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## Contract Rummy

The card game I chose to create a variant of for this project was Contract Rummy. I decided upon this game mainly because I had played the game years ago with my family and I wanted to go back and learn the game and its mechanics. Unfortunately, Contract Rummy presented some problems right off the bat due to the length of the game. Contract Rummy is not a short game by any means and, as a result, was difficult to test at times because it was so hard to convince three to five other people to spend hours with me testing variations of a game when they had plenty of their own homework to do. On the other hand, because of the unique nature of the game that requires it be broken into distinct “rounds” with similar, yet separate, goals, I was able to get around the total length of the game by attempting to test a different change during each round. To start the process off, I searched for a set of rules from which to base my changes. Since it had been years since I had played, I ended up simply taking a rule-set from the internet that seemed vaguely familiar to me. It was as follows (McLeod):

### **Introduction**

Contract Rummy is a version of Rummy consisting of a series of rounds. In each round there is a different **contract**: players have to collect a particular combination of groups and sequences before they are allowed to meld. The contracts become progressively more demanding on each deal.

### **Players**

The game is best played by three to five players; the optimum number is four.

### **Cards**

Contract Rummy is played with two standard decks of 52 cards, plus jokers. The number of jokers used should be one fewer than the number of players, so three players play with 106 cards, four players with 107 and five with 108.

## The Deal

There are seven rounds altogether. The first dealer is chosen randomly, and thereafter the turn to deal rotates clockwise. The deal itself is clockwise, one card at a time. In the first three rounds, the players receive 10 cards each; in the last four they receive 12 cards each.

The cards remaining after the deal are placed face down on the table to form the **stock pile**, the top card of which is turned face up and placed alongside to start the **discard pile**.

## Object of the Game

The object of each round is to dispose of all your cards by a combination of melding, laying off, and discarding. In order to do any melding or laying off, you must begin by fulfilling your contract for the round currently being played.

There are two kind of melds, sequences (also called runs) and groups (also called sets or books).

- A **sequence** or **run**, in this game, consists of at least **four** consecutive cards of the same suit, such as ♣4 ♣5 ♣6 ♣7. An ace can count as low or high but not both at the same time. So ♦A ♦2 ♦3 ♦4 and ♣J ♣Q ♣K ♣A are both valid sequences, but ♠Q ♠K ♠A ♠2 is not valid.
- A **group**, **set** or **book** consists three cards of the same rank, irrespective of suit, such as ♦5 ♦5 ♠5.

Once it has been melded, a sequence can be extended by adding further consecutive cards at either end, as far as the ace in either direction; the longest theoretically possible sequence being 14 cards long with an ace at each end. A group can be extended by adding further equal ranking cards.

When a player goes out, by disposing of all their cards, the other players score penalty points for all the cards remaining in their hands. The object of the game is to be the player with the lowest score at the end of the series of seven rounds.

## The Contracts

The contracts in each successive round are as the following.

1. Two Groups of 3 (6 cards)
2. One Group of 3 and One Sequence of 4 (7 cards)
3. Two Sequences of 4 (8 cards)
4. Three Groups of 3 (9 cards)
5. Two Groups of 3 and One Sequence of 4 (10 cards)
6. One Group of 3 and Two Sequences of 4 (11 cards)

## 7. Three Sequences of 4 and No Discard (explained later)

### The Play

The player to dealer's left takes the first turn. A turn consists of:

#### 1. The Draw

The player **must** either draw the top card of the stock pile or take the top card of the discard pile. A player who chooses to draw a card from the stock pile must first give any other player who wishes the opportunity to take the discard (see below).

#### 2. Melding

The player may place groups or sequences from hand face up on the table. This can only be done once by each player during each round. When melding, you must lay down exactly the combination of groups or sequences which is required by the contract for the round you are in. For example, you cannot lay down one group if you need two, or if you need a sequence also. When you meld, you can only meld the minimum number of cards required. For example if you have a sequence of a greater number of cards than four, or a group of more than three, you must wait until your next turn before you can lay off the additional cards. Melding is **optional** - you are not required to meld as soon as you are able to.

#### 3. Laying off.

Laying off is adding cards to groups or sequences which have already been melded - both your own and those melded by your opponents. You may lay off only if you have already melded in some previous turn of the current round. You may not lay off before or on the same turn in which you meld. There is no limit as to how many cards you may lay off in one turn. Laying off is **optional** - you are never obliged to lay off cards if you do not wish to.

#### 4. The Discard.

At the end of your turn, you **must** discard one card from your hand and placed it face up on top of the discard pile (except at the end of round 7 - see below).

Play continues with players taking turns clockwise around the table until one person has got rid of all the cards from their hand.

It can occasionally happen that the stock pile runs out of cards. If a player wishes to draw a card when there are no cards left in the stock pile, then you take all the cards of the discard pile except the top one, shuffle them together, and place them face down to make a new stock. The top card of the old discard pile remains face up to start the new discard pile. Play then continues as before.

If there are a lot of "May I?"s (see below), it is just conceivable that both the stock pile and the discard pile might run out of cards. In that case the play ends. There is no winner and everyone scores penalty points according to the cards that they have in their hands (see scoring).

### Taking the Discard Out of Turn (the "May I?")

If at the start of your turn you choose to draw from the stock rather than take the discard, any player who desires the card on the top of the discard pile may ask for it (hence the name "May I?" of the version

described later). If several people want the discard, it goes to the earliest in turn to play after the person who is about to draw from the stock. The player who takes the discard in this way must take in addition the top card from the stock as a penalty card.

After someone has taken the discard out of turn, it is possible for a different player to take the next card of the discard pile in the same way, also taking a penalty card from the stock pile along with it. There is no limit as to how many times this can be done, but the same player is not allowed to take two successive cards from the discard pile in this way.

Only when the other players have had the opportunity to take any cards they want from the top of the discard pile does the person who was about to play draw from the stock and continue their turn. Note that the play resumes from its original point - the turn to play does not jump to the person who takes the discard.

Note also that if the player whose turn it is to play wishes to take the card at the top of the discard pile they may do so, without taking a penalty card from the stock pile, and no one else then has the chance to take any discards.

## Jokers

Jokers may be used in either sequences or groups, to substitute for any missing card.

If a joker is played in a sequence, any player who has the card which the joker is representing, and who has already melded their contract on a previous turn, may, during the laying off phase of their turn to play, take the joker, replacing it in the meld with the card it represents. Any joker gained in this manner must be laid off in the current turn - it cannot be saved for play in a later turn.

Jokers played as part of a group are considered "dead"; they cannot be reclaimed and played elsewhere.

## Special Rules for Particular Rounds

### Rounds 1,2,3

Dealer deals 10 Cards.

### Rounds 4,5,6,7

Dealer Deals 12 Cards.

### Rounds 3,6,7

In rounds in which the contract requires multiple sequences, you are not allowed to meld two sequences in the same suit which are contiguous. For example     and     are not acceptable as two sequences in a contract. To be valid, sequences in the same suit must either have a gap between them or overlap. The following are valid as a pair of sequences:

-     and    
-     and    

The above restriction applies only to sequences melded by a single player as part of a contract. You are allowed to meld a sequence which is contiguous with a sequence melded by a different player, and it does not matter if your sequences which were originally separated by a gap become contiguous as a result of cards laid off by yourself or another player.

### Round 7

In the final round, you must meld all your cards at once. In this round only, the sequences you meld are allowed to be longer than four cards - in fact one of them will have to be longer, as you have at least 13 cards after drawing. As you have melded all your cards, there is no discard - play ends immediately after the meld.

### Scoring

When someone **goes out** by getting rid of all their cards, play ends and the other players score penalty points for all the cards remaining in their hands, the cards scoring as follows:

Face cards (K,Q,J)	10 Points
Ace	15 Points
Joker	15 Points

Number Cards are worth their spot (index) value.

At the end of the seventh and last round, the player with the lowest total score wins.

### Variation

The game can be played without jokers.

If anyone was unconvinced as to the possible length of the game, the length of the rules above certainly drives the point home. My first response to the length of the rules was simply: "How in the world can I possibly test so many variables?" In the end, I decided the best I could do was simply to begin brainstorming for the first round of testing and then go from there. My initial brainstormed list included such changes as the inclusion of betting with chips in between rounds, betting with chips before any rounds had started, changing the function of the jokers, and doubling the size of the deck and changing the required contracts. However, after entering into the first play-test during lab last Monday it became immediately obvious that all of the above changes would either change the flow of the game in a way that I did not like, be far too difficult to test with such a long game because of the radical nature of the change (the doubling of the deck and changing

of contracts in particular), or simply have no effect at all because I misunderstood the rules of the game on the first read through.

As a result, the only change I made to the game that I decided to keep past the first play test was a fairly minor change to the “laying off” part of the game. The change was made in an attempt to make the game a little faster by allowing players to not only add to other melds, but lay down whole new sequences and/or groups given that the new melds fulfilled the minimum requirement for a set or sequence and that the player had already fulfilled his or her contract. The minimum for a sequence is four consecutive cards in the same suit and the minimum for a group is three cards with the same rank regardless of suit. This change to the possible lay offs is not an entirely new concept to the variations of Rummy games that are in the same family of Contract Rummy. For example, both Rummy Rummy and 6 7 8 9 10 allow the player to lay off extra melds after they have fulfilled the contract for that round (Rummy-Games.com). In the end, the change did indeed make the play faster, but also introduced an interesting pattern that I will go into more detail about shortly.

Even though I did not make many huge changes during the first play through of the game, it was far from a waste of time. It brought to light some of the unspoken mechanics and flow of the game as well as where the rules above were unclear and could use some fixing. The first aspect of the game that I felt had the potential for tuning was the scoring system. As a result, I decided to try out adding an extra flare to the rules by changing it so that every sequence and/or group melded **after** the player has fulfilled the contract would allow them to reduce their score by giving them negative points. Although I thought this sounded like an awesome idea, it actually changed practically nothing due to a pattern that I eventually saw after play-testing the game further (the same as mentioned above). The pattern was that after the first player melds the round seems to last only a few turns past that meld because that same player can often get rid of their cards fairly quickly. As a result, once the first player melds there is not usually a huge chance for everyone to rack up on the negative points because not only do they have to wait a turn after they meld, but their own meld also helps the initial player because it gives that initial person more places to play their remaining cards. In the

end, the negative points either don't come into play or are simply gained by the winner of the round (who didn't get any penalty points in the first place). As a result, I did not end up keeping the negative points change in the final rule-set.

The second most glaring problem that I found during the first play-through was the "May I?" aspect of the game. First of all, if the game is played by only three people, that means only two people are really fighting for the card and during the course of play we quickly found that it was completely uncompetitive and boring. The very fact that you must ask the other players before taking the card made it so uncompetitive that I felt a great change for the game would be to revamp it by not requiring anyone to ask. In other words, after the player whose turn it is has decided to draw from the stock and not the discard, the discard becomes first-come-first-serve and the player who manages to get their hands on it first gets it and still takes the penalty card for drawing out of turn. When this change went into effect in the next round of play-testing the effect was immediate and positive. The change made everyone more alert to what was being discarded and even led to fake-outs where one person, whose turn it actually was, would jump for the card as if to draw out who actually wanted it. This made the game not only more competitive, but also hilarious to watch. Since this change was so well received, I kept it for the next play through where it was also really enjoyed so I kept it in for the rest of the play-tests and the final rule-set.

After making the changes noted above, I was pretty stumped. The game was fairly well-balanced, and yet it still had the pattern I mentioned above that I really wanted to find a way to change, by making it so that melding first was not always the most advantageous act. I also just wanted to cause trouble. I came up with my rule initially by simply going back to the readings and trying to figure out exactly where the pattern could be coming from. I eventually concluded that the pattern and first meld advantage came from a mixture of the information available to all players, to only one player, and to the lack of noise in the system (Salen and Zimmerman). In a non-game system, noise can be extremely detrimental to the function of the system as a whole; however, games are completely different. Adding some degree of noise can actually enhance the play of the game by completely changing the flow of information within the game (Salen and Zimmerman). It

seemed to me that the game as is had very little noise in it because there was little to no uncertainty or misinformation other than what I had induced by changing the “May I?” action and even that was not really a huge amount. I decided to shake this up a bit by adding the following rules:

### The Screw Over

- Each player has the ability to “screw” another player **once per round**.
- Screwing another player can be done in the following manner:
  - If the current player sees that one of the melds already in play (on the table) has a card s/he wants that player may take the desired card and replace it “with a card for the screwed player to remember her/him by”.
  - The results of a screw for the screwed player can vary:
    - In all cases, if the removal of that one card has made it so the group or sequence does not fulfill its minimum requirements, that entire group/sequence (in addition to the replacement card) must be taken back into the hand of the player being screwed. The “minimum” requirement for a group is to have 3 cards for that group. The “minimum” requirement for a sequence is 4 cards of the same suit that are consecutive.
    - If the removal and replacement of that one card does not make the group/sequence fall below its minimum requirement (as explained in the previous bullet point), then all that must be taken into the screwed player's hand is the replacement card.
    - If the sequence/group fails the minimum requirements and is taken back into the screwed player's hand **and** makes it so what the player still has on the table does **not** fulfill the minimum for the contract for that round then the player is truly screwed. The player is basically back to square one in that they may no longer “lay off” cards until they fulfill the contract by replacing the group/sequence they had to take back into their hand. Clarifications:
      - Yes, this means that even after the player fulfills the contract in a later round they must still wait **another** round before they can begin “laying off” again.
      - The player **only** takes back into his/her hand the group/sequence that was screwed. The other parts of the contract that were not screwed are left on the table for anyone else at the table to add to if they want.
      - The player **only** replaces the screwed group/sequence. They may **not** lay down a whole new contract in an effort to get rid of more groups/sequences.
    - If even when the player takes back the group/sequence they still have enough on the table to fulfill the contract then being screwed does not affect them in any other way.
- There is one major condition for screwing someone else: The player who steals the card **must** be able to either meld or lay down a group/sequence with the stolen card in it **on that turn**.
  - If the player has not melded yet, then the card must be used in their meld **on that turn**. They may not simply place down a random group/sequence. They also can only meld the **minimum** for the contract.
  - If the player has already melded in a previous turn they may lay off the card in either a group or sequence.
- A player may not steal back the same card that was stolen from them. In other words, if the player being screwed had a group composed of  $\heartsuit 5 \spadesuit 5$  and the other player stole the  $\spadesuit 5$  and laid it down in a whole other group, the screwed person may not screw them back by taking the  $\spadesuit 5$  back (not even if the group the player laid down has two  $\spadesuit 5$ 's in it).
- A player may **not** screw themselves.

The reactions to the following rule were, in one word, awesome. In all of the rest of the play-tests I did everyone really enjoyed the dynamics that the rule created. It became no longer as advantageous to be the first to meld, but neither was it advantageous to hold on to your cards forever. I believe that the reason for the change in pattern was that the addition of the noise (player uncertainty) created by the rule above completely changed the flow of information in the game. Initially the information known to all players was the discards, melds, and what people were taking from the discard. Although the rule did not change **what** was known by all players it did change **when** it was revealed and **what** the meld signified to the other players. Putting a meld down no longer meant you were safe and no longer acted as a signal for everyone else to meld as quickly as possible and/or get rid of as many face cards, aces, and jokers as they could before the next turn. Instead, the meld became a source of new information in the sense that it's a whole new set of cards that can be used by anyone else at the table and not just an indication of what cards that player had in his or her hand.

After finalizing and flushing out the details of the screw over and the "May I?" remix, I still play-tested the whole game a couple more times with different people just to ensure I had gotten the opinion of a variety of players. The final problem with the rules that these extra play-tests brought to the foreground was a problem with the rule indicating the number of players of this game. During my play-testing process I played the game with three players, four players, and five players and the results were interesting, but not entirely surprising in retrospect. When only three people play the game it goes much faster not just because of the obvious small number of players, but because the lack of players means that there is a much lower chance that someone else is building the same runs/sequences that you are. In that way it makes it easier for everyone to get the card they want. On the other end of the spectrum, if there are five players there does not seem to be quite enough cards in the deck because there are more total cards in the hands of the players. As a result, the chance that two people are working on the same sequences/runs really seems to increase. In addition, with five people one person can put everyone else at a severe disadvantage by basically "buying off" the top card on every turn and getting a huge chunk of the deck in their hand. For them this is an advantage because the amount of information available to them is drastically increased and, since there were

already fewer cards in the deck to begin with, it leaves fewer cards for everyone else and makes it much harder for them to fulfill their contract. In other words, they increase the amount of information known only to them, but severely decrease the amount of information only known to the game (Salen and Zimmerman). With four players this problem seems to be a bit more balanced. The number of cards in the deck after the initial deal is still enough that even if one person takes a chunk, there are still plenty for the rest of the table so even though there is some advantage, it is not as huge. In addition, you don't have the same problem as with three players where there are so many cards that practically anyone can make a sequence with little competition for cards so the "May I?" remix remains interesting. As a result, I would like to make a slight change to the rules about the number of players:

- Game should be played with four players **unless** a quicker game is desired at which point three players can be used.
- For larger numbers of players (greater than four), the number of decks should basically be changed such that there is one deck to every two players.

Although I would not consider these rules necessarily set in stone for the game, I do think they will help the overall balance of the game. It should be noted that the second bullet point is actually what is used in some other variations of Rummy so it's really not a drastic change in the mechanics of the game (McLeod). So, in conclusion, I have made only three major changes (the laying off tweak, the "May I" remix, and the Screw Over) to the play of the game and one last minor change to the balance of the game resulting from the card to player ratio. I really feel like these changes make the game completely different in a really fun way because of the additional noise and the change in the flow of information in the game. In addition, I was unable to find a Contract Rummy rule-set that included any rules like the Screw Over so I essentially made my own Rummy game. Therefore, I think it's only fair that my variation get its own name: Screw Rummy.

### **Annotated Bibliography**

McLeod, John. "Contract Rummy." Card Games. 1 January 2008. 8 March 2008.

<<http://www.pagat.com/rummy/ctrummy.html>>

This is the website from which I got the base rule-set to start out with. The site also was cool because on the main page it has bells, hearts, acorns, and leaves (I think?), as well as clubs, swords, coins, and I think bells, all of which were mentioned as the suits of different decks of cards in one of our past readings.

Rummy-Games.com. "Contract Rummy." 2008. 16 March 2008. <<http://www.rummy-games.com/rules/contract-rummy.html>>

Very useful in finding a much of different rule variations because not only did it go into detail on different variations on the site itself, but it also had plenty of links to other sites.

Salen, Katie and Eric Zimmerman. Rules of Play: Game Design Fundamentals. Cambridge: The MIT Press, 2004.

I pretty much only used the chapters on noise and information (Ch. 16 and 17) from the book.