Assignment 3: ASP.Net

1 Overview
For the third assignment you will develop a simple ASP.Net web site implementing a small information system for student data that will query the database. You can re-use portions of your first and second assignment. The web site consists of three pages: one for selecting between two different style sheets, one that allows you to list the roster of a class you select, and one that allows you to get a report on the distribution of the grades for a class you select. The web site should use a master page with the elements common to all pages – the navigation menu and the common heading (see examples below – you may use a different visual design).

2 The preference selection page
Your site should contain two interchangeable style sheets that specify different color schemes. The preference selection page should have two radio buttons allowing you to toggle between the two style sheets and no submit button. Once you pick a style, it should be in effect for all pages of the site until you change it.

Hints: By setting the AutoPostBack attribute of an ASP RadioButtonList to “true” you can make it post back to the server whenever the user selects a radio button. You can
store the user’s selection in the session which is accessible to both the code behind of the page and the code behind of the master. By setting to “server” the runat attribute of the link to the style sheet from the master file, you make it visible to the code behind file which can set its href attribute. The master’s Page_Prerender gets executed after the handlers for postback events, but before the page is rendered.

3 The class roster page

This page should have dropdown lists where the user can select the course catalog number, the year and the semester. These dropdown lists should be populated with the values present in the database (sorted). A submit button labeled Get Class Roster should trigger the database query producing the class roster. The last names, first names, and email addresses of all students should be listed in a table. Between the button and the table, a summary line should specify the course number, the year and the semester selected for the query. The table should have headings identifying each column. You should use a hard-coded connection string with the user name and password for your individual database and open and close the database automatically.
Hints: Open the connection to the database in Page_Init and close it in Page_Unload. Populate the dropdown lists only when the page is first read and not on postbacks. Perform the actual generation of the table when the handler for the button click is invoked.

4 The grade report page

This page should list the grades given in a certain class, the percentage of students who received a certain grade, and the total number of students (see below). Columns should not be added for grades that have not been given to any of the students taking the class. Columns should be sorted alphabetically by the grade. There is no need to remember the course number, year and semester from an earlier class roster or grade report page.

MISIS - Mini Integrated Student Information System

<table>
<thead>
<tr>
<th>Performers</th>
<th>Grade report</th>
</tr>
</thead>
<tbody>
<tr>
<td>Course:</td>
<td>CS-367</td>
</tr>
<tr>
<td>Year:</td>
<td>2004</td>
</tr>
<tr>
<td>Semester:</td>
<td>Spring</td>
</tr>
</tbody>
</table>

Get Grade Report

Grade Report for CS-367 Spring 2004

<table>
<thead>
<tr>
<th>Grade</th>
<th>A</th>
<th>AB</th>
<th>B</th>
<th>BC</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Students</td>
<td>100</td>
<td>12.5%</td>
<td>12.5%</td>
<td>12.5%</td>
<td>50%</td>
</tr>
</tbody>
</table>

Hint: Use a dictionary based on generic collections to compute the number of students who received each grade.

5 Grading criteria

The grading criteria for this assignment will include: the extent to which all the required features are covered and correctness.

6 Submission

Please email as attachment to a single message to the TA the archive with the web site you wrote.