

Code Narrative

I implemented the A code with extra credit for my Crazy Eights program.

I created a Player class, which keeps track of the player's hands, whether or not they have a match, and which card in their hand matches the card in the deck. The Player class also keeps track of whose turn it is, as well as the winner of the game.

In my driver, I instantiated draw pile and starter pile deck objects, and two player objects. I added 5 cards each to the player's hands, and flipped one card from the draw pile onto the starter pile. To start the game, I created an infinite while loop, which is only exited once a player's hand is empty. From there, the player's take turns playing cards that match the top card of the starter pile. If they do not have a card that matches, a static function in the driver named drawTilMatch is called, and they keep taking cards from the draw pile until they find a card that matches. The main code in my driver was getting really messy with a lot of nested if/else loops, so I created the drawTilMatch function. I also changed the Card objects for the matching cards and the top card in the starter pile, so that they are instantiated outside of main as static variables that can be accessed by the drawTilMatch function.

To test my code, I printed the player's hands, as well as the draw pile, after each run through the while loop. I also kept track of the number of matches each player had and printed them at the end of the game (although this was more useful during earlier versions of the code, where the winner was based on the number of matches). I spent a lot of time testing my program, and found that Eclipse's debugger was really useful for detecting issues. At the end of the game, I printed the winner of the game and the final hand size of each player!