Crazy 8s
ITEC 2150
Spring 2013 Project
Due April 22, 2013

You are to create a Crazy 8s game. You are to allow the user to select the number of computer players, 1 to 3. Specific requirements:

1. This game will use a standard 52 card deck. The user will be shown the deck in an unshuffled display. Once the user selects the number of computer players, the deck will be shuffled and 8 cards will be dealt to each player. The computer cards will be facedown while the users will be displayed on buttons.
2. After the cards are dealt one at a time to each player in a clockwise order starting to the player's left, the top card in the deck will be turned up on the discard pile.
3. The player should be allowed to play first followed by computer players in a counter clockwise order.
4. Rules for a valid play:
    a. The player may play any card meeting the following criteria:
        i. The same suit as the top card on the discard pile.
        ii. Any card that matches the value of the top card of the discard pile.
        iii. An 8 can always be played. Once a player plays an 8, they get to name the suit to be played.
    b. If the player cannot play they must draw until they are able to play.
5. Once the final card in the draw pile is drawn, all cards in the discard pile except the top card of the discard pile will be shuffled and become the new draw pile. The top card will be the start of the new discard pile. Note: The new draw pile must not contain any card that is in any of the player hands or the card in the new discard pile.
6. When a player, computer or human, plays the last card, they win the game. You should provide a message congratulating the winner or notifying the player which computer won. Ask the player if they would like to play again.

Programming requirements:

1. You must create a graphical interface. You do not have to put pictures or animations in your program. Text on buttons is sufficient.
2. You should display each card played long enough for the human player to see it before the next computer plays a card. This will allow the player to plan their strategy.
3. The computer is not allowed to cheat by looking at the any cards other than the ones in its hand and those that have been played on the discard pile. The computer should count and track plays to build a better strategy.
4. You should display each player's hand in their respective positions. I recommend you put the player in the SOUTH panel.
5. The computer players should be distributed around the playing surface of the table.
6. You must use the following Java concepts:
    a. Exception handling
    b. Swing components
    c. Proper class design
    d. Implementation of interfaces
    e. Event handling