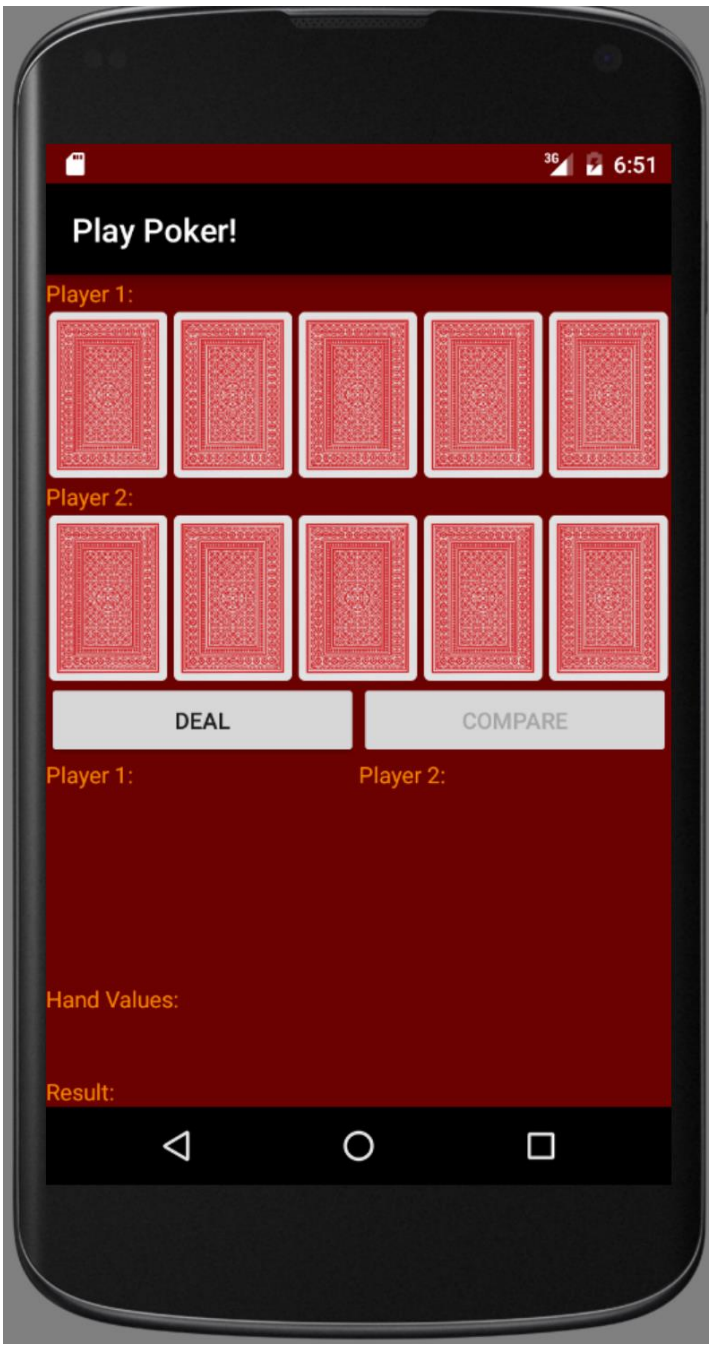
Midterm Project - Poker App

Implement an app that deals two five-card poker hands and displays and prints out each hand's cards. Each time the "DEAL" button is clicked, the app deals two new hands and displays and prints out each hand.

This is how the app looks like when it starts:



And this is how it looks like after the player has clicked the “DEAL” button:

Clicking the “COMPARE” button determines whether a hand contains:

- a pair
- two pairs
- three of a kind (e.g., three jacks)
- four of a kind (e.g., four aces)
- a flush (i.e., all five cards of the same suit)
- a straight (i.e., five cards of consecutive face values)
- a full house (i.e., two cards of one face value and three cards of another face value)

It then evaluates each hand and determines which hand is better.

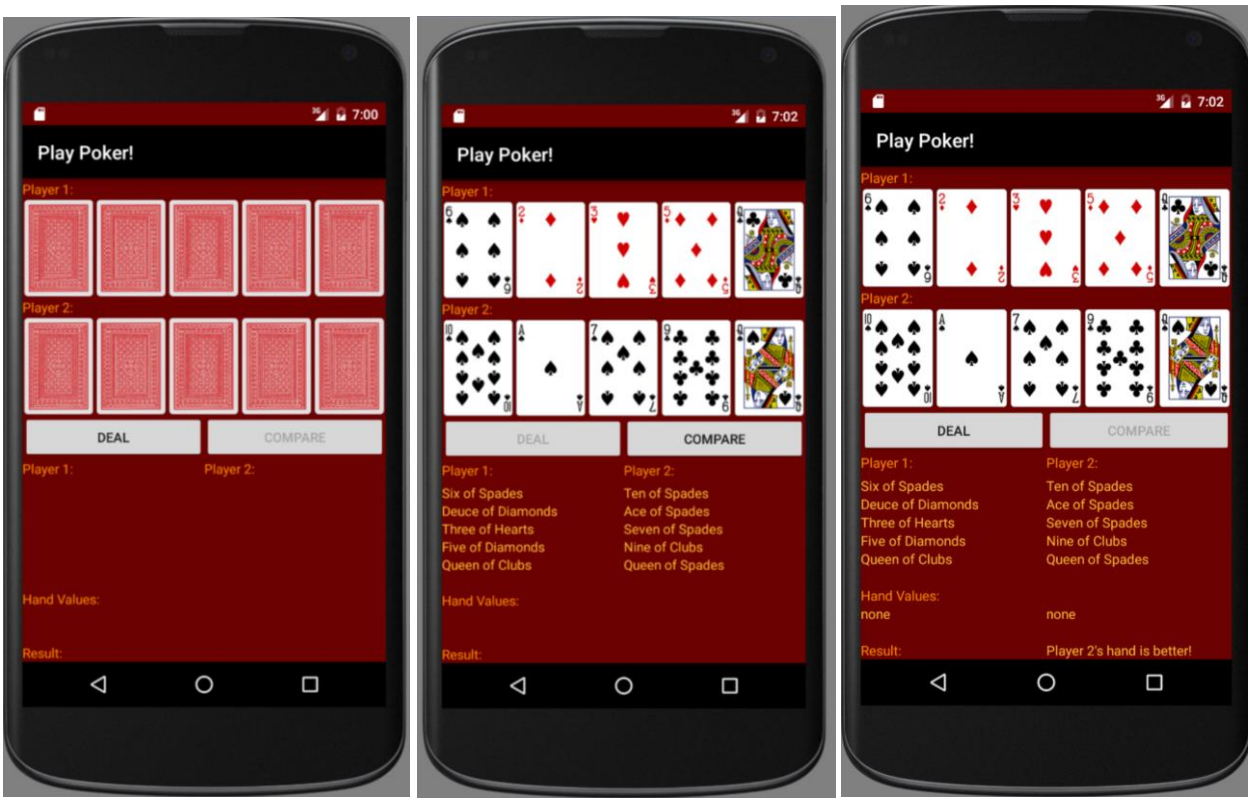
Use the rules specified in the “Poker Hand Rankings.pdf” file to determine the value of each hand.

Poker is played with different set of hand ranking rules in different countries, so you can write the logic to use a different set of rules as long as you include the set of hand ranking rules you used.

For testing purposes and to make sure that your logic is able to determine the value of each hand for any possible combination of cards, you need to hard code the values of high ranking cards (royal flush for example) since the chance that a player gets this hand is slim and testing your logic with playing the game might take a long time before such a hand is dealt.

Comment out these hard-coded lines before submitting your final project but don’t delete them so I can use them to test your submitted project.

The following images shows this app in action:




7:09
Play Poker!
Player 1:
Player 2:
DEAL
COMPARE
Player 1:
Jack of Clubs
Deuce of Diamonds
Six of Diamonds
Eight of Hearts
Jack of Hearts
Player 2:
Three of Hearts
Nine of Clubs
Seven of Hearts
Ace of Clubs
King of Spades
Hand Values:
Result:


7:09
Play Poker!
Player 1:
Player 2:
DEAL
COMPARE
Player 1:
Jack of Clubs
Deuce of Diamonds
Six of Diamonds
Eight of Hearts
Jack of Hearts
Player 2:
Three of Hearts
Nine of Clubs
Seven of Hearts
Ace of Clubs
King of Spades
Hand Values:
One Pair
none
Result:
Player 1's hand is better!


7:12
Play Poker!
Player 1:
Player 2:
DEAL
COMPARE
Player 1:
Deuce of Diamonds
Nine of Clubs
Deuce of Clubs
Ten of Hearts
King of Spades
Player 2:
Seven of Hearts
Queen of Hearts
King of Diamonds
Nine of Diamonds
Seven of Spades
Hand Values:
Result:


7:12
Play Poker!
Player 1:
Player 2:
DEAL
COMPARE
Player 1:
Deuce of Diamonds
Nine of Clubs
Deuce of Clubs
Ten of Hearts
King of Spades
Player 2:
Seven of Hearts
Queen of Hearts
King of Diamonds
Nine of Diamonds
Seven of Spades
Hand Values:
One Pair
One Pair
Result:
Player 2's hand is better!


7:16
Play Poker!
Player 1:
Player 2:
DEAL
COMPARE
Player 1:
Queen of Hearts
Ten of Diamonds
Queen of Diamonds
Queen of Spades
Five of Diamonds
Player 2:
Three of Hearts
Eight of Spades
Queen of Clubs
Three of Diamonds
Six of Clubs
Hand Values:
Result:
7:16
Play Poker!
Player 1:
Player 2:
DEAL
COMPARE
Player 1:
Queen of Hearts
Ten of Diamonds
Queen of Diamonds
Queen of Spades
Five of Diamonds
Player 2:
Three of Hearts
Eight of Spades
Queen of Clubs
Three of Diamonds
Six of Clubs
Hand Values:
Three of a Kind
One Pair
Result:
Player 1's hand is better!

Player 1: Flush

Player 2: One Pair

Player 1: One Pair

Player 2: One Pair

Player 1: Two Pair

Player 2: One Pair