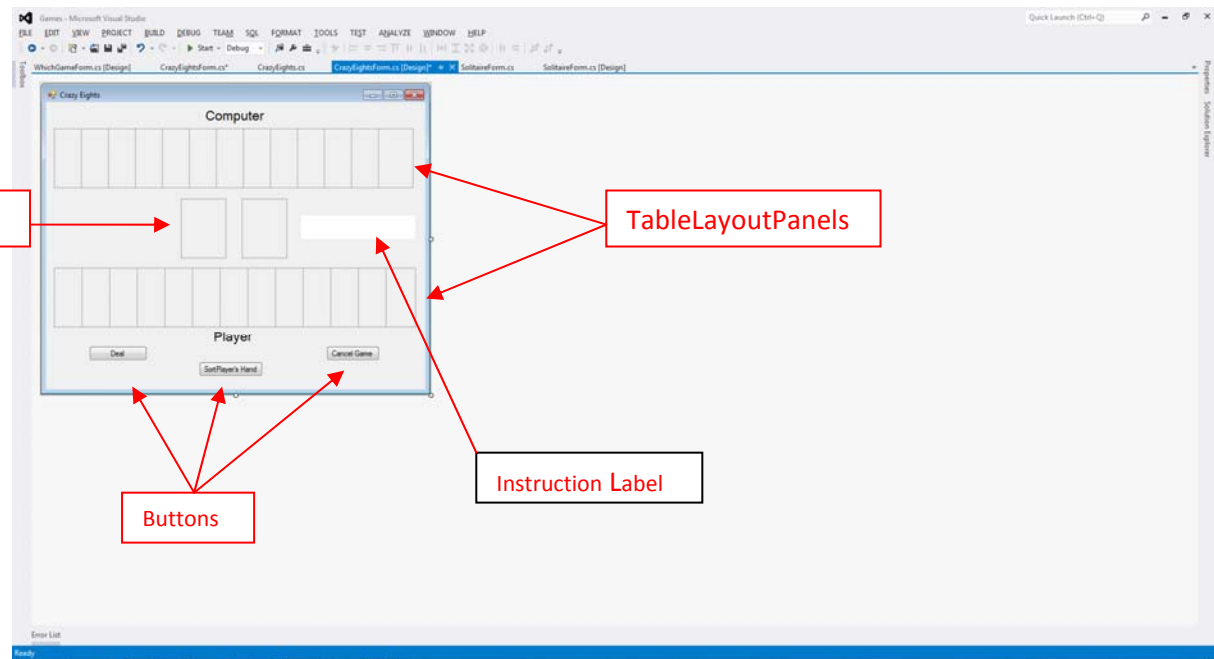# GUI Notes on the CrazyEightsForm

You should look at the whole of this document, before starting to implement this GUI.

Initial Design View

The form consists of two labels, three buttons, two TableLayout Panels, two Picture Boxes and a label which will be used to output instructions to the user. Choose sensible names for the various controls as your design this form.

The **form** has the following Properties set to the specified values below, any Property not explicit named retains it default value.

AutoSize : True
AutoSizeMode: GrowOnly
Size: 620, 500

Two **labels** contain text **Compute**r and **Player** respectively and are located above and below their respective TableLayout Panel. Their Font size is 15.75

Each **TableLayOut Panel** consists of 13 columns and 1 row. Each panel has the following Properities set to the specified value below:

Anchor: Top, Left
AutoSize : True
AutoSizeMode: GrowOnly
Size: 570, 95

Within the TableLayOut Panel, **each column** occupies **7.69%** of the area of the panel. These columns will hold images of playing cards within PictureBoxes. These Picture Boxes will be added dynamically by your code.

The two **Picture Boxes** between the TableLayout Panels have the following properity set:

Size:70, 95

The left Picture Box represents the **Draw Pile** and the right Picture Box represents the **Discard Pile**. The images to these Picture Boxes will be added dynamically by your code.

The **Label** to the right of the two Picture Boxes will be used to output instructions to the user. The properities that you need to set so that the Label is visible are:

BackColor: White   where **White** is located on the **Web** tab, the default setting is **Control** on the **System** tab

Text: no visible text at all! But enter 4 lines the first containing roughly 40 spaces, followed by 3 blank lines. This will result in **Size** of approximately 180, 40.

The three **Buttons** labelled **Deal**, **Sort Player's Hand** and **Cacnel Game** left to right. Their exact size and locations is not critical.

Look and Feel of this GUI

When fully implemented, the game looks like the screen shot below when first started. The **Draw Pile** is shown by the left **PictureBox** near the middle of the form. There is an instruction **Label** to the right of the Picture Boxes. The **Sort Player's Hand** button is initially disabled. Before attempting to add the Game Logic in the **Game_Class_ Libary** read and understand the game rules which are in the document **Crazy Eights Rules** as well as looking over the next seven pages of screen shots.

Do not add any event handlers to this form until you have implement sufficient Game Logic in the **Crazy_Eight_ Game** class.

Information on how to display images and implement various event handler for this GUi will be provided at trhe start of Week 11.

he **Cancel Game** button is always enabled throughout the life of this form. Clicking the **Cancel Game** button closes this form immediately, returning control to the **Start_Game** form. When the user clicks **Deal**, eight cards are dealt to the Player, and eight to the Computer, and one card is dealt to the Discard Pile — see screenshot below. All dealt cards are face-up.

The **Deal** button is now disabled and the **Sort Cards** button is enabled. These buttons remain that way until the current game is finished. Note that the message in the instruction label has changed in the following screen shot. The following screen shots (pages 4 – 9) show some possible interactions during a game, but no attempt has been made to cover all possibilities.

Below the player has tried to play an incorrect card by clicking on the Jack of Spades, but the message in the label tells them they cannot paly that card.
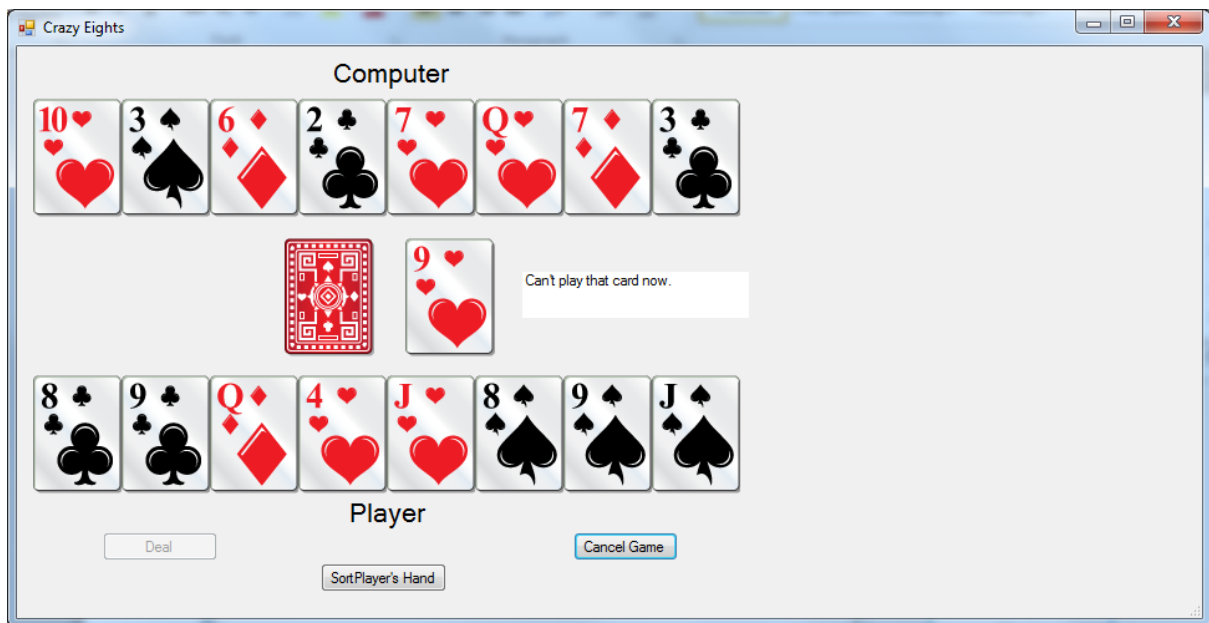
The player then tried to draw a card (by clicking on the **Draw Pile**), but the message in the label tells them they cannot do that at this time.


The player decides to select the **Eight of Spades** and the form below appears. Which enables the player to select the suit which the Computer will need to play. (The default radio-button is always **Clubs**, regardless of the cards that have been played.)
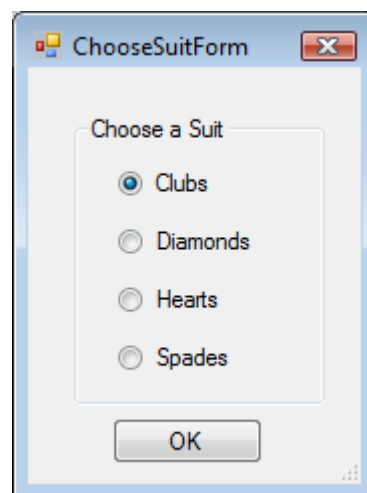
The user selects **Spades** as the Computer has only one.
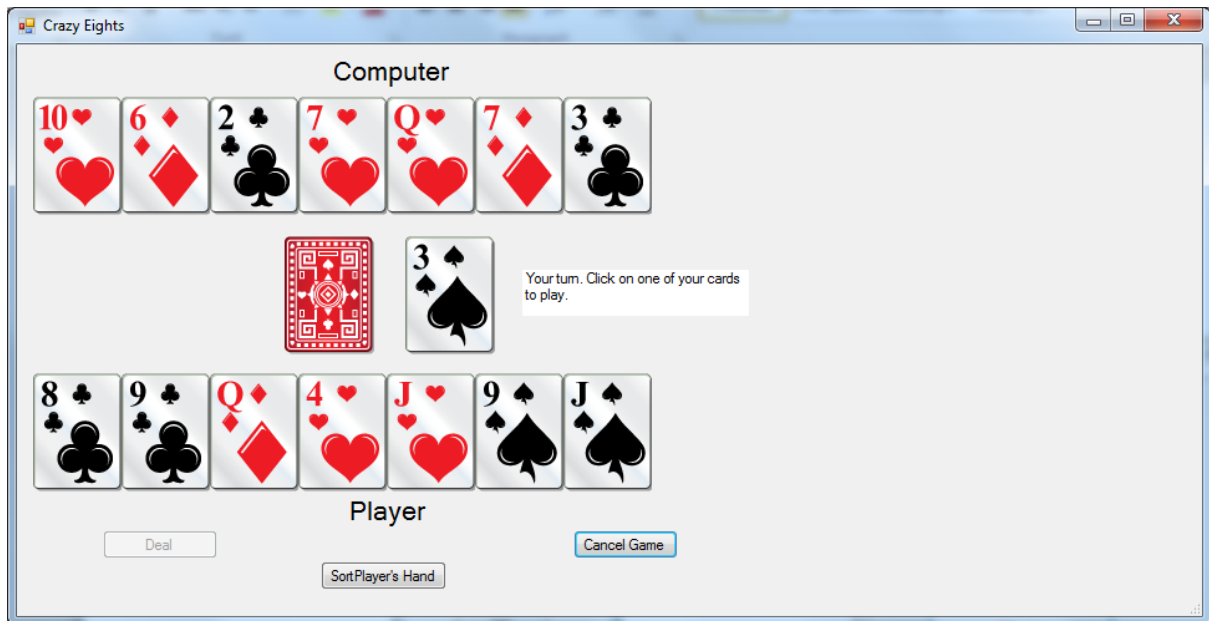
The Computer plays **Three of Spades** and the player selects **Nine of Spades** and as the Computer has no more **Spades,** it is required to draw cards until it has a card ot can play or reaches 13 cards in its hand. In this example, eventually a **Sixof Clubs** is drawn by the Computer and is placed on the **discard pile** see below. The Computer had drawn two additional cards before the Six, **Two of Hearts and King of Clubs.**
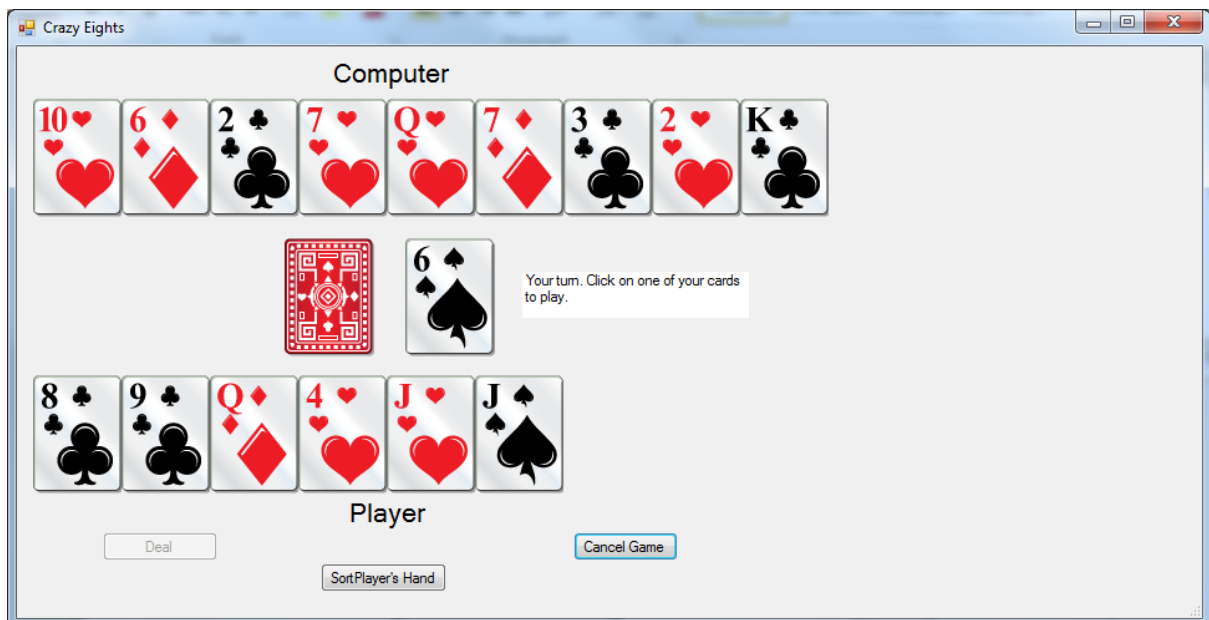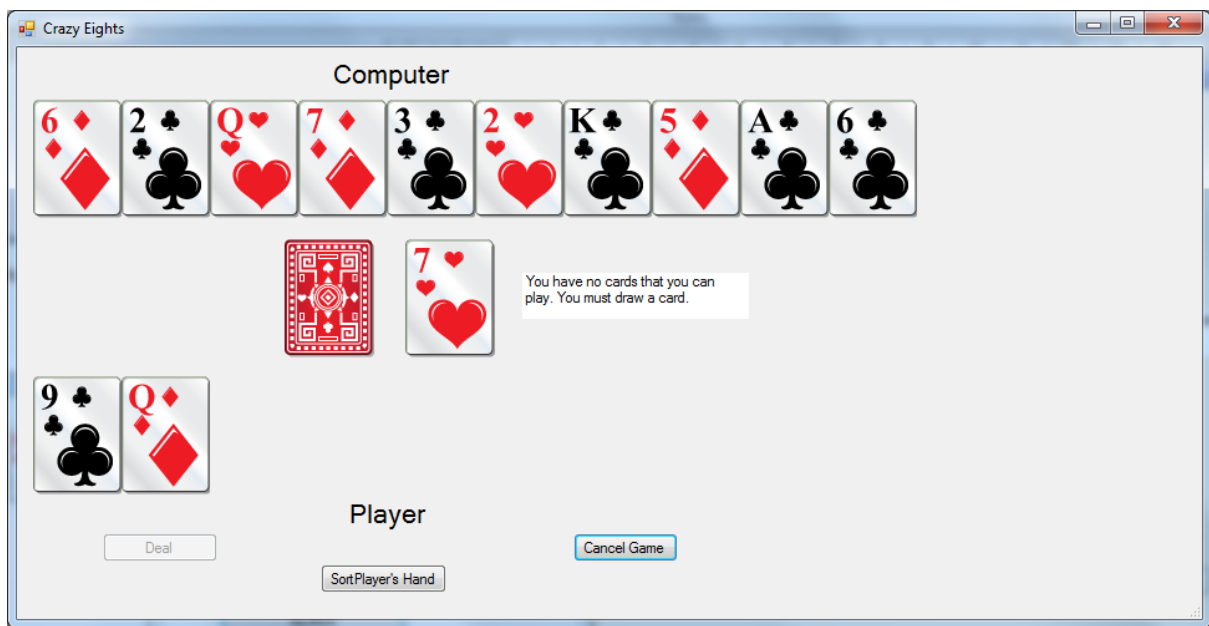

Later in the game , the Computer draws more cards until it can play an **Ace of Clubs** as the Player played the **Jack of Spades** that was in the player's hand (see above)
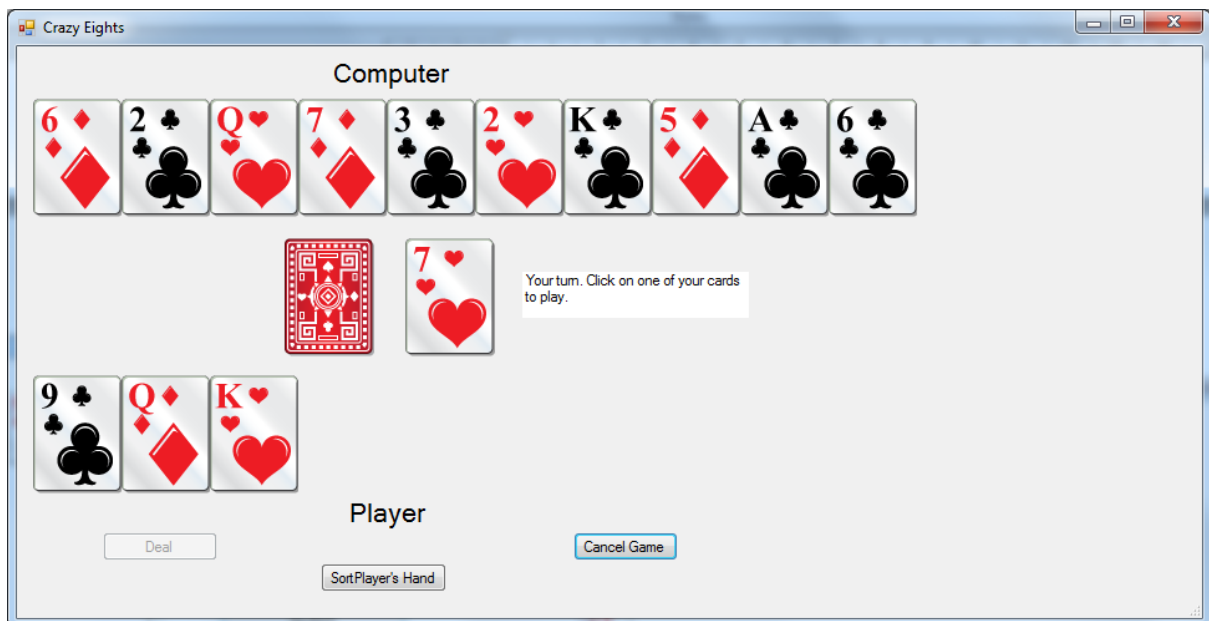
Later in the game the Computer draws more cards until it has 13 cards, then it is the player's turn again.
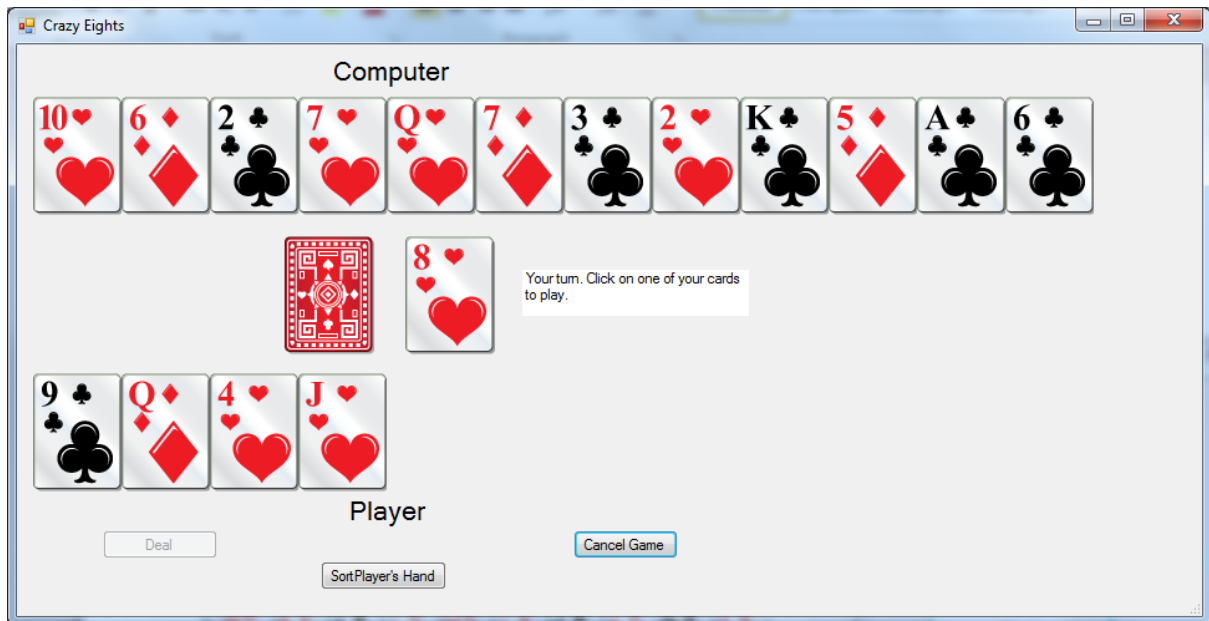
Later in the game, the player is forced to draw a card (by clicking on the **Draw Pile**).

Afte drawing a **King of Hearts**, the Player can play that card.

Some moves later the Computer plays the Two of Spades which willforce the Player to draw a card (or many cards)

The game continues …