

# Manual JavaTiles

This document describes how JavaTiles is to be played.

## How to start a game

To start a game, you must do the following things:

- If not yet done, install Java (17 or newer)
- Start a server
- Start clients (in the same network as the server)
- Join lobbies

## How to start a server/client

Start a terminal.

To start a server, use the following command:

```
java -jar <path-to-jarfile> server <port>
```

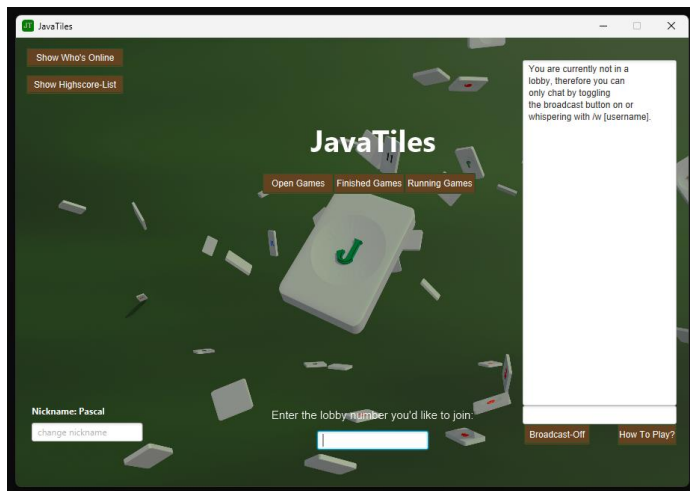
To start a client, use the following command:

```
java -jar <path-to-jarfile> client <ip_address>:<port> [<nickname>]
```

Where <path-to-jarfile> is the path to the jar-file and <port> is a port that is free. <ip\_address> is the IP-address of the server in the network. The optional parameter <nickname> is the nickname that the client wants to have. If the nickname is already taken, the client gets the specified nickname with a generated suffix. If <nickname> isn't given, the client gets the username of the current user of the computer.

## How to join/create a lobby and start playing

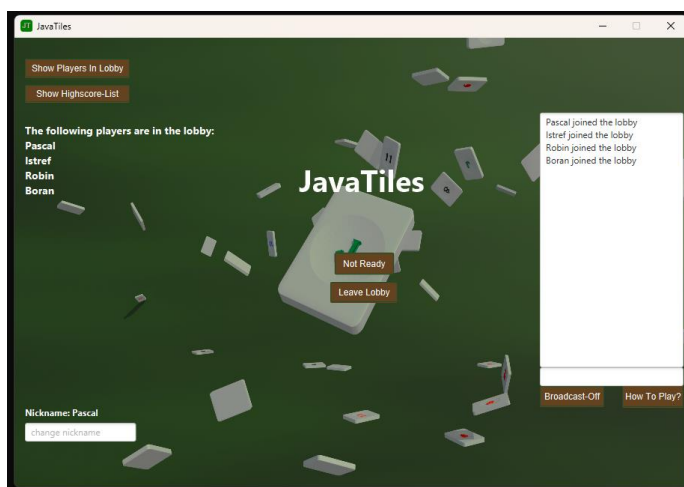
After clicking the “Start” button in your newly opened client, the window size and content will change. Then, click the “Join/Create Lobby” button to see the following layout:



To see which lobbies are available for you to join, click the “Open Games” button. You can only join lobbies with fewer than 4 players.

If you want to view ongoing or completed games, click the respective buttons.

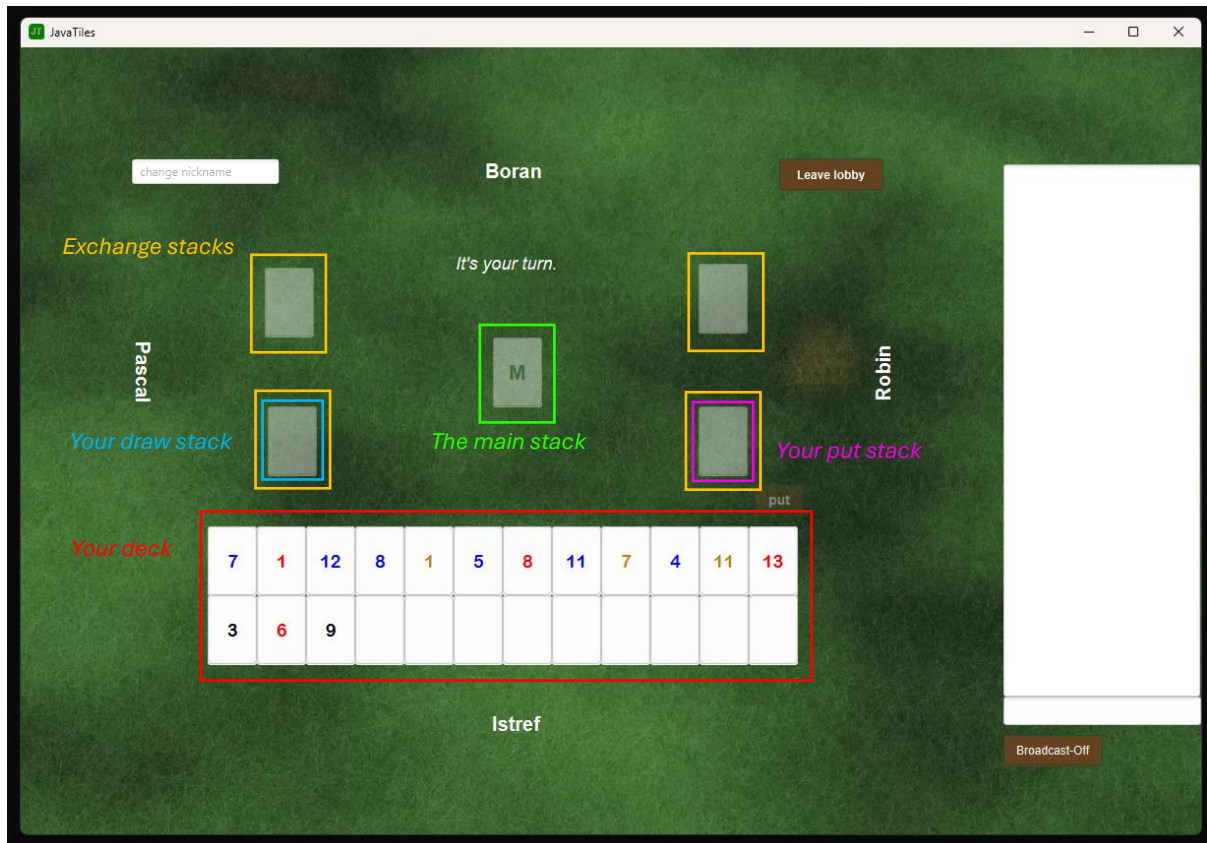
In the text field at the bottom center of the screen, enter a number to identify a lobby you want to join. If no lobby with the entered number exists, a new one will be created.



Each player can then click on the “not ready”-button. If there are 4 players in the lobby and each one of them has clicked this button, the window layout changes to the game layout.

## Layout of the game

Once the game has started, click the “Start” button. Your window should then look like this:



At the bottom you see your deck, in the middle of the gameboard the main stack and the four surrounding buttons represent the exchange stacks. The exchange stack to your left is your draw stack, the one to your right is your put stack.

Your put stack is the draw stack of the player after you (in this case Robin) and your draw stack is the put stack of the player prior to you (in this case Pascal), as visually hinted by the layout.

## Playing the game

During the game you can always reorder your deck. You can do that by swapping around the tiles in your deck, which you do by clicking on the two tiles that you want to swap.

The game begins with each player having 14 tiles in their deck except for the player that starts, this player has 15 tiles in their deck. The starting player must put a tile to their put stack by selecting a tile and clicking on the “put”-button to their right. Afterwards it's the next players turn.

Once it is your turn you must draw either from the draw stack or from the main stack which you do by clicking on the respective button. Now you must choose a tile that you want to put on your put stack. If your deck is a winning deck, the game ends and you win the game, else it's the next players turn.

## Winning configurations

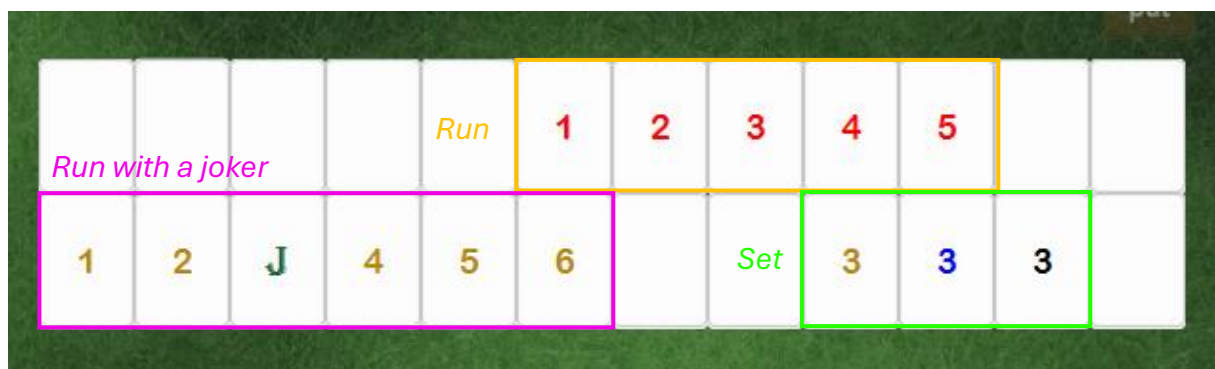
A deck can be split into groups of tiles, separated by empty slots.

For the deck to be a winning deck, all the groups of the deck must be a valid group, meaning it must either be a run or a set and at least 3 tiles long.

A run is a group that contains only tiles that are of the same colour and have consecutive numbers, ordered from lowest to highest, while a set is a group that contains only tiles with the same numbers but distinct colours.

The joker tile adopts the number and color needed to make its group valid (if possible). This means it can be used to complete either a set or a run.

Here is an example of a winning configuration:



In this case, the joker represents a yellow tile with number 3.

## How the game ends

Once someone achieves a winning configuration, they must place a tile on the next player's draw stack to win and end the game. The winner's nickname is then displayed to all players in the lobby. To play again, click the “Leave Lobby” button and rejoin a lobby.

If the game lasts so long that the main stack becomes empty, the game ends with no winner.

## Other features

On the right-hand side of the screen, there is a chat feature. You can chat with the people in your lobby by toggling the “Broadcast” button off, or with everyone connected to the server by toggling the “Broadcast” button on. To chat privately with a single person, use the command: `/w <nickname> <message>`.

You can see the high scores by clicking the “Show Highscore-List”-button, which is on the top left of your screen before joining a game.

Before joining a lobby you can see who is connected to the server by clicking the “Show Who’s Online”-button.

After joining a lobby, you can see who’s inside the lobby by clicking the “Show Players In Lobby”-button which is located on the top left of the screen.

You can change your nickname by entering a new one in the text field at the bottom left of the screen and pressing Enter. If you are already playing a game, the text field will be at the top left of the screen.

You can also see this document by clicking on the “How To Play?”-button on the bottom right of the screen before starting a game.

To cheat you can type the command: `/secretcheatcode42` in the chat.