Card Game Report

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Date: 16/06/2019

The development was started with the main method the first thing that was done is to instantiate the data structure "Deck", which was defined above as a class, structure that has an enumeration of colors and an array of strings representing the cards.

Then I begin the printed the cards by colors in the order proposed in the project going through the colors of the enumeration in the class "Deck" and the cards Then i call the method newGame(), The first thing that this method does is to see if there is a database.xml file to read the stored victories of the players in previous games, if it does not exist, it then creates it, updating the array winnings appropriately using the DocumentBuilderFactory to read from the xml file. Subsequently.

The begin with hands of the players (as linked lists as it is more efficient to perform insertions and deletions) and the deck (data structure), in addition to distributing the initial cards with the getCard() method the Deck class, which is responsible for distributing random cards not repeated.

Then comes a while statement, which is responsible for executing the moves while no player has won (the playerWon() method checks if he wins), takes a card from each player randomly with the getPlayerCard() method, takes the biggest one and assigns to it all the cards in the hand of the player who won, in addition to increasing the rounds counter roundsCount.

Then we check which player won and in how many rounds, printing it on the screen. The rest of the method code newGame() uses DocumentBuilderFactory to persist the data in the database.xml file, increasing the wins of the player who won.