



# Use Case

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Team Email: [blugoo@lists.csc.calpoly.edu](mailto:blugoo@lists.csc.calpoly.edu)

Team Wiki: <http://wiki.csc.calpoly.edu/blugoo>

Lead:

Viktor Gerdin

Members:

Katherine Blizard

Nathaniel Welch

Paul Phu

Michael Quan

Hermyn Mendez

Kalvin Vu

# Use Case Document

Name	Date	Reason For Changes	Version
Nat Welch	2/1/09	Merged wiki versions of use cases	0.42

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**Use Case # 1****Use Case Name** View Announcements**Created By** Nat Welch**Date Created** 1/26/08**Actor** Student**Description**

A page exists with all of the news posts posted by the Teacher sorted with the most recently posted announcements at the top of the page. Students can view this page and each announcement shows a title, announcement time and date, and the content of the announcement.

**Pre-conditions** Student must be enrolled in the class and logged into the application.**Post-conditions** The page as specified in the description is displayed.**Frequency of Use** Once a week**Exceptions** If no announcements have been made then display a "no announcements message".**Includes** None**Special Requirements** None**Assumptions** None**Notes and Issues** None

**Use Case # 2****Use Case Name** View Grade**Created By** Nat Welch**Date Created** 1/25/08**Actor** Student

**Description** Upon logging in the student will be displayed a summary of his most recent grades. This summary is a table which provides the most recently graded assignment and the current status of his overall grade. For both of these statistics a letter grade, a points earned, points available, and a percentage will be provided. From here he can follow a link to a page that provides a more detailed listing for his grade. At the top of this page there is a table which provides the same columns as the previous table, except the first column is titled "Assignment". Each row of the table is associated with one assignment and the final row is labeled Overall, which shows the summation of the previous grades and is the same statistic that was provided on the front page. This table can be sorted by column headers, although the overall row will always remain at the bottom. When a Student clicks on the table header it will sort the table in ascending order first so the student can get an idea of which assignments he did better on. Below this table a plot chart will graph the grade distribution of the entire class section.

**Pre-conditions** Student must be enrolled in the class and logged into the application

**Post-conditions** A page containing a table and a graph will be displayed if on view grade page, or just a small table as defined above if it is the homepage.

**Frequency of Use** Once a week

**Exceptions** None

**Includes** None

**Special Requirements** It should be noted that it will be impossible for a student to tell what grade another specific student has in the class nor discern any information other than their general standing in relation to their peers.

**Assumptions** None

**Notes and Issues** None

**Use Case # 3****Use Case Name** Check Class Standing**Created By** Nat Welch**Date Created** 1/30/08**Actor** Student**Description**

This feature is the parent of the chart on the view grades page. This page provides a selection of charts to help show the overall progress of the class, and the student's position in relation to their peers. The first chart is the same as the one on the view grades class, a scatter chart to show where the student is in relation to his peers. The next chart has a drop down box above it. Inside this drop down box is a list of every assignment for the class. Depending on which assignment is selected the chart will show the grade distribution for just that assignment. This gives the student a chance to see how they did on a per assignment basis. Finally at the bottom of the page there are two pie charts. The first pie chart shows the grade curve. The second pie chart shows the percentage of students that are getting which grades. These two charts should be identical to the ones the Teacher sees when they are modifying the grade curve.

**Pre-conditions** Student must be enrolled in the class and logged into the application**Post-conditions** A page containing graphs will be displayed.**Frequency of Use** Once a week**Exceptions** Students should not be able to discern any specific information about their peers from this page.**Includes** None**Special Requirements** None**Assumptions** None**Notes and Issues** None

**Use Case # 4****Use Case Name** Print Page**Created By** Michael Quan**Date Created** 1/31/09**Actor** Student**Description**

Our tool will have the ability to convert the current graphical user interface page from the web browser into a page with only tables of assignments and the respective grades for less cluttered printing. The full webpage consists of the graphical user interface with the data contained in it. The print page option will allow the data from the webpage to be extracted into its own separate page with no graphic user interface.

**Pre-conditions** Student must be logged into the application. Student clicks on a button in the upper right corner of the page that says "Printer Friendly Page"

**Post-conditions** A new web browser page will display with just data and no colors or black and white gray fills. The output webpage format conforms to a standard 8.5" x 11" sheet of paper.

**Frequency of Use** Daily

**Exceptions** None

**Includes** None

**Special Requirements** None

**Assumptions** None

**Notes and Issues** None

**Use Case # 5****Use Case Name** Download File**Created By** Michael Quan**Date Created** 1/31/09**Actor** Student**Description**

Student will be able to download files posted by the teacher from the file storage space. Teacher will make available files for particular assignments that require additional files.

**Input** Student clicks on button "Download File" on the respective assignment page of the tool.

**Output** The tool links the respective files from the database to the web browser. If more than one file exists, two separate files are linked separately. Student can then do anything with the file.

**Pre-conditions** Student must be logged into the application. Teacher must have a file uploaded for the respective assignment.

**Post-conditions** None

**Frequency of Use** Once a week

**Exceptions** Failed download gives error message.

**Includes** None

**Special Requirements** In order to view downloaded file, Student must have a program to open the file extension of the downloaded file.

**Assumptions** None

**Notes and Issues** None



**Use Case # 6****Use Case Name** Upload Homework**Created By** Michael Quan**Date Created** 1/31/09**Actor** Student**Description**

Our tool will allow Student to upload files for the class and store them on the database for the teacher to view.

**Pre-conditions** Student must be logged into the application. Teacher must make file uploads available for the particular assignment. Student clicks on a particular assignment on the assignment page. Student then clicks on “upload homework” and chooses the file from the local computer to upload. After choosing file, Student clicks “upload.”

**Post-conditions** The file is saved to the database. Once the upload is complete the system will print out a message saying, “Upload complete.”

**Frequency of Use** Once a week

**Exceptions** Failed upload gives error message.

**Includes** None

**Special Requirements** None

**Assumptions** None

**Notes and Issues** None

**Use Case # 7**

**Use Case Name**

**Created By** Nat Welch

**Date Created** 1/27/08

**Actor** Teacher

**Description**

**Pre-conditions**

**Post-conditions**

**Frequency of Use**

**Exceptions** None

**Includes** None

**Special Requirements** None

**Assumptions** None

**Notes and Issues** None

**Use Case # 8****Use Case Name** Manage Classes**Created By** Nat Welch**Date Created** 1/27/08**Actor** Teacher**Description**

A Teacher needs to be able to manage the classes they are currently working on. On one page they should be able to add, remove, edit, backup, and restore their classes. The class title, class number, class section, class curve, and which TAs are assigned to the class. Upon arriving at the page the teacher will need to select the class they wish to edit. The classes will be listed in a table. There will be a red x next to each class name so the teacher can delete the class. They will be asked if they are sure they want to delete a class before the class is actually deleted if they do click that red x. Once they select a class by clicking on its name, all of the information for that class will be displayed. The information will be displayed in a simple table, and each value will have an edit button next to it. Once the edit button is clicked the value will become a text box where the teacher can edit the value, and then click save. Once they are done editing the class they can click done and the values will be updated in the database, and they will be returned to the class listing page. At the bottom of the class table will be an add button and a backup button. The add button will take you to an empty class info page to fill out, while the backup button will provide you with a gzip'd tar file of all of the class information (including students and grades) which can be saved to disk.

**Pre-conditions** Teacher must be logged into the application**Post-conditions** The information is saved to the database and the page shows the new changes.**Frequency of Use** Once a week**Exceptions** None**Includes** None**Special Requirements** None**Assumptions** None**Notes and Issues** The extracted file will be a CSV file.

**Use Case # 9****Use Case Name** Manage Users**Created By** Nat Welch**Date Created** 1/27/08**Actor** Teacher**Description**

A Teacher needs to be able to manage the users of their grade book. The teacher should be able edit all aspects of the student and from this page easily get to the pages where he/she can modify grades, modify classes, or view metrics. A drop down box will allow the teacher to select a class. Once they have selected a class they will be given a table of all of their students. The teacher can click on a name to edit it, or click the x next to their name to delete it. At the bottom of the page the teacher can add a student.

**Pre-conditions** Teacher must be logged into the application**Post-conditions** The information is saved to the database and the page shows the new changes.**Frequency of Use** Once a week**Exceptions** None**Includes** None**Special Requirements** None**Assumptions** None**Notes and Issues** None

**Use Case # 10****Use Case Name** Manage Assignments**Created By** Nat Welch**Date Created** 1/27/08**Actor** Teacher**Description**

The teacher selects a class from a drop down menu. Once a class is selected he/she is given a table of all assignments. The table has two columns, assignment name and total points available. Each assignment can be edited by clicking on its name and new assignments can be added by clicking on a button at the bottom of the table. Each assignment can be deleted by clicking the delete button next to the assignments row. No changes will be saved until the teacher clicks the save button at the bottom of the page.

**Pre-conditions** Teacher must be logged into the application**Post-conditions** The information is saved to the database and the page shows the new changes.**Frequency of Use** Once a week**Exceptions** None**Includes** None**Special Requirements** None**Assumptions** None**Notes and Issues** None

**Use Case # 11****Use Case Name** Manage Announcements**Created By** Katherine Blizzard**Date Created** 1/31/2009**Actor** Teacher**Description**

The Teacher is able to add, edit or remove announcements, messages that are displayed to all students in a selected class, or to all classes

**Normal Flow**

1. The Teacher is presented with a list of previously created announcements titles, each with an edit button and delete button beside them. A create announcement button is above the list.
2. If the Teacher chooses to edit or create a new announcement, they are brought to a page that has two text boxes, one for the title of the announcement and one for the body. The page also has a checklist of classes they teach.
3. The teacher fills in those boxes with text, checks all class check boxes to display the announcement, and presses a done button.
4. The system gathers the information, adds the current date, and applies it to the selected classes.
5. The Teacher is brought back to the announcements page with the list of announcements.
6. If the Teacher presses the Delete button, the System displays an "Are You Sure" dialog box, and then deletes the announcement from the list of announcements.

**Alternate Flow**

- 1a. Teacher can delete an announcement before adding or editing one.
- 2a. If Teacher is editing an announcement instead of creating a new one, the System fills the text boxes with the information from the announcement being edited.
- 6a. Teacher may decide not to delete any announcements at all.

**Pre-conditions** The Teacher is logged in**Post-conditions** The database of Announcements has been modified as requested by the Teacher.**Frequency of Use** Several times a week

**Exceptions** If no previous announcements have been created, a "No Announcements Yet" notice is displayed instead, and the Teacher's only option is to create a new announcement. If the database has no room to save adds or edits, an error is shown and the action is canceled.

**Includes** None**Special Requirements** None**Assumptions** The system has somewhere to save announcements.**Priority** Medium High**Notes and Issues** None.

**Use Case # 12****Use Case Name** Send Email**Created By** Katherine Blizzard**Date Created** 1/31/2009**Actor** Teacher or Teacher Assistant**Description**

Teacher or Teacher Assistant can send an Email out to a student by student user name or email address or to the entire class or classes.

**Normal Flow**

1. Teacher is brought to a page with text boxes for an email title, email recipients and the email body, as well as a button to upload file attachments.
2. Teacher enters either a student's username or an email address with an @ sign, or enters the name of a class. Then Teacher proceeds to fill out the title and body of the email as desired and presses the Send button.
3. System takes information entered by teacher, and parses the address line to find a username, class name or email address.
4. If a filename of a file to be uploaded is present, the system downloads the file from the user's computer.
5. The system turns the parsed address line into an address and sends the email and its attachment if the email has an attachment.

**Pre-conditions** Teacher is logged in**Post-conditions** Applicable students receive email from the Teacher in their inboxes.**Frequency of Use** One to three times a day

**Exceptions** An error occurs if the Teacher enters nothing, an invalid username, an invalid class name or invalid email address in the address line and the email is not sent. If the Teacher enters nothing for the email title, the email is sent with the title "[no title]." If the Teacher sends an email with no body, a dialog box informing the Teacher is displayed.

**Includes** None**Special Requirements** None**Assumptions** Teacher knows how to operate an email client.**Priority** Medium Low**Notes and Issues** Email may be susceptible to excessive spam without a spam blocking ability.

**Use Case # 13****Use Case Name** Grade Students**Created By** Nat Welch**Date Created** 2/1/08**Actor** Teacher**Description**

Our tool will have the ability to adjust the grade for each assignment for each student in each class. The teacher will choose a class to grade upon arriving at the grading page and will then be given a table with the students on first column and assignments in the first row.

**Pre-conditions** Teacher must be logged into the application and have created a class with assignments in it. The teacher will click the corresponding table cell for student assignment pair and will then be able to change the grade. Note that all grades are set to zero before a grade is entered.

**Post-conditions** The information is saved to the database upon clicking apply and the refreshed page shows the new changes. The table will not be sort-able and will just be organized alphabetically by student last name. The grades will not be saved until the apply button at the bottom of the page is clicked.

**Frequency of Use** Once a week

**Exceptions** None

**Includes** None

**Special Requirements** None

**Assumptions** None

**Notes and Issues** None



**Use Case # 14****Use Case Name** View Roster**Created By** Nat Welch**Date Created** 2/1/08**Actor** Teacher**Description**

This page will allow the teacher to select a class and be presented with a roster for the class.

**Pre-conditions** Teacher must be logged into the application. The only input a teacher can make on this page is to click each table header to sort the table by those columns contents.

**Post-conditions** A table will be output with the students first and last name, year, and current grade in the course.

**Frequency of Use** Once a week

**Exceptions** None

**Includes** None

**Special Requirements** None

**Assumptions** None

**Notes and Issues** None

**Use Case # 15**

**Use Case Name** Take Attendance

**Created By** Nat Welch

**Date Created** 2/1/08

**Actor** Teacher

**Description**

This page will allow marking students absent or present.

**Pre-conditions** Teacher must be logged into the application.

**Post-conditions** A table will be output with the students first and last name and a checkbox

**Frequency of Use** Once a week

**Exceptions** None

**Includes** None

**Special Requirements** None

**Assumptions** None

**Notes and Issues** None

**Use Case # 16****Use Case Name** Curve Adjustment**Created By** Nat Welch**Date Created** 1/27/08**Actor** Teacher**Description**

Our tool will have the ability to adjust the grading curve for each class. Five text boxes with plus and minus buttons will let the Teacher increment or decrement the curve. Above graphs (described in output) will display the new curve. The new curve will not go into effect until the teacher clicks the apply button at the bottom of the page.

**Pre-conditions** Teacher must be logged into the application. The teacher either types in, or uses buttons to select a desired curve. Each box will be related to a certain grade, e.g. A, B, C, D and F.

**Post-conditions** The information is saved to the database upon clicking apply and the refreshed page shows the new changes. Above the curve modifier boxes there will be two pie charts. The first pie chart will show the distribution of the grade by percent. So if the curve is set to have the A/B border at 90%, the B/C border at 80%, the C/D border at 70%, and the D/F border be at 50% there would be a pie chart that has 50% for F, 20% for D, and 10% for each A, B and C. Each section will be a different color. The second pie chart will show how many students are getting each grade. The colors in these should be the same so the Teacher can easily understand differentiate between grades on both charts. Like all charts in our application, the charts should be properly labeled. The charts should also be the same size.

**Frequency of Use** Once a week

**Exceptions** None

**Includes** None

**Special Requirements** None

**Assumptions** None

**Notes and Issues** None

**Use Case # 17****Use Case Name** Import Data**Created By** Katherine Blizzard**Date Created** 1/31/2009**Actor** Teacher**Description**

The Teacher may need to import Microsoft Excel spreadsheets containing data from rosters, students, or assignments. It is an alternative to the time consuming practice of copying the data from large spreadsheets manually

**Normal Flow**

1. Teacher is prompted if he will import a Class (a list of Students), a Student (a list of their assignment grades), or an Assignment (a list of students and their grades they received on that assignment).
2. A Dialog box appears, asking the Teacher for the spreadsheet file. He selects his file and presses enter or clicks OK.
3. The System begins downloading the spreadsheet from the Teacher's computer.
4. The System parses the spreadsheet, creates a new Class if the Teacher selected Roster, or otherwise searches for each student and updates their Assignment grades accordingly.
5. The system recalculates all Student Total Grades.
6. A completed message is given to the Teacher

**Pre-conditions** The Teacher is logged into the grader. The Teacher has created a spreadsheet containing at minimum a Student's username and the class they belong to. If the Teacher is uploading an Assignment Grade spreadsheet, the assignment number and type (Test, Quiz, Final, Homework, Participation, or Other) is required.

**Post-conditions** The System has updated all classes and students to match the result in the spreadsheet.

**Frequency of Use** About once per day

**Exceptions** Assignment Grade to be updated has a grade already in place. The Teacher is given a dialog box explaining the situation, with three buttons to continue and overwrite, continue and not overwrite already established data, and cancel update.

**Includes** None

**Special Requirements** The Teacher must have an application that can save in Microsoft Excel spreadsheet format. (.xls)

**Assumptions** The system assumes the teacher has labeled spreadsheet columns appropriately and put the correct number in the correct column

**Notes and Issues** None

**Priority** Medium

**Use Case # 18****Use Case Name** Export Data**Created By** Calvin Vu**Date Created** 1/31/2009**Actor** Teacher**Description**

The Teacher may need to export Class information, an otherwise time consuming task. The page will include a table of all Classes as well as links to each Class page. Each Class has its name, number of students, time, and export button listed in the table. The export button for each Class will prompt the System to generate a .csv or .tdl file and begin a download.

**Pre-conditions** The desired Class must already exist. The Teacher clicks on an export button.

**Post-conditions** The Teacher receives a file containing Class information.

**Frequency of Use** Once a week

**Exceptions** If exporting fails then an error message is displayed. Exporting can fail due to an inconsistency with the database or network error.

**Includes** None

**Special Requirements** The Teacher must have access to program that can display spreadsheets.

**Assumptions** None

**Notes and Issues** None

**Use Case # 19****Use Case Name** Upload Files**Created By** Calvin Vu**Date Created** 1/31/2009**Actor** Teacher**Description**

The Teacher may need to upload files for distribution. Each individual assignment page will include an upload button. Clicking it will open a prompt for a file from the Teacher's local computer. Once the Teacher selects a file, the transfer will begin. Once stored, the file will be displayed as a downloadable file on the assignment page.

**Pre-conditions** The Teacher clicks the upload button.

Post-conditions The System must update the database and assignment page to include the new file. A confirmation message is displayed.

**Frequency of Use** Twice a week

**Exceptions** If the upload fails, an error message is displayed. Upload can fail due to network error. If a file with the same name already exists, the newly uploaded file's name is modified with a number.

**Includes** None**Special Requirements** None**Assumptions** None**Notes and Issues** None

**Use Case # 20****Use Case Name** Download Files**Created By** Calvin Vu**Date Created** 1/31/2009**Actor** Teacher**Description**

The Teacher may need to download files that have been previously uploaded. Each individual assignment page will list available files and their attributes: name, type, time uploaded, and uploaded by. A download button will begin the download. A download all button will begin a download for all listed files packaged in zip format.

**Pre-conditions** The desired file must have already been uploaded. The Teacher clicks a “download” or “download all” button.

**Post-conditions** The desired file is transferred to the Teacher.

**Frequency of Use** Once a day

**Exceptions** If the download fails then an error message is displayed. Failure can be a result of database inconsistency or network error.

**Includes** None

**Special Requirements** The Teacher must have access to a program that can read zip files if using the download all function.

**Assumptions** None

**Notes and Issues** None