My project will be the card game [Rummy](https://bicyclecards.com/how-to-play/rummy-rum/). It’s a 2+ player game where players are dealt a hand of 6-10 cards (depending on the number of players) and need to make melds (sets/runs of cards) out of them. My version will probably only be for one person to play against a computer.

The game will have a text-based UI. It will start with a brief introduction/explanation of how to play the game. At the start of each turn it will show your hand (with cards printed like this: 7♣), the melds on the board, and the last discarded card. It will then print out the card drawing menu, with options to rearrange your hand and draw a card from the stock and discard piles. Then it will print out the card discarding menu, which will have options to rearrange your hand, lay down cards in melds, and discard a card from your hand.

This project will have several ADTs. There will be a player object that contains a list, which stores the player’s hand, and a similar computer player object. I chose a list for the hand because you need to be able to access specific cards in your hand, and the size doesn’t change. The draw pile will be stored in a queue because the cards are shuffled and then just drawn in order. The discard pile will be stored as a stack because the player has an option to take the most recently discarded card. There will also be meld objects which store the cards in the meld using a list.

I will code this project in Java, and my environment will be VS Code. I might make a Git repository for the project so I can work on it on my laptop and desktop.