

## Programming assignment 3: ASP.NET

*Assigned March 15, 2007**Due: March 22, 2007*

You will build a student information system with two functions:

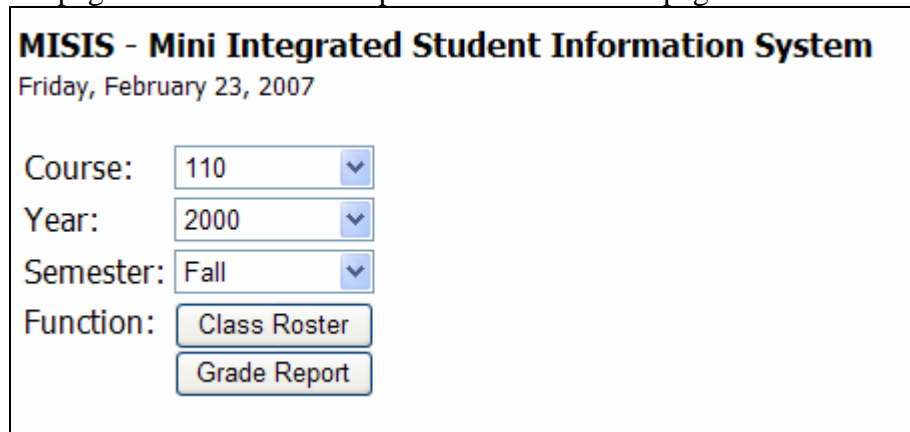
Class Roster List all students in a given class.

Grade Report List the distribution of grades given in a given class.

Not in a specific order – read entire document before beginning.

Must use a CSS file to specify single font “Tahoma” for all text.

All pages look like this on top – must use a master page:



**MISIS - Mini Integrated Student Information System**  
Friday, February 23, 2007

Course: 110 ▼

Year: 2000 ▼

Semester: Fall ▼

Function:

This is all default.aspx will look like. The border around the page is part of the output.

Date must be dynamically filled in.

Each drop down list must be populated from the database. Each list must be sorted appropriately.

All controls must be well named.

Clicking on Class Roster will lead to roster.aspx.

Clicking on Grade Report will lead to report.aspx.

Clicking on either button leads to the appropriate page with query string parameters defined for course, year, and semester.

Landing on roster.aspx or report.aspx without a proper query string should produce:

**MISIS - Mini Integrated Student Information System**  
Friday, February 23, 2007

Course: 110

Year: 2000

Semester: Fall

Function: 

Class Roster

Grade Report

**Improper Query String - make selection above**

Class roster should look like this:

**MISIS - Mini Integrated Student Information System**  
Friday, February 23, 2007

Course: 110

Year: 2000

Semester: Fall

Function: 

Class Roster

Grade Report

**Class Roster for CS-110 Fall 2002**

Last Name	First Name	Email Address
Alessandro	Shannon	Shannon657@madeupserver.com
Axel	Gunnar	Gunnar518@madeupserver.com
Jaleel	Cooper	Cooper952@madeupserver.com
Liam	Hugh	Hugh949@madeupserver.com
Muhammad	Reilly	Reilly354@madeupserver.com
Oscar	Kayden	Kayden641@madeupserver.com

Roster must be sorted by last name.

Headings must be small type as shown.

Grade report should look like this:

**MISIS - Mini Integrated Student Information System**  
Friday, February 23, 2007

Course:

110

▼

Year:

2000

▼

Semester:

Fall

▼

Function:

Class Roster

Grade Report

**Grade Report for CS-110 Fall 2006**

Total Students	A	AB	B
6	16.66667%	50%	33.33333%

All columns must be centered. Headings sized as above.

Only grades actually present for a given class must be shown.

Grade designations must be sorted alphabetically.

New grade designations, such as “I”, might be added in the future. Must use a generic List and Dictionary to handle this flexibility. No key errors are allowed when using the Dictionary. Dictionary must be used to accumulate the grade distribution data.

All operations which might result in an error must be in try catch blocks with an appropriate error message indicating what function failed and what the failure was. Use Response.Write and Response.End. Error function must come from its own class so it can be reused.

Connection string must come from its own class so it can be reused.

Connection opened in OnInit();

Connection closed (only if open) in OnUnload();

Tables must be ASP tables, not direct HTML.

Final project must have a master page, a CSS file, default.aspx, roster.aspx, report.aspx, and two class files.

Database queries to use fully qualified table names ONLY when needed.

Queries must be parameterized.

Number of queries must be minimized using joins. This project will require use of non-joined, double joined and triple joined queries.