Exercise 2: n-tier architecture set up and login
Due date: February Feb 8, 2010

Deliverables:
1. Implement the n-tier setup in VS 2008 and all code demonstrated in the podcasts: n-tier implementation, Call-and-Respond path implementation, and Role-based security: person profile.
2. Create an additional call-and-respond path that performs the pivot operation at the presentation tier for the data returned by the sproc `GetPersonProfileInfoRowWise` (see below). By additional, I mean create the call-and-respond paths demonstrated in the podcasts but create an additional call-and-respond path.
3. Create a C# method at the presentation tier that takes as input a datatable and returns a datatable that has been pivoted.

Create the sproc `GetPersonProfileInfoRowWise` in your database.

```sql
CREATE PROC GetPersonProfileInfoRowWise
    @Email NVARCHAR(50)
AS
BEGIN

    SELECT tblPerson.PersonID, LastName, FirstName, Email, Password, LastLogin, tblRole.RoleID, tblRole.RoleName
    FROM tblPerson INNER JOIN tblProfile
        ON tblPerson.PersonID = tblProfile.PersonID
    RIGHT OUTER JOIN tblRole
        ON tblProfile.RoleID = tblRole.RoleID AND
        tblPerson.Email = @Email

END
```

```sql
DECLARE @Email AS NVARCHAR(50)
SET @Email = 'hpardue@usouthal.edu' -- rsingh@usouthal.edu
EXEC GetPersonProfileInfoRowWise @Email
```

This sproc returns the values for the profile in row-wise data.

<table>
<thead>
<tr>
<th>PersonID</th>
<th>LastName</th>
<th>FirstName</th>
<th>Email</th>
<th>Password</th>
<th>LastLogin</th>
<th>RoleID</th>
<th>RoleName</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Pardue</td>
<td>Harold</td>
<td><a href="mailto:hpardue@usouthal.edu">hpardue@usouthal.edu</a></td>
<td>321</td>
<td>2010-01-25 18:15:12.817</td>
<td>100</td>
<td>Administrator</td>
</tr>
<tr>
<td>1</td>
<td>Pardue</td>
<td>Harold</td>
<td><a href="mailto:hpardue@usouthal.edu">hpardue@usouthal.edu</a></td>
<td>321</td>
<td>2010-01-25 18:15:12.817</td>
<td>101</td>
<td>Web developer</td>
</tr>
<tr>
<td>NULL</td>
<td>NULL</td>
<td>NULL</td>
<td>NULL</td>
<td>NULL</td>
<td>NULL</td>
<td>102</td>
<td>Operator</td>
</tr>
<tr>
<td>1</td>
<td>Pardue</td>
<td>Harold</td>
<td><a href="mailto:hpardue@usouthal.edu">hpardue@usouthal.edu</a></td>
<td>321</td>
<td>2010-01-25 18:15:12.817</td>
<td>103</td>
<td>User</td>
</tr>
</tbody>
</table>

Create a read method in the data access tier that that creates a datatable based on the results of this sproc.

Write a C# method at the presentation tier that takes the above datatable as an input and returns a datatable of the form:
Grading: Percent complete

Submission:
If you finish before Feb 8, you can either come by my office or arrange a method for me to review your exercise. Otherwise, we will meet in class on Monday so that I can evaluate your project. Bring your laptop to class with your project open and be prepared to demonstrate it.