

OOP Inheritance

Source:

<http://www.tech-archive.net/Archive/DotNet/microsoft.public.dotnet.languages.vb/2007-03/msg02569.html>

- *From:* "RSH" <way_beyond_oops@xxxxxxxxxx>
 - *Date:* Thu, 29 Mar 2007 10:26:02 -0400
-

Being rather new to OOP constructs I have a question regarding inheritance.

What is the proper way to setup my classes in a Company/Employee relationship.

I have a Company Object and a company has employees (one to many relationship) and CompanyDeductions. The Employees have EmployeeDeductions. Based on my limited knowledge I set my objects as follows:

```
Public Class Company

Private _CompanyID As String

Private _Employees As New ArrayList

Private _Deductions As New ArrayList

Public Property CompanyID() As String

Get

Return _CompanyID

End Get

Set(ByVal Value As String)

_CompanyID = Value

End Set

End Property

Public ReadOnly Property Employees() As ArrayList

Get

Return _Employees
```

OOP Inheritance

End Get

End Property

Public Sub LoadEmployees()

' Database call to get employees

Dim oDR As SqlClient.SqlDataReader

Dim oEmployee As New employee(oDR("EmployeeID"))

_Employees.Add(oEmployee)

End Sub

Public Sub LoadCompanyDeductions()

' Database call to get employees

Dim oDR As SqlClient.SqlDataReader

Dim oCompanyDeduction As New CompanyDeduction(oDR("DeductionID"))

_Employees.Add(oCompanyDeduction)

End Sub

End Class

Public Class Employee

Inherits Company

Private _EmployeeID As String

Private _FirstName As String

Private _LastName As String

Private _Deductions As ArrayList

Public Sub New(ByVal EmployeeID As String)

_EmployeeID = EmployeeID

End Sub

Public ReadOnly Property EmployeeID() As String

OOP Inheritance

```
Get
Return _EmployeeID
End Get
End Property
Public ReadOnly Property FirstName() As String
Get
Return _FirstName
End Get
End Property
Public ReadOnly Property LastName() As String
Get
Return _LastName
End Get
End Property
Public Sub LoadEmployeeDeductions()
' Database call to get employees
Dim oDR As SqlClient.SqlDataReader
Dim oEmployeeDeduction As New EmployeeDeduction(oDR("DeductionID"))
_Deductions.Add(oEmployeeDeduction)
End Sub
End Class
Public Class CompanyDeduction
Inherits Company
Private _DeductionID As String
Private _DeductionName As String
Public Sub New(ByVal DeductionID As String)
```

OOP Inheritance

```
_DeductionID = DeductionID  
End Sub  
Public ReadOnly Property DeductionID() As String  
Get  
Return _DeductionID  
End Get  
End Property  
Public ReadOnly Property DeductionName() As String  
Get  
Return _DeductionName  
End Get  
End Property  
End Class  
Public Class EmployeeDeduction  
Inherits Employee  
Private _DeductionID As String  
Private _DeductionName As String  
Public Sub New(ByVal DeductionID As String)  
_DeductionID = DeductionID  
End Sub  
Public ReadOnly Property DeductionID() As String  
Get  
Return _DeductionID  
End Get  
End Property
```

OOP Inheritance

```
Public ReadOnly Property DeductionName() As String
```

```
Get
```

```
Return _DeductionName
```

```
End Get
```

```
End Property
```

```
End Class
```

Is this a good strategy? Or how could I make it better 9or more industry standard?

Thank you for your time.

Ron

.