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1 .....
2 .....
3 'Project:      PayrollInheritance      '
4 'Programmer:   Kevin Dougherty        '
5 'Module:      PayrollSalaried.vb Class'
6 'Date:        January 2007            '
7 '
8 'Description:  Class in the business tier for payroll calculation:
9 '              instantites its own objects through the base class and
10 '              validates input data and calculates the pay for
11 '              salaried employees based on a salary array.
12 'Folder:      Ch02HandsOn
13 'Modified:    February 12, 2013
14 '              Updated names to match current Program Style Guide
15 .....
16 .....
17
18 Friend Class PayrollSalaried
19     Inherits Payroll
20
21 #Region "Instance and Shared Property Variables"
22     ' Instance property variables.
23     Private salaryLevel As Integer      ' Hold SalaryLevel property.
24     Private salary As Decimal           ' Hold SalaryPay property.
25
26     ' Shared property variables.
27     Private Shared salaryTotal As Decimal ' Hold SalaryTotal shared property.
28
29 #End Region
30
31 #Region "Constructors"
32
33     Friend Sub New()
34         ' Empty constructor for inheritance and instantiation.
35
36     End Sub
37
38     Friend Sub New(ByVal levelValue As Integer)
39         ' Assign object property values and determine salary
40
41         ' Call the empty constructor of the base class
42         MyBase.New()
43         ' Set the salary level using the SalaryLevel property procedure
44         Me.SalaryLevelAccessor = levelValue
45         ' Call to the method to determine employee salary
46         Me.FindPay()
47     End Sub
48
49 #End Region
50

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51 #Region "Class Methods"
52
53     Protected Overrides Sub findPay()
54         ' Declaration of salary array, matched up to
55         ' salary levels, for determination of salary
56         Dim salaryArray() As Decimal = _
57             {0D, 800D, 950D, 1075D, 1250D, 1500D}
58
59         ' Calculate the salary based on the level.
60
61         ' use the salary level as an index to the salary array
62         salary = salaryArray(salaryLevel)
63         ' Add to total salary hours
64         salaryTotal += salary
65
66         ' Increment the number of employees processed
67         ' by accessing the shared variable in the base class
68         numberOfEmployees += 1
69     End Sub
70
71 #End Region
72
73 #Region "Property Procedures"
74
75     Friend Property SalaryLevelAccessor() As Integer
76         ' Read and Write the salary level for the employee
77         ' Includes validation of salary level withing minimum and maximum
78
79         ' Read and return the salary level for an object
80         Get
81             Return salaryLevel
82         End Get
83
84         ' Write the salary level for an object after passing validaion
85         Set(ByVal setLevelValue As Integer)
86             ' Local constant declarations
87             Const MIN_LEVEL As Integer = 1           ' The minimum salary level
88             Const MAX_LEVEL As Integer = 5           ' The maximum salary level
89
90             ' Is the value passed to this proceudre within the
91             ' acceptable range for salary level for an employee?
92             If setLevelValue >= MIN_LEVEL And setLevelValue <= MAX_LEVEL Then
93                 ' Write to the salary level field
94                 salaryLevel = setLevelValue
95             Else
96                 ' If outside of range, throw a new Application Exception
97                 ' to the calling class, including a message.
98                 Throw New ApplicationException("Salary level must be 1-5.")
99             End If
100         End Set

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101 End Property
102
103 Friend ReadOnly Property SalaryPay() As Decimal
104     ' Read and return the salary pay, this field cannot be
105     ' written to outside of the findPay() method
106     Get
107         Return salary
108     End Get
109 End Property
110
111 Friend Shared ReadOnly Property SalaryTotalPay() As Decimal
112     ' Read and return the total salary pay, this field cannot be
113     ' written to outside of the findPay() method
114     Get
115         Return salaryTotal
116     End Get
117 End Property
118
119 #End Region
120
121 End Class
122
```