CSCI 3328 Object Oriented Programming in C#
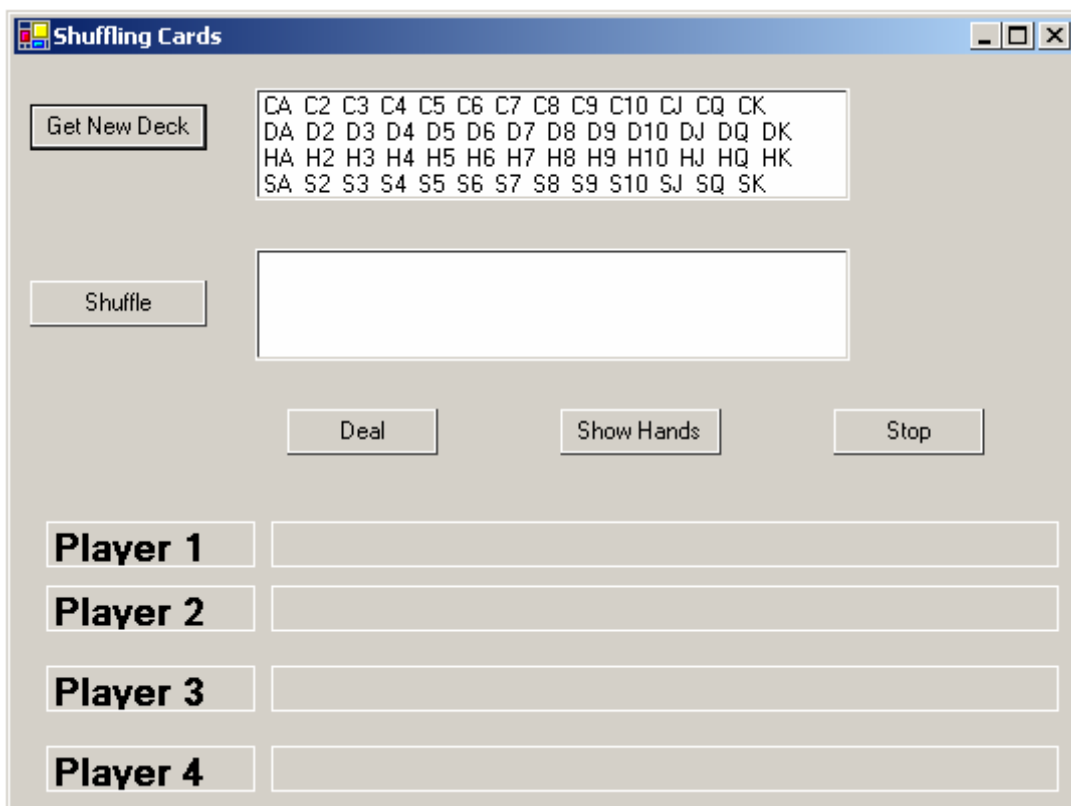## Fall 2012
Assignment #6

Instructor: Dr. Xiang Lian
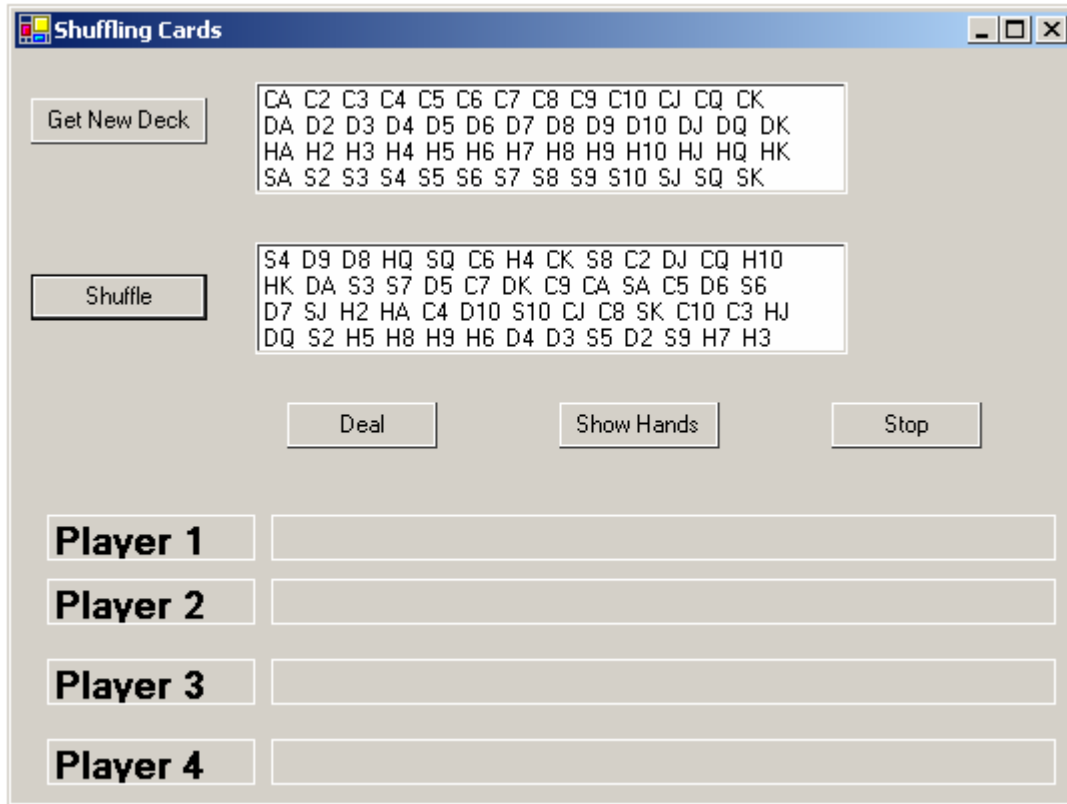Due Date: See the course Web page

Write a program to show a deck of cards, shuffle cards, show shuffled deck, deal to 4 players, display dealt cards, arrange cards by suite, and display arranged cards.

Please start early. This assignment will take some time. Figure out your own way of shuffling cards.
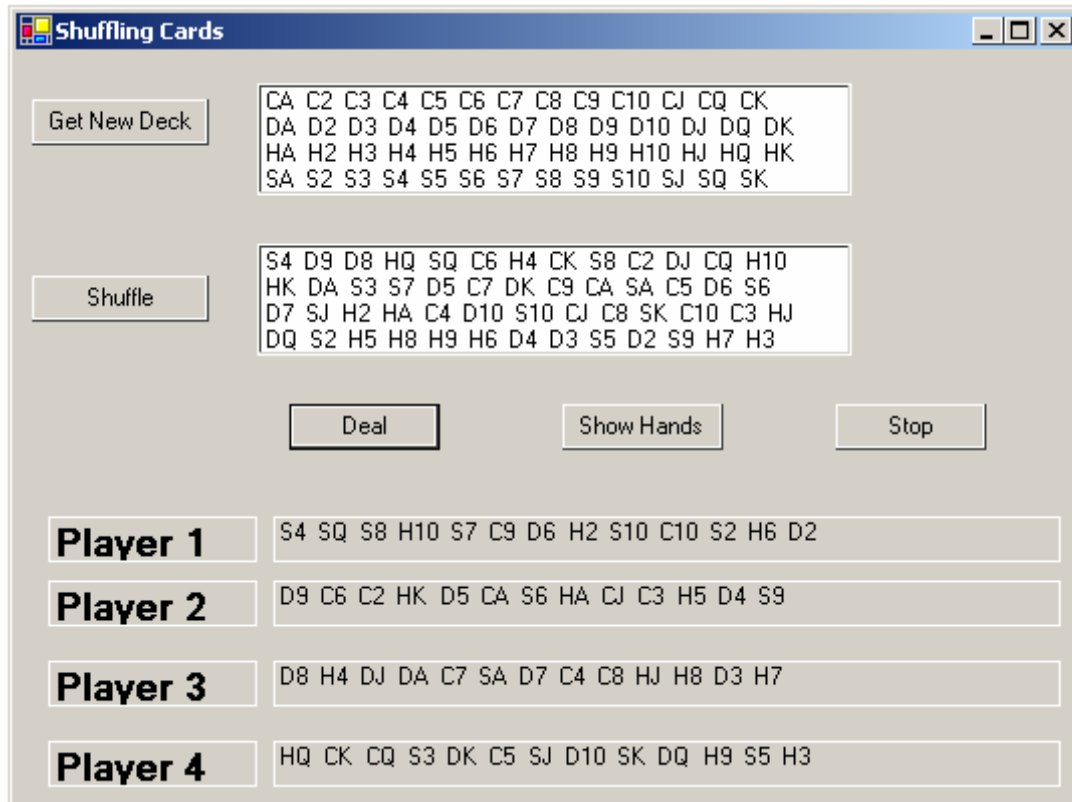
Button **Get New Deck**: The card names are read from a file and displayed in a list box.
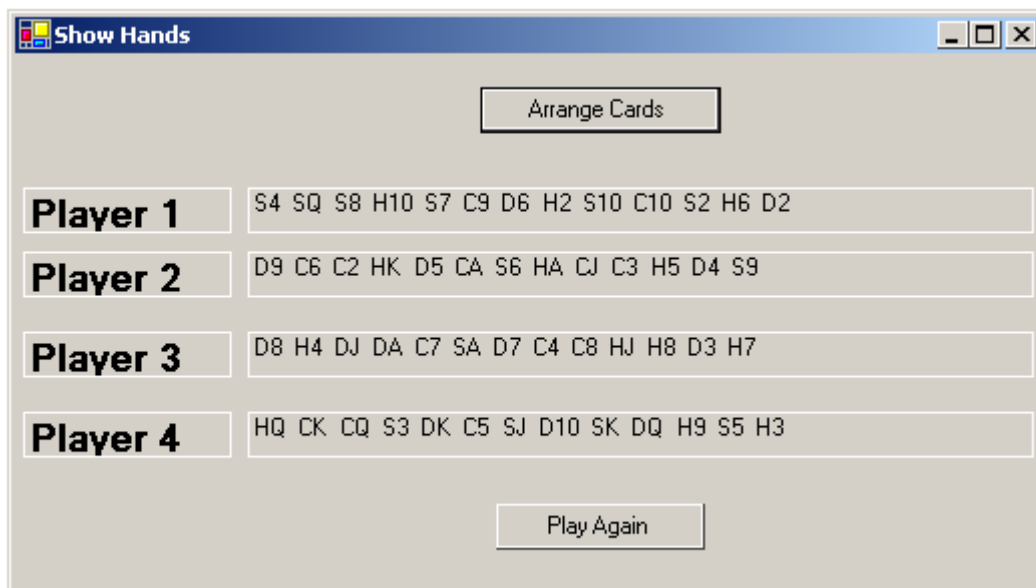
Button **Shuffle**: The cards are shuffled (abstractly) and displayed in the list box shown here.

Shuffling Cards

Get New Deck

```
CA  C2  C3  C4  C5  C6  C7  C8  C9  C10  CJ  CQ  CK
DA  D2  D3  D4  D5  D6  D7  D8  D9  D10  DJ  DQ  DK
HA  H2  H3  H4  H5  H6  H7  H8  H9  H10  HJ  HQ  HK
SA  S2  S3  S4  S5  S6  S7  S8  S9  S10  SJ  SQ  SK
```

Shuffle

```
S4  D9  D8  HQ  SQ  C6  H4  CK  S8  C2  DJ  CQ  H10
HK  DA  S3  S7  D5  C7  DK  C9  CA  SA  C5  D6  S6
D7  SJ  H2  HA  C4  D10 S10 CJ  C8  SK  C10 C3  HJ
DQ  S2  H5  H8  H9  H6  D4  D3  S5  D2  S9  H7  H3
```

Deal   Show Hands   Stop

Player 1

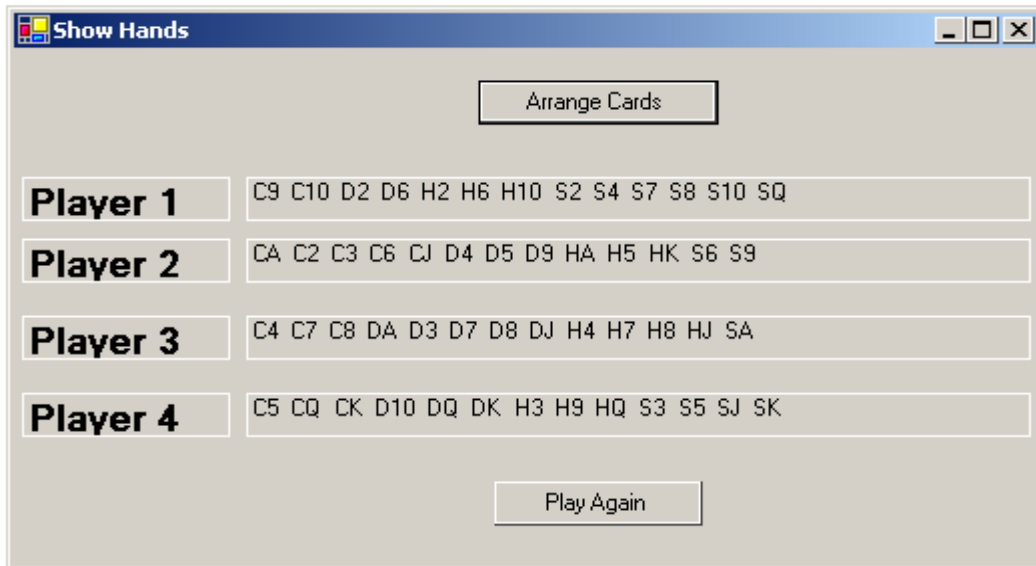**Player 2**

Player 3

Player 4

Button **Deal**: The shuffled cards are distributed one at a time in a round robin fashion to four players. Players' cards are displayed in the appropriate 3D label boxes.
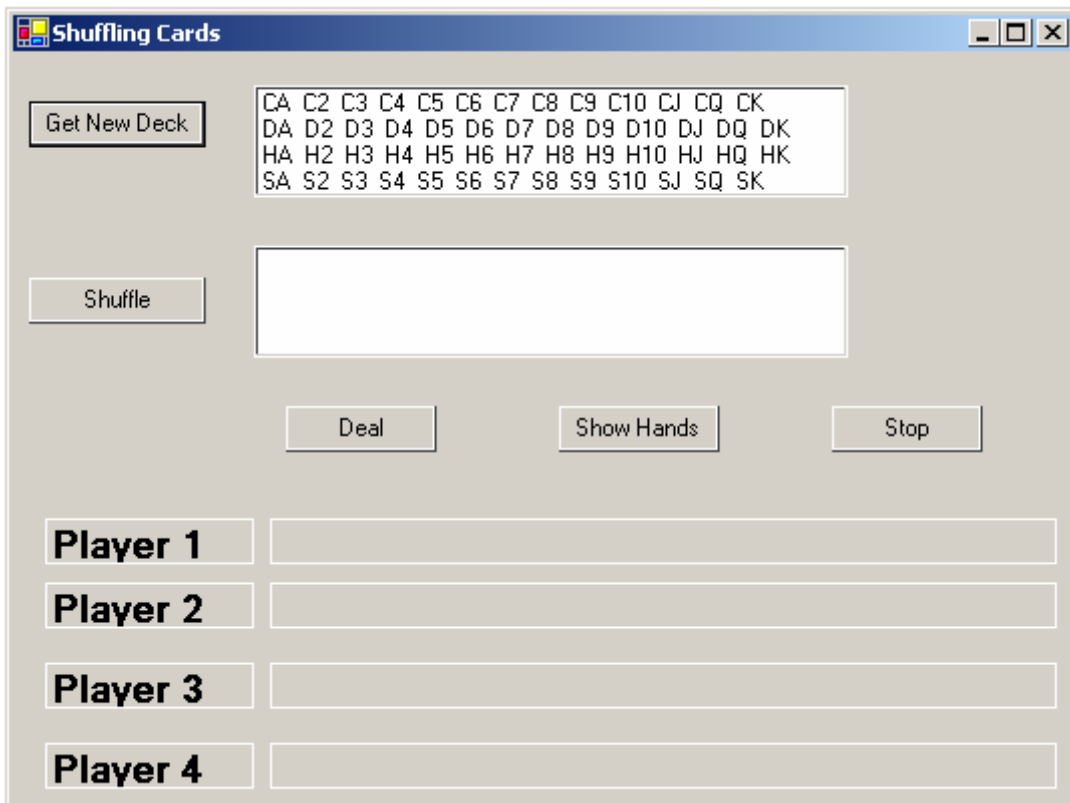

Button **Show Hands**: A new form is displayed with players cards.

Button **Arrange Cards**: The cards are re-ordered using a two-dim sort and re-displayed.

```
Show Hands                                                    _ □ ×

                        Arrange Cards

Player 1    C9 C10 D2 D6 H2 H6 H10 S2 S4 S7 S8 S10 SQ

Player 2    CA C2 C3 C6 CJ D4 D5 D9 HA H5 HK S6 S9

Player 3    C4 C7 C8 DA D3 D7 D8 DJ H4 H7 H8 HJ SA

Player 4    C5 CQ CK D10 DQ DK H3 H9 HQ S3 S5 SJ SK

                         Play Again
```

Button **Play Again**: This button takes you back to the previous form.

```
Shuffling Cards                                               _ □ ×

                CA C2 C3 C4 C5 C6 C7 C8 C9 C10 CJ CQ  CK
 Get New Deck   DA D2 D3 D4 D5 D6 D7 D8 D9 D10 DJ DQ  DK
                HA H2 H3 H4 H5 H6 H7 H8 H9 H10 HJ HQ  HK
                SA S2 S3 S4 S5 S6 S7 S8 S9 S10 SJ SQ  SK


   Shuffle


            Deal              Show Hands              Stop


 Player 1

 Player 2

 Player 3

 Player 4
```

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Please submit:

1. Program listing, and
2. The screen captures (as given in the Appendix)

Please submit all files in a compressed *.zip file.

- Your program should begin with a comment section that would include the following:

PROGRAMMERS NAME:_____
STUDENT ID:_____
CLASS:_____ ASSIGNMENT #:_____
DATE DUE:_____ DATE TURNED IN:_____

- Upload the *.zip file you created to the Blackboard. The subject of the submission must include the following information:
  [CSCI 3328] [Assignment #] [Your Name Here] [Your Student ID Here]