User Documentation: Ludo

How to play the game?

- Download the zip file containing the executable (.exe) file from GitHub.
- On Windows, run the exe file to start a game.
- On Linux, you can download Wine which allows you to run executable files.
- If you have Python 3 and PyGame installed on your computer, you can just run the Team_1_client.py file.
- Because the AWS server connection is too slow, users have the option of running the server locally by modifying the Team_1_connection.py file (Requires Python 3 and PyGame).
  - **Warning! Any change to code can have unwanted effects .**
  - Run the Team_1_server.py on your local machine, and observe the ip address printed to the console. This IP address will be used to allow local devices to connect.
  - Everyone who wants to play the game must alter the code in Team_1_connection.py.
  - Change line 35 of Team_1_connection.py from:
  -
    - self.server_address = ("54.172.246.147", 10000)
  - To:
    - self.server_address = ("IP OF LOCAL SERVER", 10000)
    - Where "IP OF LOCAL SERVER" is the IP Address of the server printed to the console.
  - Each player then runs Team_1_client.py on their machine.

Start Up Menu

From the start-up menu you can:

- Create a game. (public/private)
- Join an already existing public game.
- Join an already existing private game.
- Get an explanation of the rules of the game of Ludo.

Create a Game

Create new game:

- *Public:* You must leave the Room Code blank.
- *Private:* Enter a Room Code for your game. This will act as a password for your friends to enter the game.
- Press Create to create the game.

Public Game Created

New public game created:

- Enter your name.
- *In Lobby* tells you how many players have joined the game so far.
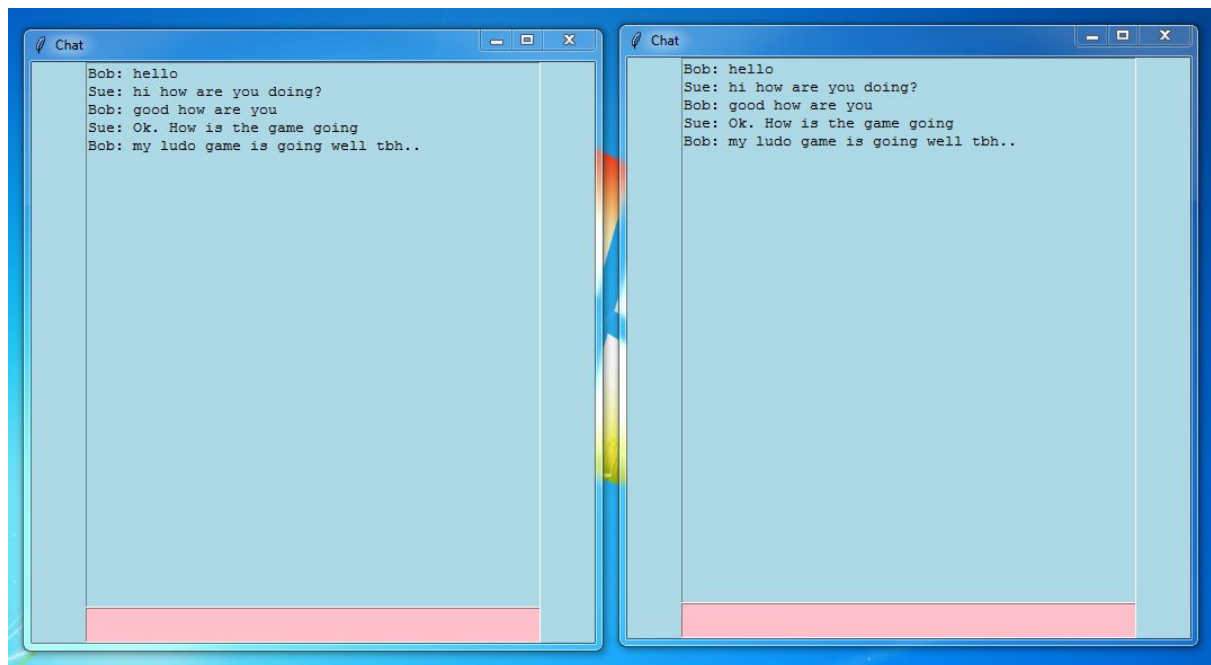- When there are at least 2 people in the lobby you can start the game.

Join a Public/Private Game

Ludo — □ ×

Ludo

List of Games

Join Game

Back

Join a Public Game:

- A list of public games will appear in the list of games field.
- You can then choose the game you want to join.
- Once selected, press Join Game.

Chat Interface

Chat

```
Bob: hello
Sue: hi how are you doing?
Bob: good how are you
Sue: Ok. How is the game going
Bob: my ludo game is going well tbh..
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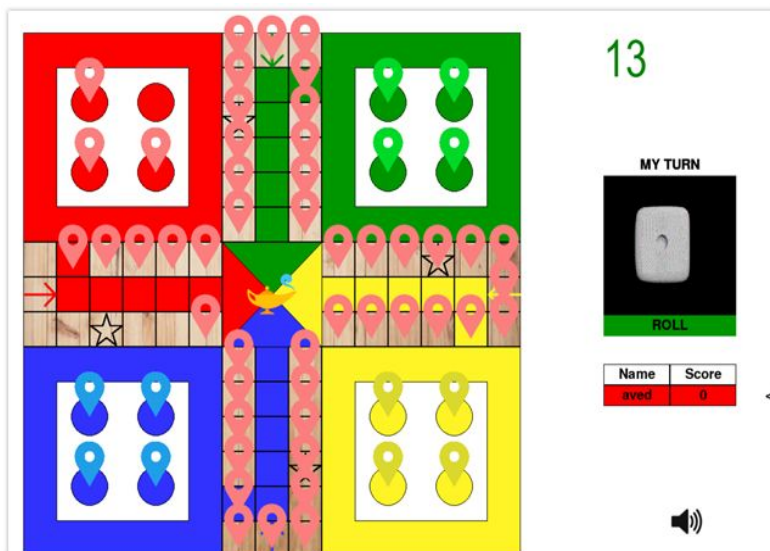
- There is also a chat interface implemented in this game allowing you to chat with friends while playing.
- The chat box will pop up on your screen.
- You can mute this chat if needed.
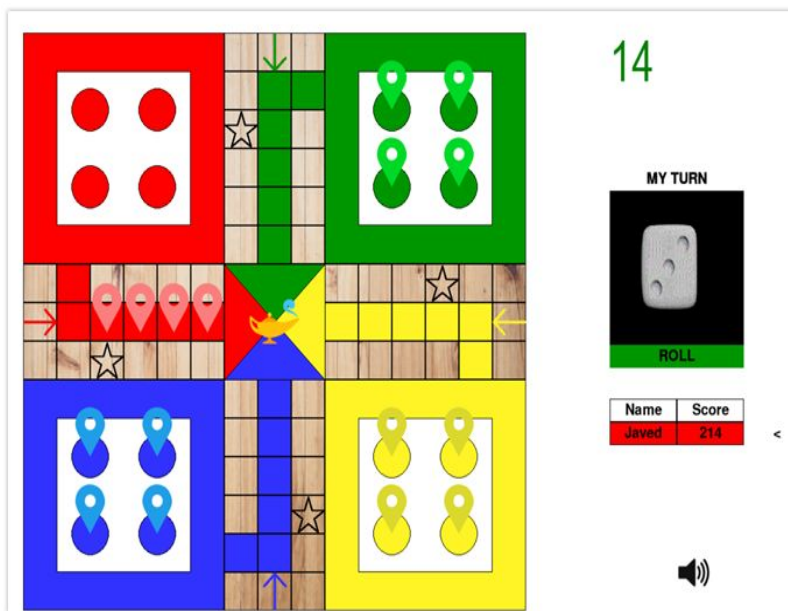
Representation of the Board:
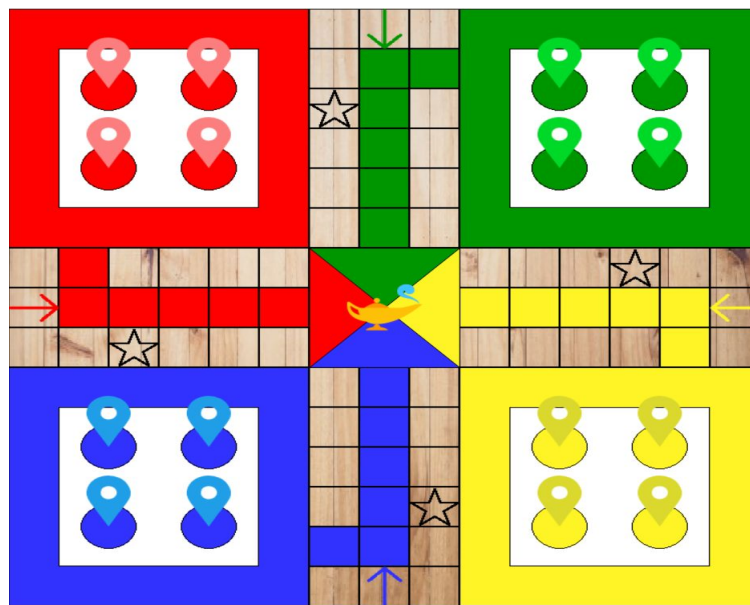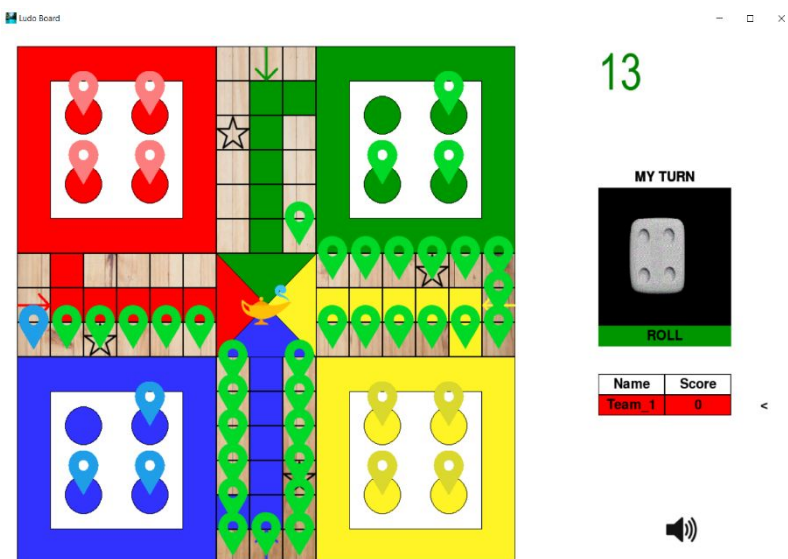

Path to Victory

- Once a piece is taken out it must take the path as shown from their *home square* to their line of red squares.

How to Win

- You must line all 4 pieces up in the last 4 squares to win the game.

How to kill another Player's piece

- You must land on another player's piece.
- This sends this player's piece back to their home square.
- The piece that is killed traces its path back to its home space.
- The stars and each player's coloured home squares are safe spots.
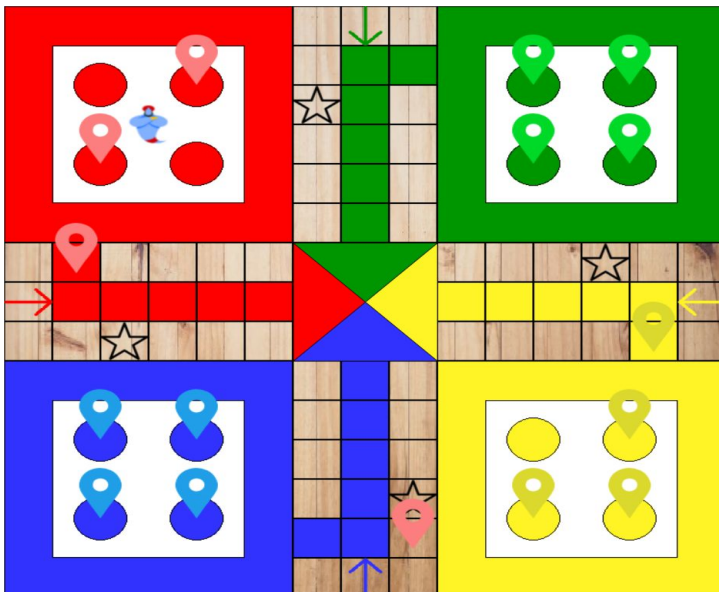
Genie Functionality

- 1 in 6 chance of getting the genie every roll of the dice.
- When you have the genie you have a 1 in 6 chance of losing the genie.
- Independent of the dice roll.
- Genie gives you invincibility, if another player lands on you they die.

No Player has the Genie.
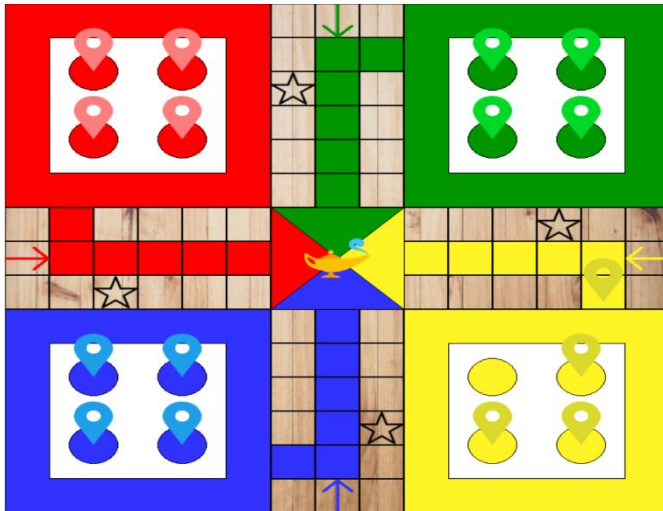
- No player has the genie so the oil lamp is in the middle of the board.

When a Player has Genie

- The red player now has the genie so the genie is seen in his home square.

Scoreboard

Name	Score
David	0
Javed	0
Xin	0
Ludo King	0

<

- Score is calculated by adding all your pieces' number of spaces away from their starting home space.
- Every entry shows a player and their score.
- The entry's colour is the players colour.
- '<' indicates who you are.

Video Explanation

Shows the functionality of:

- Rolling a 6, a piece can be taken out of home.
- Killing another player's piece.
- Holding the genie, if another player lands on your piece they are killed and sent back to their home square.
- **Timeout:** When the timer runs out the dice is rolled and a piece chosen at random and moved for you.