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Crazy Eights Card Game Project

In my project I will be implementing the crazy eights card game in Java. I plan on creating seven classes which will be: CardArray, Card, Deck, Hand, Pile, Player, and User. The Card objects will be used during the game, which make up the standard playing cards deck of 52 cards. The Pile class represents piles of cards that accumulate during the game as either stock or waste. The stock pile is a pile in which players draw from during the game, and the waste pile is the pile of discarded cards. The rules of the game are as follows: the top card on the “waste pile” determines what card can be placed down next. Any matching suit, matching number or an 8 card can be placed down, otherwise players need to draw from the stock pile. A maximum of three cards can be acquired before passing on to the next player if no acceptable cards can be placed down. The game ends when one player has no cards left, and there is a point system involved. Players with remaining cards get points based on how many cards they have left, in addition to the content of each card. Eights are worth 20 points, face cards are worth 10 points, and all other cards are worth their rank. Once one player reaches 100 points, the player with the least amount of points wins. Each of these rules will be commented accordingly based on the methods that perform these operations. CardArray will be an abstract class that encapsulates an array of the playing cards, which will be the super class to Deck and Hand classes. The Player class represents a player playing the game of crazy eights with multiple players needed in order

to play the game. The User class is the subclass to the Player class, where the user will represent the human actually playing the game.