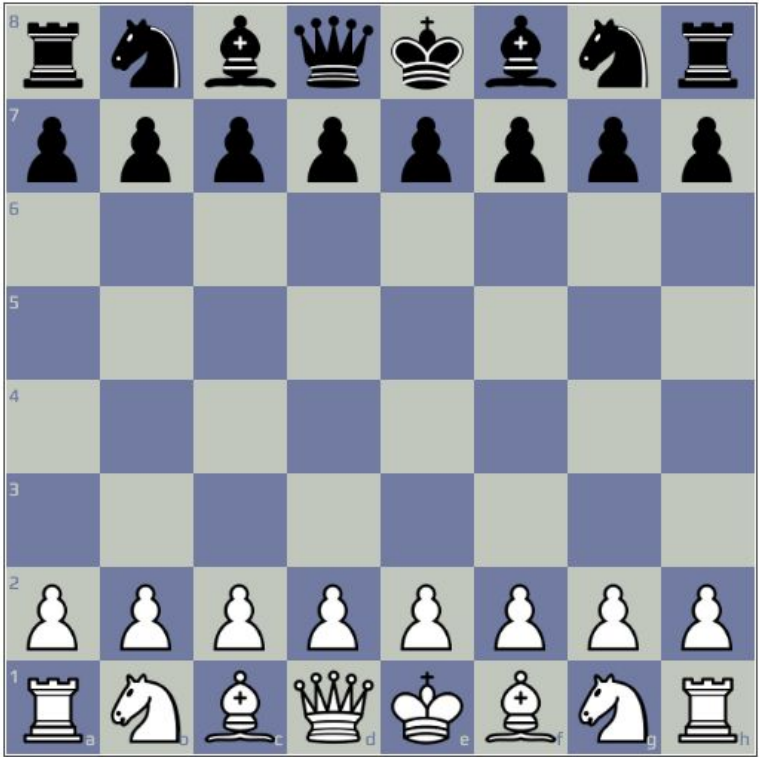
Snapshots

Colour Themes



Snapshots

Colour Themes



Conclusion

- Online chess game is designed by keeping in mind the Human Machine Interaction principles.
- The web application is simple and allows the user to play chess. The user has the choice to change the theme of the game as well. While playing, the user gets to know about the possible movement of the pieces.
- Two modes are available: single player and multiplayer. In case of multiplayer, the user can communicate with the opponent through a chat window. For multiple player mode, if the opponent leaves the game in the middle, the browser notifies that the opponent has left the game.

REFERENCES

[1] <https://www.chess.com/terms/chess-pieces>

[2] <https://nodejs.org/en/docs>

[3] <https://devcenter.heroku.com/categories/reference>

[4] <https://devcenter.heroku.com/articles/getting-started-with-nodejs>

THANK YOU