```
1
     Public Class Form1
 2
         'Globals
 3
             'For generating suits and values
 4
             Dim RandNumGen As System.Random = New System.Random()
 5
 6
             'Represent the three cards shown to the user
 7
              Dim card1 As card = New Card(CreateSuit(), CreateValue())
              Dim card2 As card = New Card(CreateSuit(), CreateValue())
 8
 9
              Dim card3 As card = New Card(CreateSuit(), CreateValue())
10
11
             'To keep track of how many times the "show card" button is pressed
12
             Dim btnCounter As Integer = 0
13
14
         'User Interface Subroutines
15
             'When the form loads
16
             Private Sub Form1 Load (sender As Object, e As EventArgs) Handles MyBase.Load
17
                 Btn DepositTokens.Select()
18
             End Sub
19
20
             'When "Deposit tokens" clicked
21
             Private Sub Btn DepositTokens Click(sender As Object, e As EventArgs) Handles
             Btn DepositTokens.Click
22
                 Txt Credits.Text = ((CDec(Val(Txt Credits.Text) + ((CDec(Val(InputBox("How
                 many tokens would you like to deposit?", "Deposit tokens", (0)))) * (4))))
23
24
                 If (CDec(Val(Txt Credits.Text))) >= 4 Then
25
                     Btn ShowCard.Select()
                     Btn ShowCard.Enabled = True
26
27
                 End If
28
             End Sub
29
30
             'When "Show card" clicked
             Private Sub Btn ShowCard Click (sender As Object, e As EventArgs) Handles
31
             Btn ShowCard.Click
                 btnCounter = (btnCounter + 1)
32
33
                 Dim wagerIncrease As Decimal = 0
34
35
                 'If it's the first time clicking...
36
                 If btnCounter = 1 Then
37
                     Txt Credits.Text = (Txt Credits.Text - 4)
38
                     Txt Wager. Text = 4
39
                     Pic Card1. Image =
                     My.Resources.ResourceManager.GetObject(card1.generateImagePath())
40
                     Btn ShowCard.Select()
41
42
                 'If it's the second time clicking...
43
                 Else If btnCounter = 2 Then
44
                     Pic Card2.Image =
                     My.Resources.ResourceManager.GetObject(card2.generateImagePath())
                     wagerIncrease = CDec(Val(InputBox("How many more credits would you like
45
                     to wager?", "Increase wager?", 0)))
46
                     'If the first two cards are a pair, only let the user increase their
47
```

```
wager by 4 or less
48
                      If (card1.getWorth = card2.getWorth) Then
                          If wagerIncrease <= 4</pre>
49
50
                               Txt Credits.Text = (CDec(Val(Txt Credits.Text)) - wagerIncrease)
51
                               Txt Wager.Text = (CDec(Val(Txt Wager.Text)) + wagerIncrease)
52
                               Btn ShowCard.Select()
53
                          End If
54
                      Else
55
                          If wagerIncrease <= (CDec(Val(Txt Credits.Text)))</pre>
56
                               Txt Credits.Text = (CDec(Val(Txt Credits.Text)) - wagerIncrease)
57
                               Txt Wager.Text = (CDec(Val(Txt Wager.Text)) + wagerIncrease)
58
                              Btn ShowCard.Select()
59
                          End If
60
                      End If
61
62
                  'If it's the third time clicking...
63
                  Else If btnCounter = 3 Then
                      Pic Card3. Image =
64
                      My.Resources.ResourceManager.GetObject(card3.generateImagePath())
65
                      Btn ShowCard.Enabled = False
66
                      Btn NewHand. Enabled = True
67
                      Btn NewHand.Select()
68
                      PayoutCheck()
69
                  End If
70
             End Sub
71
72
              'When "New hand" clicked
73
             Private Sub Btn NewHand Click(sender As Object, e As EventArgs) Handles
             Btn NewHand.Click
74
                  If (CDec(Val(Txt Credits.Text))) < 4 Then</pre>
75
                      MessageBox. Show ("You must have a minimum of four credits to play.")
76
                      Txt Credits.Text = ((CDec(Val(Txt Credits.Text)) +
                      ((CDec(Val(InputBox("How many tokens would you like to deposit?",
                      "Deposit tokens", 0)))) * 4)))
77
                  End If
78
                  If (CDec(Val(Txt Credits.Text))) < 4 Then</pre>
79
                      MessageBox.Show("Game over!")
80
81
                      Me.Close()
                  End If
82
83
                  UpdateCard(1)
84
85
                  UpdateCard(2)
86
                  UpdateCard(3)
87
88
                  Pic Card1. Image = My.Resources.ResourceManager.GetObject("Card0")
89
                  Pic Card2. Image = My.Resources.ResourceManager.GetObject("Card0")
                  Pic Card3. Image = My.Resources.ResourceManager.GetObject("Card0")
90
91
92
                  btnCounter = 0
93
94
                  Txt Wager.Text = ""
                  Btn ShowCard.Enabled = True
95
```

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96
                  Btn ShowCard.Select()
 97
              End Sub
 98
 99
              'When "Show payouts" clicked
100
              Private Sub Btn ShowPayouts Click(sender As Object, e As EventArgs) Handles
              Btn ShowPayouts.Click
101
                  MessageBox.Show("Three Card Poker Payouts:" + vbcrlf + vbcrlf +
                                                      + vbTab + vbTab + "1 to 1" + vbcrlf +
                                   vbTab + "Pair"
102
103
                                   vbTab + "Flush"
                                                      + vbTab + vbTab + "4 to 1" + vbcrlf +
                                   vbTab + "Straight" + vbTab + vbTab + "5 to 1" + vbcrlf +
104
105
                                   vbTab + "Three of a Kind" + vbTab + "30 to 1" + vbcrlf +
                                   vbTab + "Straight Flush"
                                                              + vbTab + "40 to 1" + vbcrlf)
106
              End Sub
107
108
109
              'When "Exit" clicked
110
              Private Sub Btn Exit Click(sender As Object, e As EventArgs) Handles
              Btn Exit.Click
111
                  Me.Close()
112
              End Sub
113
114
              'When "Debug" clicked
              Private Sub Btn Debug_Click(sender As Object, e As EventArgs) Handles
115
              Btn Debug.Click
116
              MessageBox.Show("Card1: " & card1.getSuit & " " & card1.getWorth & vbcrlf &
117
                               "Card2: " & card2.getSuit & " " & card2.getWorth & vbcrlf &
                               "Card3: " & card3.getSuit & " " & card3.getWorth & vbcrlf)
118
119
              End Sub
120
121
          'Program functions
122
              'Picks a suit, using a random number
              Private Function CreateSuit() As String
123
124
                  Return RandNumGen.Next (1, 5) '1 to 4
              End Function
125
126
127
              'Picks a value, using a random number
128
              Private Function CreateValue() As String
129
                  Return RandNumGen.Next(0, 13) '0 to 12
130
              End Function
131
132
              'Gives the appropriate card a new suit and value
133
              Private Sub UpdateCard(cardNum As Integer)
                  If cardNum = 1 Then
134
                      card1.changeCard(CreateSuit(), CreateValue())
135
136
                  Else If cardNum = 2 Then
137
                      card2.changeCard(CreateSuit(), CreateValue())
                  Else If cardNum = 3 Then
138
139
                      card3.changeCard(CreateSuit(), CreateValue())
                  End If
140
141
              End Sub
142
143
              'Checks to see if the current combination of cards merits a payout
144
              Public Sub PayoutCheck()
145
                  If IsSequential() = True And (card1.getSuit = card2.getSuit) And
```

```
(card2.getSuit = card3.getSuit) Then
                      MessageBox.Show("Congratulations!" + vbcrlf + "Straight flush.")
146
147
                      AwardPayout (40)
148
149
                  Else If IsSequential() = True Then
150
                      MessageBox.Show("Congratulations!" + vbcrlf + "Straight.")
151
                      AwardPayout (5)
152
153
                  Else if (card1.getWorth = card2.GetWorth) And (card2.getWorth =
                  card3.getWorth)
154
                      MessageBox.Show("Congratulations!" + vbcrlf + "Three of a kind.")
155
                      AwardPayout (30)
156
157
                  Else If (card1.getSuit = card2.getSuit) And (card2.getSuit = card3.getSuit)
158
                      MessageBox.Show("Congratulations!" + vbcrlf + "Flush.")
159
                      AwardPayout (4)
160
                  Else if (card1.getWorth = card2.GetWorth) Or (card1.getWorth =
161
                  card3.getWorth) Or (card2.getWorth = card3.getWorth)
                      MessageBox.Show("Congratulations!" + vbcrlf + "Pair.")
162
163
                      AwardPayout (1)
                  End if
164
165
              End Sub
166
167
              'Awards the user a payout, based on the passed multiplier
168
              Private Sub AwardPayout (multiplier As integer)
169
                  Txt Credits.Text = ((CDec(Val(Txt Credits.Text)) +
                  ((CDec(Val(Txt Wager.Text)) * multiplier))))
                  Txt Wager.Text = ""
170
171
              End Sub
172
173
              'Determines if the three cards are of sequential value, for use in determining
              if the hand is a stright flush or a straight
174
              Private Function IsSequential() As Boolean
                     If (card1.getWorth = (card2.getWorth - 1) And card2.getWorth =
175
                      (card3.getWorth - 1)) or (card1 = (card2 - 1) = (card3 - 1)
                         (card1.getWorth = (card3.getWorth - 1) And card3.getWorth =
176
                         (card2.getWorth - 1)) Or
                                                   'card1 = (card3 - 1) = (card2 - 1)
                         (card2.getWorth = (card3.getWorth - 1) And card3.getWorth =
177
                         (card1.getWorth - 1)) or (card2 = (card3 - 1) = (card1 - 1)
178
                         (card2.getWorth = (card1.getWorth - 1) And card1.getWorth =
                         (card3.getWorth -1)) Or 'card2 = (card1 -1) = (card3 -1)
179
                         (card3.getWorth = (card1.getWorth - 1) And card1.getWorth =
                         (card2.getWorth - 1)) Or   (card3 = (card1 - 1) = (card2 - 1)
                         (card3.getWorth = (card2.getWorth - 1) And card2.getWorth =
180
                         (card1.getWorth - \frac{1}{1}) Then 'card3 = (card2 - 1) = (card1 - 1)
181
                        Return True
182
                     Else
183
                         Return False
184
                     End If
185
              End Function
186
      End Class
```