

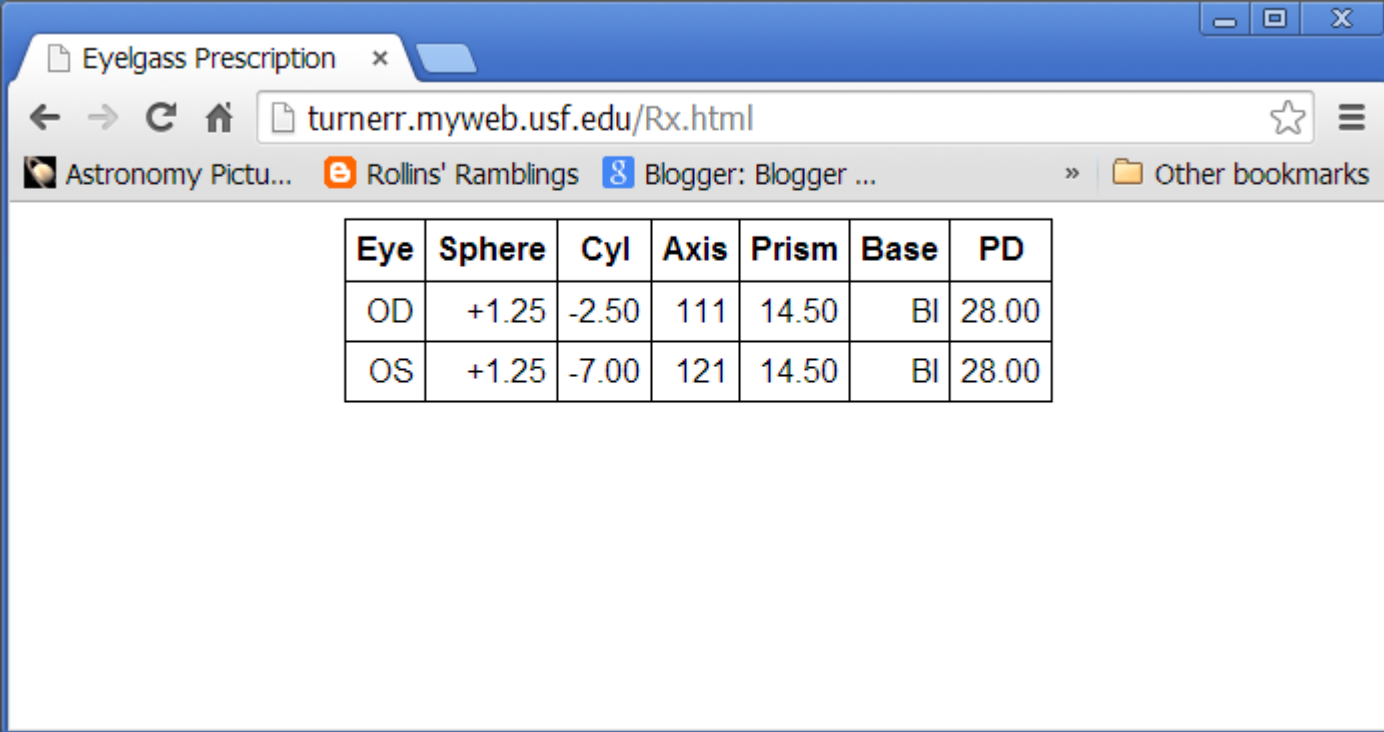


Project 5

Eyeglass Rx User Control

Eyeglass Rx

- Earlier in the semester we looked at an eyeglass prescription in an example of HTML tables.



A screenshot of a web browser window. The title bar says "Eyelglass Prescription". The address bar shows the URL "turnerr.myweb.usf.edu/Rx.html". The browser has several bookmarks, including "Astronomy Pictu...", "Rollins' Ramblings", and "Blogger: Blogger ...". The main content area displays an HTML table with 7 columns: Eye, Sphere, Cyl, Axis, Prism, Base, and PD. The table contains two rows of data for OD and OS eyes.

Eye	Sphere	Cyl	Axis	Prism	Base	PD
OD	+1.25	-2.50	111	14.50	BI	28.00
OS	+1.25	-7.00	121	14.50	BI	28.00



Project 5

- In this project we will create an ASPX user control to display eyeglass prescriptions.
 - Use ASPX Table control so that the contents are settable by code.
- The user control will be a reusable component.



Assignment

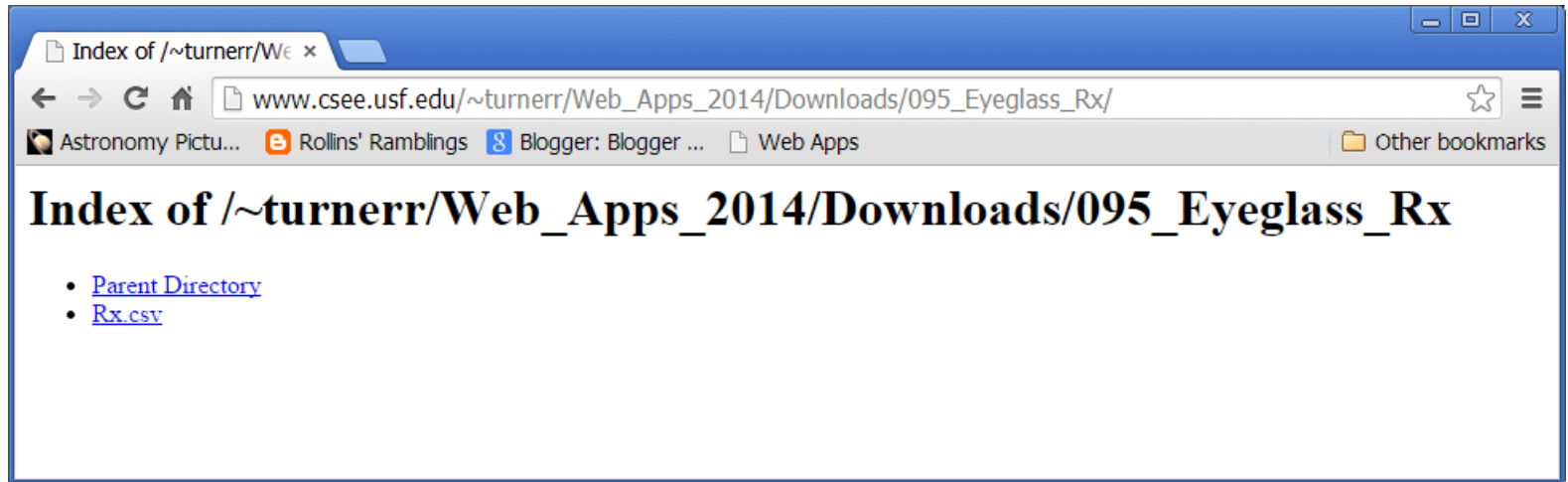
- Write an ASP.NET app to display Eyeglass Prescriptions from a comma separated values file.
 - Let the display be done by a user control suitable for reuse in other pages and apps.
- There is a working example at

http://rollinsturner.net/Eyeglass_Rx/

The Data File

- Download file Rx.csv from the class web site:

<http://www.cse.usf.edu/~turnerr/095>



Rx.csv

Rx.csv - Microsoft Excel

File Home Insert Page Layout Formulas Data Review View Team

M18 f_x 0

	A	B	C	D	E	F	G	H	I	J	K	L	M
1	RxID	RSphere	RCylinder	RAxis	RPrism	RBase	RAdd	RSeg	RPD	RNPD	LSphere	LCylinder	LAxis
2	3	-2	0	0	0	0	1	14	28	25	-0.5	0	0
3	4	-1	0	0	0	0	1	14	28	25	-1.25	0	0
4	6	-2	0	0	0	0	1	14	28	25	-2	0	0
5	8	0.75	1.25	10	0	0	2.25	17	30	25	0	2	70
6	10	0	0	0	0	0	1	14	28	25	0	0	0
7	12	-0.25	0	0	0.5	1	1	14	28	25	-0.25	0	0
8	13	0	0.25	1	0	0	1	14	28	25	0	0	0
9	14	0	-0.25	1	0	0	1	14	28	25	0	-0.25	1
10	15	0	-0.25	1	0.5	1	1	14	28	25	0	0.25	10
11	23	1.25	0.25	144	0	0	1	14	28	25	1.25	0	0
12	24	-1	0	0	0	0	1	14	28	25	-1.25	0	0
13	25	1.25	0	0	0	0	1	14	28	25	1.25	0	0
14	26	0	0	0	0	0	1	14	28	25	1.25	0	0
15	27	1.25	0.25	1	14	1	1	14	28	25	1.25	0.25	1
16	29	1.25	-3.75	29	8	1	1	14	28	25	1.25	-4.75	20

Ready

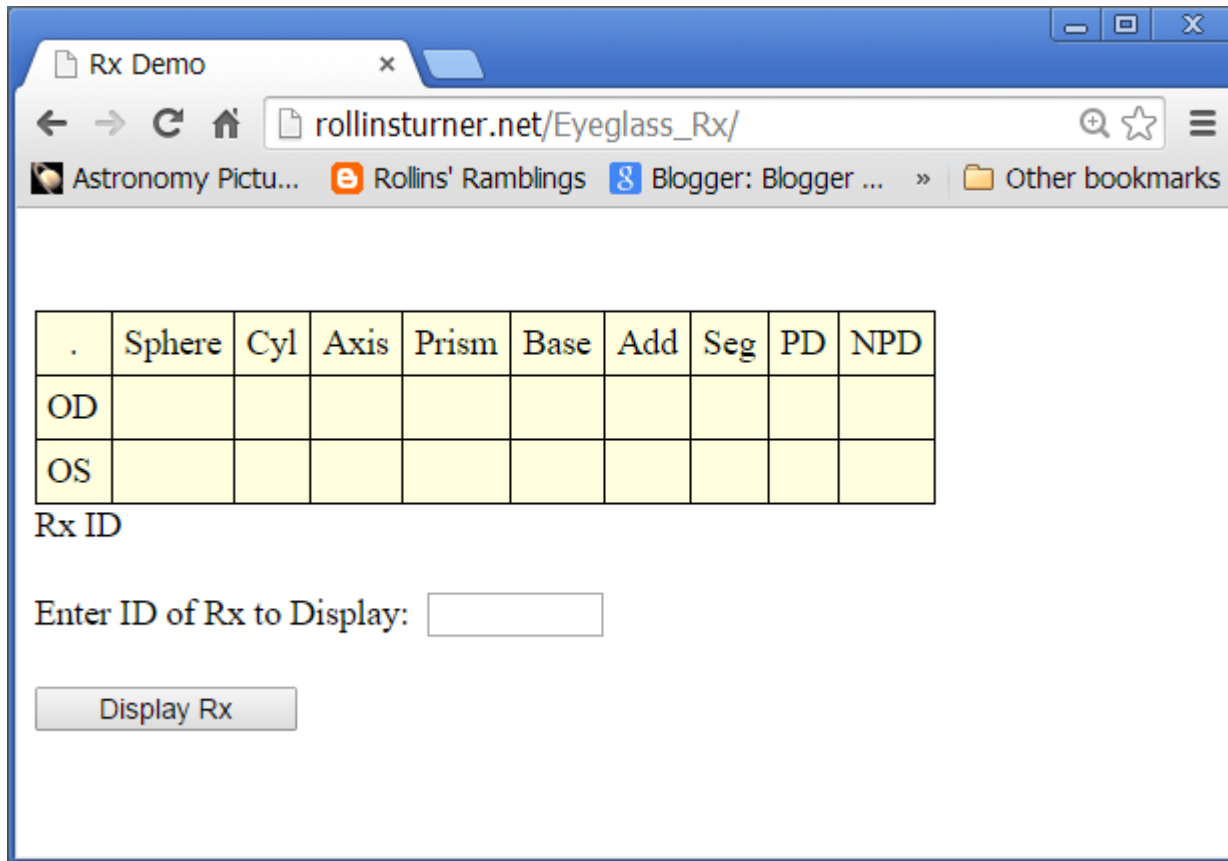
100%



Use Sequence

- The user enters a Rx ID into the textbox.
- The user clicks the “Display Rx” button.
- The app displays the selected Rx.

Example



Rx Demo

rollinsturner.net/Eyeglass_Rx/

Astronomy Pictu... Rollins' Ramblings Blogger: Blogger ... Other bookmarks

.	Sphere	Cyl	Axis	Prism	Base	Add	Seg	PD	NPD
OD									
OS									

Rx ID

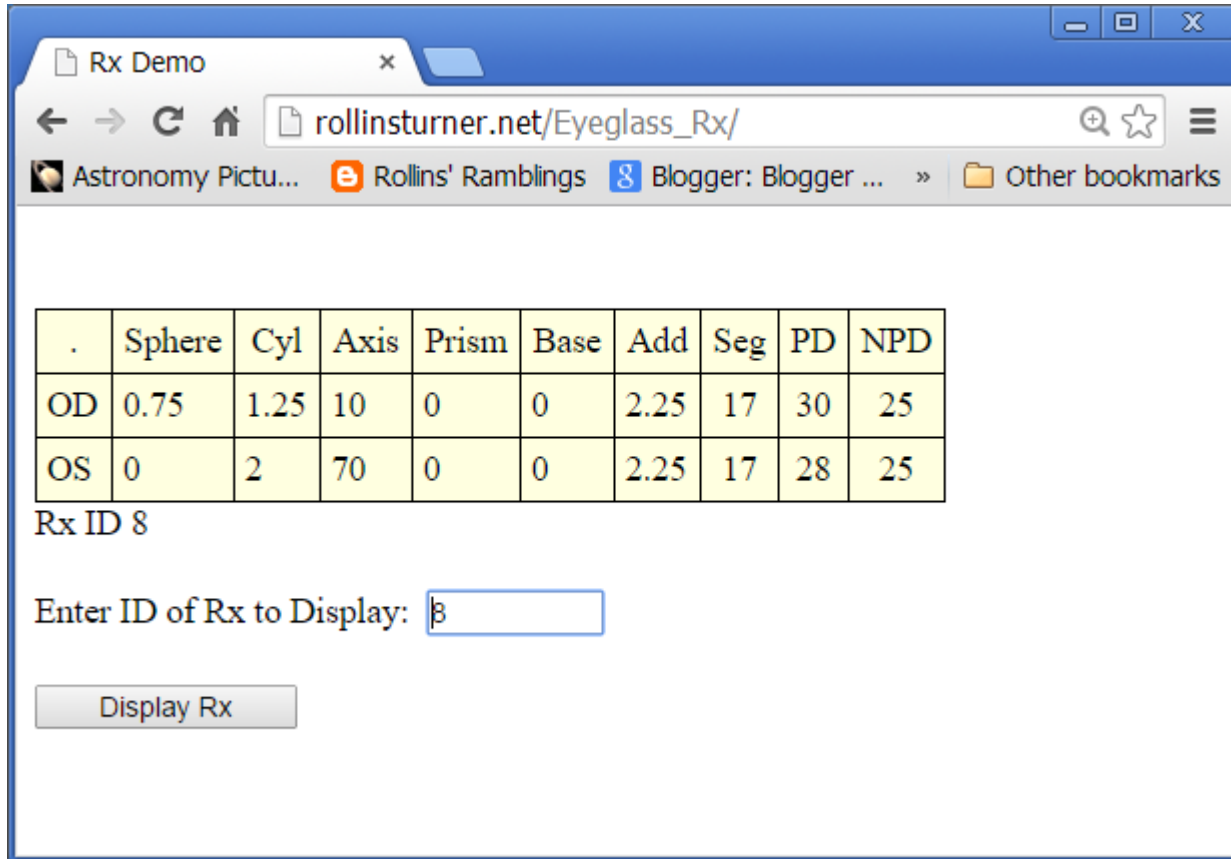
Enter ID of Rx to Display:

Display Rx

User enters 8 as Rx ID and then clicks "Display Rx".

Example

App displays Rx 8



The screenshot shows a web browser window titled "Rx Demo" with the address bar displaying "rollinsturner.net/Eyeglass_Rx/". The browser's bookmark bar includes "Astronomy Pictu...", "Rollins' Ramblings", "Blogger: Blogger ...", and "Other bookmarks". The main content area features a table with 10 columns: an empty header cell, "Sphere", "Cyl", "Axis", "Prism", "Base", "Add", "Seg", "PD", and "NPD". There are three data rows: "OD" with values 0.75, 1.25, 10, 0, 0, 2.25, 17, 30, 25; "OS" with values 0, 2, 70, 0, 0, 2.25, 17, 28, 25; and a third row with empty cells. Below the table, the text "Rx ID 8" is displayed. A label "Enter ID of Rx to Display:" is followed by a text input field containing the character "8". A "Display Rx" button is located below the input field.

	Sphere	Cyl	Axis	Prism	Base	Add	Seg	PD	NPD
OD	0.75	1.25	10	0	0	2.25	17	30	25
OS	0	2	70	0	0	2.25	17	28	25

Rx ID 8

Enter ID of Rx to Display:

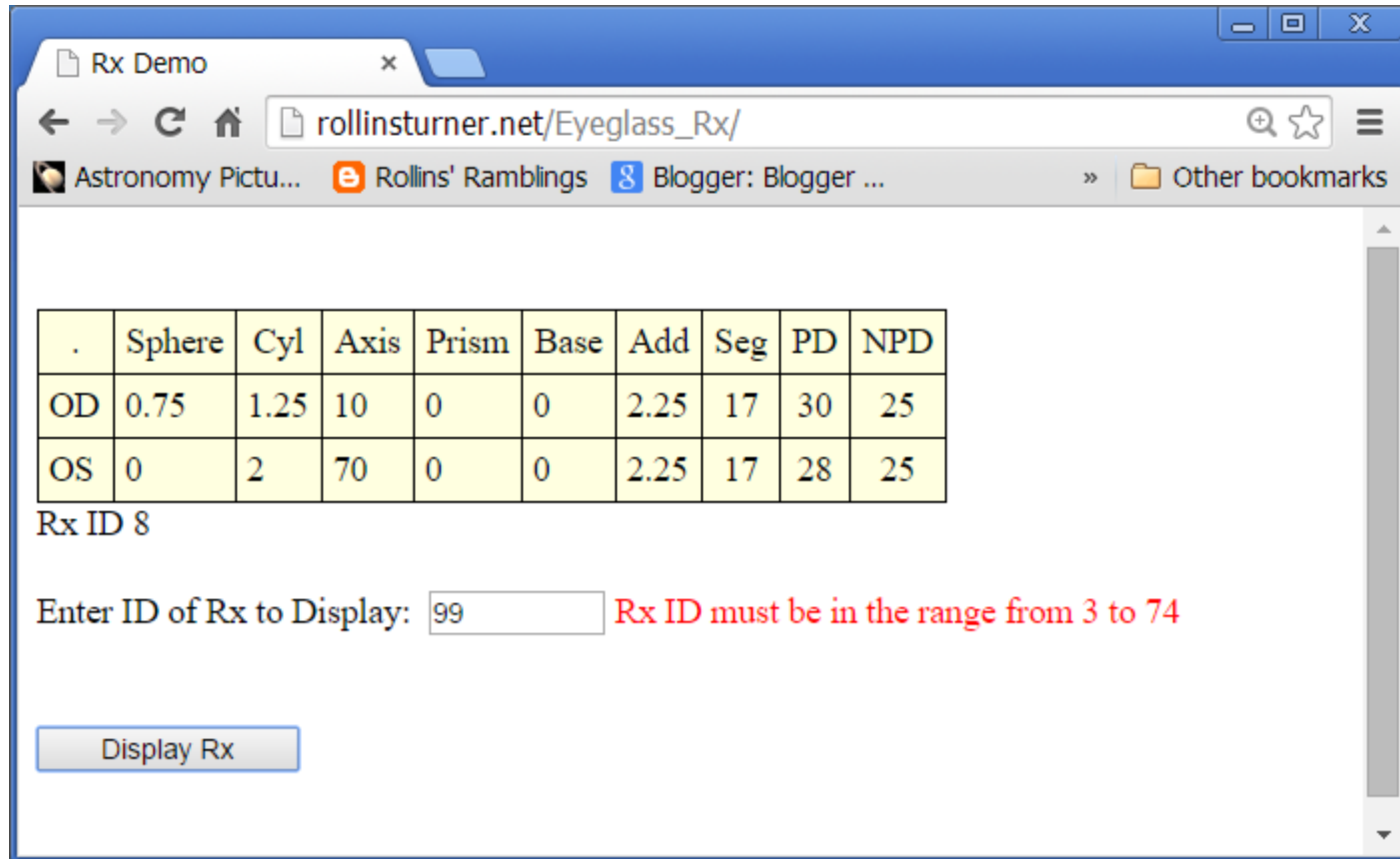


Error Use Sequence

- User enters an invalid Rx ID into the textbox.
- User clicks the “Display Rx” button.
- App displays an error message telling the user the valid range of Rx IDs.

Invalid Rx ID Error Use Sequence

User enters an invalid Rx ID into the textbox and then clicks "Display Rx".



.	Sphere	Cyl	Axis	Prism	Base	Add	Seg	PD	NPD
OD	0.75	1.25	10	0	0	2.25	17	30	25
OS	0	2	70	0	0	2.25	17	28	25

Rx ID 8

Enter ID of Rx to Display: Rx ID must be in the range from 3 to 74

Previously displayed Rx (if any) is unchanged.

Invalid Rx ID Error Use Sequence

User enters an invalid Rx ID into the textbox and then clicks "Display Rx".

.	Sphere	Cyl	Axis	Prism	Base	Add	Seg	PD	NPD
OD	0.75	1.25	10	0	0	2.25	17	30	25
OS	0	2	70	0	0	2.25	17	28	25

Rx ID 8

Enter ID of Rx to Display: Rx ID must be in the range from 3 to 74

Previously displayed Rx (if any) is unchanged.



Error Use Sequence

- User clicks the “Display Rx” button with nothing in the Rx ID textbox.
- App displays an error message telling the user that an Rx ID is required.

No Rx ID Error Use Sequence

Rx Demo

rollinsturner.net/Eyeglass_Rx/

Astronomy Pictu... Rollins' Ramblings Blogger: Blogger ... Other bookmarks

.	Sphere	Cyl	Axis	Prism	Base	Add	Seg	PD	NPD
OD	0.75	1.25	10	0	0	2.25	17	30	25
OS	0	2	70	0	0	2.25	17	28	25

Rx ID 8

Enter ID of Rx to Display: Rx ID is required

Display Rx

- Your app should look similar to the example and should behave identically.
 - Note cell padding.

- Define a class, Rx, to hold Eyeglass Rx information.
 - An object of this class should hold one eyeglass prescription.
 - Constructor takes one line of the data file as a parameter.
 - Use Rx objects wherever you need Rx information.
- Use Application state to hold file contents.
- Read the file only if you have to because the Application variable does not exist.



Specifications

- The eyeglass Rx should be displayed in a user control.
 - Suitable for reuse in other pages and apps.
- The user control should have a public property of type Rx.
 - Setting the property causes the user control to display that Rx.

- Use ASPX Validator controls to validate the input.
- Set the min and max values according to the contents of the file.
 - Also the error message.
- The program should have no built-in knowledge of the range of Rx ID values.
 - Accept up to three digits for Rx ID.



Specifications

- The program should never throw an exception due to bad input.
 - Even if the user's browser does not support JavaScript, or the user has JavaScript disabled.



Implementation Tips

- Review the slides and examples from class presentations.
- It is OK to copy and modify code from class presentations and the Downloads area of the class web site.
- Look up documentation on the ASPX Table class.
 - The markup in your .aspx file is different from HTML `<table>` markup.
 - Contents settable by page code.
 - Renders as HTML `<table>`



Implementation Tips

- Test your app with `EnableClientScript` set to `False` in all validators.
 - This is to ensure that the app will work correctly even if the browser does not have JavaScript.



Ground Rules

- You may work with one or two other students.
 - OK to work alone if you prefer.



Ground Rules

- If you do collaborate
 - All group members are expected to contribute.
 - Each group member should deploy the files to his or her own scorpius directory.
 - Only one group member should submit the website files in Canvas.
 - Include a comment with the URL of his or her own scorpius directory and the names of all group members.
 - Other group members submit just a comment with their own URL and the names of all group members.
- Grader should be able to access your website by copying the URL from your Canvas comment and pasting it into a browser address box.



Submission

- Submit your web site folder via Canvas Assignments.
- Zip your web site folder using the Windows “Send to Compressed Folder” command.
- Submit the .zip file
 - Do not submit any other form of compressed file.



Submission

- Deploy your website files to your scorpius directory.
 - Omit web.config. (It will cause the app to fail on scorpius.)
 - Delete “using Linq” if it is present in your .cs files.
 - Newer versions of Visual Studio put this into the initial .cs files.
 - It will cause compile errors on scorpius.



Ground Rules

- Do not share your work with other students (outside your group.)
 - Before or after submitting the project.
 - OK to *discuss* the project.
 - OK to look at others' web sites with a browser.
- Do not copy any other student's code.
 - Or even look at it.
- Do not let anyone copy or examine your code.



Ground Rules

Except for code posted on the class web site

- Do not copy code from the Internet
 - or any other source.
- Write your own code.



Due Date

- Project is due by 11:59 PM, Sunday, October 19.
 - Project submitted after the deadline will be subject to a penalty of 10 points per hour.