

# Manual or the Game **Bettler**

Gruppe 18 Los Capos:

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# 1 Starting Server and Clients

## 1.1 Starting a Server

In order to start a server the executable *Bettler.jar* file has to be downloaded. Then the terminal is used in order to start the *Bettler.jar* file. To start the server a port has to be set `textit(<listenport>)`. The command to initiate the server looks the following:

**Java -jar ./Path/Bettler.jar server <listenport>**

Here the *Path* is the location, where the *Bettler.jar*-file is located. When this command is used, a server is started, using the port chosen in the command.

## 1.2 Starting a Client

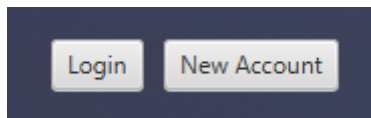
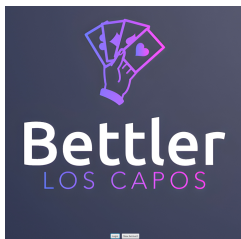
In order to start a client, the same actions have to be performed as if a server is started. To properly start the client, a server has to be running. The command for the terminal to start a client is the following:

**Java -jar ./Path/Bettler.jar client <serverip>:<serverport> <name>**

Here the *>serverip>* is the IP-adress of the device, the server is running on. The *<serverport>* is the port chosen when the server was started and the *<name>* is the designated name the client receives whilst joining the server. If no name is chosen, the client automatically gets his system name.

# 2 Getting Started

Once a client is started, we either have the option to create a new account or to login to an already existing account.

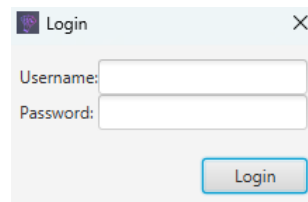


## 2.1 Creating an Account

If there is no existing account to login to a new account has to be created. Once the *New Account* option is chosen, the player can now enter his username and his password. In order to create the account, the user has to repeat his password and match his password to make sure that there are no mistakes in the password. If the user does not enter a user name, the name is given to the user which was chosen whilst starting the client.

A screenshot of a "New Account" dialog box. It has a title bar with "New Account" and a close button. The form contains three input fields: "Username:", "Password:", and "Repeat Password:". Below the "Username:" field, there is a note: "If you leave this field empty, the name that was specified when the jar-document was started is automatically adopted." At the bottom right of the form is a "Create Account" button.

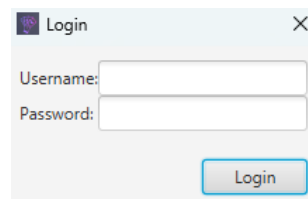
If the user has entered his username and password, the login window pops up such that the user can now login to his created account.



After the user entered his account data here, the user is logged in and is able to access the lobbies, the chat and the high-scores.

## 2.2 Login Into an Existing Account

If the user already has an existing account because the user had connection problems for example the user is able to login to his account again. In this case the *Login* option is chosen and the login window pops up.



Once logged in, the user can now access the game as described in the chapter above for creating an account.

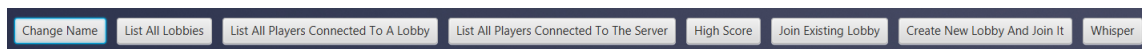
## 3 The Main Window of the Game

After the user is logged in to his account, the user has now the possibility to see all lobbies, connect to an open lobby, to see the high-scores and the chat is now available.

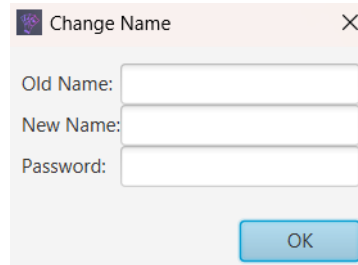


On the bottom of the screen, there are all buttons, the user can use.

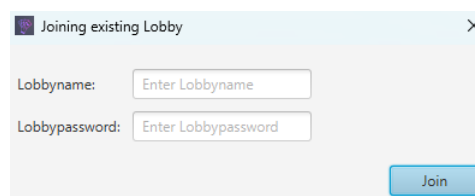
Now we are taking a closer look at these buttons and what they actually do.



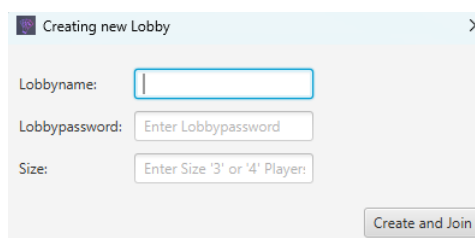
- **Change Name:** This button lets the user change his player name. Here the user has to enter his old player name, the new player name and his password.



- **List All Lobbies:** This button lists all existing lobbies on the server, their name and their state (open, ongoing and finished).
- **List All Players Connected To A Lobby:** Here all lobbies and the players connected to these lobbies are shown.
- **High Score:** This button shows the high-score of all players. Here the user sees the player names and their highest points after playing.
- **Join Existing Lobby:** This button is used if the user wants to join an existing lobby. Here he needs to enter the lobby name as well as the lobby password. Once the lobby is created, the user automatically joins it.



- **Create New Lobby and Join it:** This button should be used if the user wants to create a new lobby to play with other players. Here the user shall choose a lobby name, lobby password and if the lobby should support three or four players.



- **Whisper:** After pressing this button, the player has to enter the player name of the player who should be whispered to. Once the player name is entered, a new chat pops up which can be only seen by the user itself and the player who should be whispered to.

## 4 The Chat Functions

In the game there are three different chats. The *All*-chat, the *Lobby*-chat and the *Whisper*-chat. How the *Whisper*-chat is used is already covered in the chapter above.

### 4.1 The All-Chat

The *All*-chat is a chat to communicate to all players connected to the server. This means that everybody connected to the server can see the messages sent in this chat, it does not matter if the players are in another lobby, already in a running game or not connected to any lobby. This chat sends the messages to everybody who is logged in.

### 4.2 The Lobby-Chat

As the name *Lobby*-chat implies this chat is used to communicate to everybody connected to the lobby. This chat is accessible once the user is connected to a lobby. All messages sent in this chat are only seen by all players connected to the current lobby. Once the user joins a lobby, the user also automatically joins the lobby's chat.

### 4.3 The Whisper-Chat

The basic functionality of this chat was already covered in the chapter before. This chat is also not restricted to a lobby. This means that the user may whisper to anybody connected to the server. It does not matter which lobbies these two users are connected to or if they are connected to a lobby in the first place. In addition the user may have *Whisper*-chats with different players on the server. So it is possible to have chats with different users.

It is not possible to have a *Whisper*-chat with multiple players at once. This means that in a *Whisper*-chat there can only be two users who can use it. It is not possible for a third player to either see what is written in the chat, to write in this chat himself or to even know that this particular *Whisper*-chat even exists in the first place.

## 5 Rules of the Game

The game offers three different roles the players can obtain and the cards used are the usual Jazz-cards with values from six to ten with a jester (11), queen (12), king (13) and ace (14). If a lobby is started with three players, each player will get 12 cards and in a lobby with four players, each player will get 9 cards. So the entire deck of cards is randomly distributed among all players.

### 5.1 The Points Given to Each Place

The goal of the game is to be the first player to have an empty hand. This means that the player who is the first one to be able to play all of his cards is the one who wins. The round is played until there is one player left who has cards left on his hand.

The person who gets first place gets **two points** and will be the *president* in the next round. The player who is the last one with cards on his hand gets **zero points** and will be the *beggar* in the next round. All players who are not first but were able to play all their cards will be *citizens* and will receive **one point**. A match is finished after three rounds are played. The points each player obtained in these three rounds are added up and displayed in the high-score.

## 5.2 The Different Roles

The three different roles, the player can obtain are the **President**, the **Citizen** and the **Beggar** (German: *Bettler*) where the name of the game comes from.

Once a game is started, no roles are given to the players. The first round is used to determine which player gets which role for the next round.

### The President

The role *President* is given to the player, which was able to get first place. The *President* has to trade one card with the *Beggar*. Here the *President* can chose one of his cards to give to the *Beggar* and the *Beggar* has to give it's highest card to the *President*.

### The Citizen

This role is given to all players, which were not the first with an empty hand but which were able to play all their cards. The *Citizens* have no special abilities and will be able to play without any restrictions. The *Citizens* are not able to trade cards with anybody.

### The Beggar

The *Beggar* has to give his card with the highest value to the *president*. After giving away his card, the *Beggar* will receive any card from the *president*. In addition, the *Beggar* will be the first person of the round to play a card so the *Beggar* decides which cards are played first.

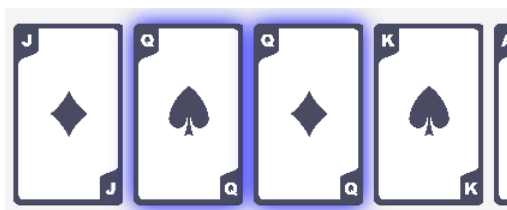
## 5.3 How to Play a Card

In order to perform a valid move, the amount of played cards has to match the amount of played cards on the table. On top of that the value of cards has to be greater than the value of the cards on the table and the value of played cards has to be the same.

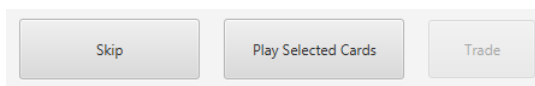
For example on the table, there is a *Eight of Diamonds* and a *Eight of Spades*, a valid move would be to play the following cards: *Queen (12) of Hearts* and a *Queen (12) of Spades*. Let us take a look at some invalid move. The following move would be invalid in this case:

- *Seven of Diamonds* and *Seven of Hearts*: Here the value of the cards if lower or equal compared to the cards on the table ( $7 \leq 8$ ).
- *Ten of Clubs*: This move is invalid since there are **two** cards on the table and the player tried to play just **one** card. Here there are less cards played than on the table which is against the rules.
- *Ten of Spades*, *Ten of Diamonds* and *Ten of Clubs*: In this case the player tries to play **three** cards whilst there are **two** cards on the table. So the amount of played cards does not match the amount of cards on the table which makes this move invalid.
- *Ten of Hearts* and *King of Spades*: This move is invalid since the value of the two cards played is not the same.

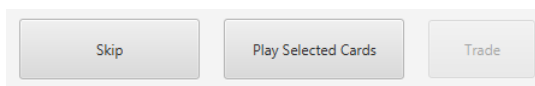
To play one or multiple cards, the player has to select the cards which should be played. The player is able to select at most four cards. Selected cards are represented by a glow around the side of it's corner.



Once the player has selected the cards which should be played, the *Play Cards*-button should be pressed in order to actually play the cards.



If the player has no cards which can be played using a valid move or if the player does not want to play any card there is the possibility to to skip the turn using the *Skip*-button.



If one player played any cards and the following two or three players (depending on the lobby size) use skip, the player who played the cards automatically wins that turn and can play new cards.

In the case that one player plays an ace or multiple aces, the player directly wins that turn and can play new cards since no other player could make a valid move in this scenario.

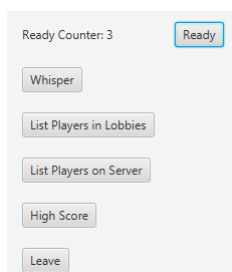
## 6 How to Start a Match

Once a lobby is created and the appropriate amount of players joined the lobby, every player can click on the *Ready*-button to tell the game, that the player is ready. At the moment when the ready-counter matches lobby size, the lobby starts the first round.



If the match is started the first player is allowed to make the first move. After the first round, when the *President* and the *Beggar* are determined, the *Beggar* will be the player who can make the first move.

Once all three rounds are over and the high-score is updated. The lobby changes it's state to finished. Now the lobby does not start a new match anymore and the players should leave the lobby using the *Leave*-button.



To play a new match, a new lobby shall be created and the players should join the new lobby.

## 7 Key Bindings

The game also supports key bindings which let the player maneuver through the GUI using just key bindings. These key bindings can be split into *Login-Scene key bindings*, *Lobby-Scene key bindings* and *Game-Scene key bindings*. These key bindings work on Windows and MacOS, for Windows, the keys *CTRL* and *ALT* are used and for MacOS, the keys *CONTROL* (for *CTRL*) and *OPTION* (for *ALT*).

### 7.1 Login-Scene Key Bindings

In the Login-scene the user may create a new account or login to an existing account using the following key bindings.

- **CTRL + N**: Opens the Create-New-Account-window.
- **CTRL + L**: Opens the Login-window.

### 7.2 Lobby-Scene Key Bindings

All functionalities in the Lobby-scene can be used by using the following key bindings.

- **CTRL + L**: Lists all lobbies on the server.
- **CTRL + P**: Lists all lobbies and the players connected to each lobby.
- **CTRL + S**: Lists all players connected to the server.
- **CTRL + H**: Opens the High-score.
- **CTRL + J**: Opens the Join-Game-window.
- **CTRL + N**: Opens the Create-New-Lobby-And-Join-It-window.
- **CTRL + W**: Opens the whisper-chat and asks who the user wants to whisper to.

### 7.3 Game-Scene Key Bindings

All functionalities in the Game-scene except selecting a card can be controlled using the following key bindings.

- **CTRL + R**: Sets the player to *ready* and increases the ready-countner.
- **CTRL + W**: Opens the whisper-chat and asks who the user wants to whisper to.
- **CTRL + H**: Opens the High-score.
- **CTRL + E**: Leaves the lobby.
- **ALT + L**: Lists all lobbies and the connected players to each lobby.
- **ALT + S**: Lists all players connected to the server.