2 Card Poker Challenge

Develop a simplified 2 card poker game to show off your C# programming prowess.

1. 2-6 players.
2. 2-5 rounds.
3. The dealer shuffles the deck at the start of each round.
4. The dealer deals 2 cards to each player.
5. The dealer ranks each player's hand according the poker hand ranking rules
6. At the end of each round, each player is assigned a score (0 – weakest to strongest x-1 (where x = number of players)).
7. The overall winner is determined once all rounds have been completed. The winner is the player with the highest score.

Poker Hand Ranks:

In order from strongest to weakest

1. Straight Flush (2 cards of sequential rank, same suit)
2. Flush (2 cards, same suit)
3. Straight (2 cards of sequential rank, different suit)
4. 1 pair (2 cards of same rank)
5. High Card (2 cards, different rank, suit and not in sequence. Highest card wins)

- Individual cards are ranked A (highest), K, Q, J, 10, 9, 8, 7, 6, 5, 4, 3, 2 (lowest).
- Suit order (strongest to weakest): Spades, Clubs, Hearts, Diamonds

Objective:

Develop a 2 card poker game according to the rules above. Implement each feature according to the acceptance criteria stated later. You will be judged on the following merits:

1. Code quality
2. Test coverage
3. Correctness (according to the game specification)

You have a weekend to complete this challenge, best of luck.

Feature: Shuffle Deck

As The Dealer
I want to Shuffle the Deck
So that the card sequence is different for each round

Scenario: Shuffle Deck X Times

Given it is the start if a new round
      And the game is not over
      And a deck of 52 cards
When I shuffle the deck X time (s)
Then the deck is in a different order each time

Feature: Deal Cards

As The Dealer
I want to deal 2 cards to each player
So that the game can proceed

Scenario: Deal Cards

Given it is the start of a new round
      And the game is not over
      And I have shuffled the deck
When I deal the cards
Then each player should have 2 cards
      And each player has a unique 2 cards

As The Dealer
I want to rank each players' hands
So that I can determine the winning hand

Scenario: Determine Winner

Given I have dealt each player their cards
When I rank each players hand (according to poker hand rankings)
Then the player with the highest ranked hand is the winner
        And each player is assigned a score from 0 (weakest) to X-1 players (strongest)

Feature: Determine Winner

As The Dealer
I want to determine who the overall winner is
So that the game can end

Scenario: Overall Winner

Given all rounds have been played
When I determine who the overall winner
    And players are ordered from highest score to lowest score
Then it is known who the winner is
    And each player knows what place they finished at