

Welcome to the virtual Rummy Card Game! This super fun card game allows two players to collaboratively compete and show off their strategic card skills!

How to run from the command line:

```
python3 rummy.py -player1 "name" -player2 "name" -shuffle
```

How to play:

1. Run the above statement from the command line.
2. The first player will be prompted to choose a card from the deck, 1, or the discard pile, 2.
3. Since there is no discard pile yet, they must choose a randomized card from the deck by selecting 1.
4. Since they just drew a card, they will have 8 cards in their deck, and this will be shown to the player.
5. Then, they will be prompted to discard one of their cards using numbers 0-7, starting from the number all the way on the left to the card all the way on the right.
6. Once they discard their card, their turn will be over.
7. Next, the program will go to player 2's turn, and prompt them to choose from the deck, 1, or the discard pile, 2.
8. Since there is a discard pile, the player can choose whichever card they want, a random one or a specific one.
9. Then player 2 will discard the card they choose, the same way player 1 did.
10. Then these steps, 7-9, will be repeated until someone gets a run of the same suit (Ex. 7 of clubs, 8 of clubs, 9 of clubs) or a set (Ex. 3 of clubs, 3 of hearts, 3 of diamonds).

| Method/Function | Primary Author | Techniques Demonstrated |
|----------------------------|----------------|---|
| Card <code>__init__</code> | Anna Carpenter | |
| Card <code>__str__</code> | Anna Carpenter | Magic methods |
| Card <code>__eq__</code> | Anna Carpenter | |
| Deck <code>__init__</code> | Jayla Parrott | |
| Deck shuffle method | Jayla Parrott | |
| Deck deal method | Samvitti Nag | List Comprehensions/Generator Expressions |
| Deck draw method | Samvitti Nag | Conditional Expressions |

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|--------------------------------------|----------------|---|
| Player __init__ | Alex Britton | |
| Player draw_card method | Alex Britton | |
| Player discard_card method | Anna Carpenter | |
| Player sort_hand method | Alex Britton | Lambda Expression |
| Player is_run method | Samvitti Nag | |
| Player is_set method | Anna Carpenter | Optional parameter |
| Player declare_win method | Samvitti Nag | |
| RummyGame __init__ method | Jayla Parrott | Composition of two classes |
| RummyGame deal_cards method | Jayla Parrott | |
| RummyGame display_game_state method | Alex Britton | f-strings |
| RummyGame handle_draw method | Anna Carpenter | |
| RummyGame handle_discard method | Alex Britton | |
| RummyGame take_turns method | Jayla Parrott | |
| RummyGame check_win_condition method | Alex Britton | |
| RummyGame play_game method | Anna Carpenter | |
| Parse_args method | Jayla Parrott | ArgumentParser class from argparse module |

References

Rummy (Rum). (2024). Bicyclecards.com. <https://bicyclecards.com/how-to-play/rummy-rum>.

We used this source as a reference for how to conduct our game. This helped to be mindful of the unique rules of Rummy and implement those into our program.