

Manual

Kniffeliger is a fun and easy game to play with your friends and family. The following manual describes the rules and the detailed game play.

How to start the game.jar

To build the jar you need to open the terminal where the jar-file is located. To start the client enter:

```
java -jar kniffeliger-VERSION.jar client ipAddress:port [username]
```

And to start the server:

```
java -jar kniffeliger-VERSION.jar server port
```

How to start the game

To start the game, follow the instructions as written below:

- (i) To start a game a player first needs to create a lobby.
- (ii) After creating a lobby, at least two players need to enter the lobby.
- (iii) If there are enough players in the lobby, one player in the lobby can press 'start' to start the game.

Detailed Rules

The objective of Kniffeliger is to score points by rolling five dice to make specific combinations which are on the entry sheet. The game consists of 14 rounds. In each round, a player can roll the dice up to three times to achieve the desired combination. At the beginning of each turn, the player rolls all five dice. After the first roll, the player can choose to:

- Keep all the dice as they are
- Keep some of the dice and reroll the rest
- Reroll all the dice

After the second roll, the player can again choose to keep some or all of the dice and reroll the rest if desired. After the third roll (or earlier if the player chooses), the player must choose one of the 14 scoring categories to score the roll.

There are 14 scoring categories, and each can only be used once per game. After you save all the rolled dice, you assign them to a combination on the entry sheet. The scoring categories are the following:

- Ones: Total of all ones rolled
- Twos: Total of all twos rolled
- Threes: Total of all threes rolled

- Fours: Total of all fours rolled
- Fives: Total of all fives rolled
- Sixes: Total of all sixes rolled
- Three of a Kind: Total sum of all dice if at least three are the same
- Four of a Kind: Total sum of all dice if at least four are the same
- Full House: 25 points for three of one number and two of another, so one pair, one triplet
- Small Straight: 30 points for a sequence of four consecutive numbers (e.g., 1-2-3-4)
- Large Straight: 40 points for a sequence of five consecutive numbers (e.g., 2-3-4-5-6)
- Kniffeliger: 50 points for all five dice showing the same number
- Chance: Total sum of all dice regardless of combination
- Pi: 31 points for the combination 3-1-4-1-5 (aka pi)

After you save your dice and assign them to a combination and your saved dice show a sum that is zero modulo 5, you get to roll another dice: the action dice. With this dice, you can perform the following actions:

- Steal an entry: you can steal an entry of another player instead of rolling the dice, the other player then gets zero points for this combination
- Freeze a combination: you can freeze one combination of another player, the other player cannot fill this field in the next round
- Cross out one combination: you can cross out one combination of another player, the other player cannot fill this combination at any later point and is skipped the following turn
- Shift all combination sheets: you can shift the collected points/combinations of all players in a circle by one
- Exchange two combination sheets: you can exchange their collected points/combinations with another player
- The player gets one of each of the above

After rolling the action dice, you can choose to keep it for later or if you want to play it immediately. After that, you finish a round.

Gameplay

The game consists of 14 rounds. In each round, every player has one turn. Each turn the player goes through the following steps:

- If the player has crossOut or freeze dice. Once played it gets removed from the player's action dice set. The player can play as many of these dice as there are in his/her action dice set.
- The player is asked to either steal an entry or to just roll the dice. The stealing function only works if the player has a 'steal' action dice.
 - If the player wants to steal an entry he is asked to tell the name from whom he wants to steal and the entry name. If both are correct values, the entry gets stolen, so the points are on the thief's entry sheet now and the victim gets zero points on his/her stolen entry. Only one entry can be stolen each round.
 - If the player wants to roll the dice he/she can roll it three times. Each time the player can decide which dice he/she wants to save. Once saved, a dice cannot be played again. The player can roll the dice up to three times or until all dice are saved. If the dice are saved, the player chooses an entry to save the dice for. If the dice are

saved then it gets checked if the sum of dice is divisible by three. If so, the player gets one of the action dice mentioned in the rules above.

(iii) After a player either stole an entry or rolled the dice, his/her round is over and every player with a 'shift' or 'swap' action dice is asked whether they want to play it.

3.1 If a player wants to shift the entry sheets, then all entry sheets are shifted by one.

3.2 If a player wants to swap entry sheets, then they need to say with whom they want to swap out their sheets.

The game continues until all entry sheets are filled, and at the very end, it displays the end of the game.