

Lab 6- Windows Programming – Bonus Lab and Final Exam Review

Course objectives: 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,18,21

Course Content: 2,3,4,5,6





In this program, you will create a GUI version of the Game of 21.

1. Design the Main Form of the Program based on the following specifications:

Form1

The Game of 21

The players



Johnny

More Cards

Bet

Jeremy

More Cards

Bet

Joseph

More Cards

Bet

Jacob

More Cards

Bet

Results

Player	Card 1	Card2	Card 3	Total	Status

Deal

Reset

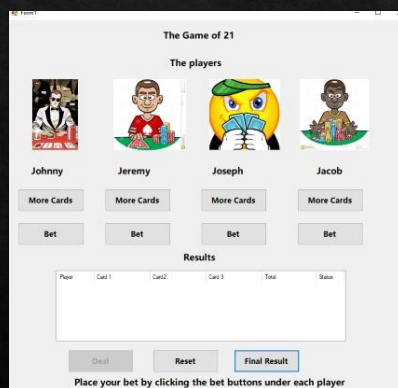
Final Result

Place your bet by clicking the bet buttons under each player

- There are four picture boxes which contains different pictures. You can replace the picture if you want.
- Four labels with the name
- 9 buttons with specific functionality check the specifications below for the purpose of each button.
- A list view that will store the results.
- Labels that serve as descriptors

Program Specifications:

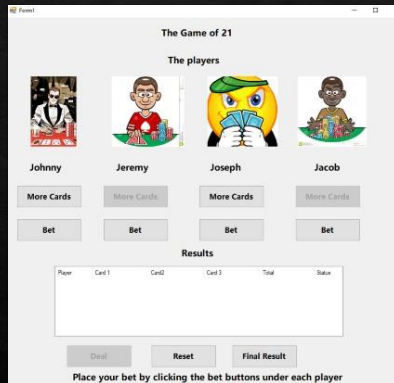
The Game of 21



- There are 52 cards in a deck and initially when the user presses deal, the program will deal two cards for each player.

- The cards are divided into 4 suits: Hearts, Spades, Diamonds and Cloves. Each suit will have 13 numbers.
- The program will randomly deal a card to each player initially.

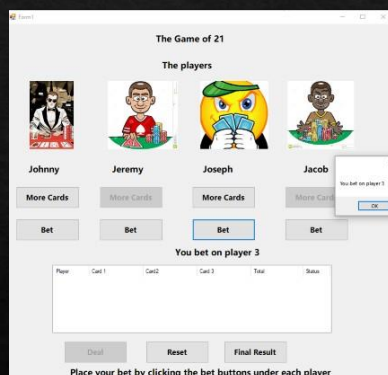
The Game of 21



- The user will decide which among the player needs another card. If the user think that a player needs more card, if will press the “More Cards for whichever player he thinks needs more cards.

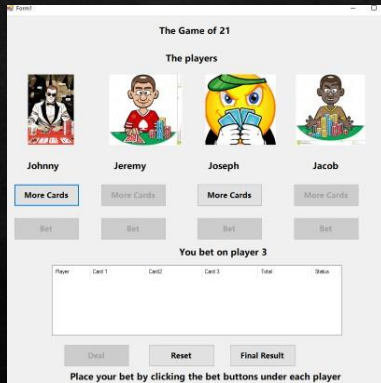
- Pressing more cards means the program will again randomly deal a card to the players. The program should be able to detect if the card has already been dealt.

The Game of 21



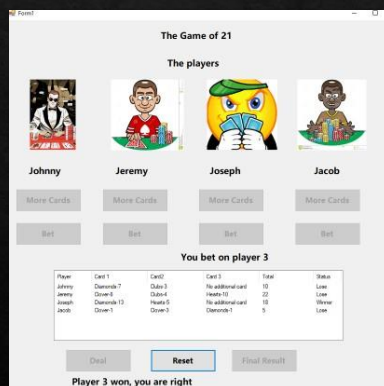
- ◇ The user will then bet on who he or she thinks will win by pressing the bet button below the player's name and picture.
- ◇ If the user bets on one player, all the other Bet buttons will be disabled to signify that the user can only choose one player.
- ◇ A message box informs the user of his or her bet.
- ◇ The label also reflects his or her bet.

The Game of 21



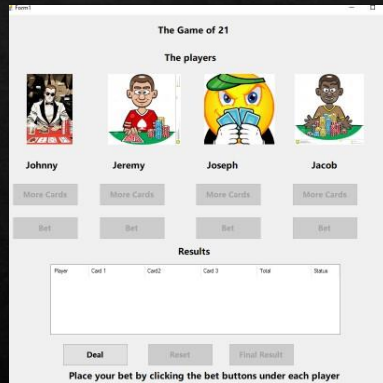
- In this card game, the cards will be summed and that will be the score for each player.
- The sum will be similar to playing cards. An ACE is equivalent to 1, a Jack is equivalent to 11, a Queen to 12 and a King to 13.
- A player who got a total of more than 21 automatically loses.
- If two or more players have the same total, the game is hanged. No one wins.

The Game of 21



- When the user press "Final Result", the result will be shown in the list view.
- The results shows the two or three cards each player got, the total and the status.
- The result also shows if the user's bet was the one who won.

The Game of 21



- When the user press "Reset", the interface will go back to its initial state.

Other program specifications:

1. Create at least one class with a method in solving this program.
2. Utilize arrays or other advance data structures (i.e. Dictionary)