Modernizing the Evaluation Process

A User Manual for GradeBook

Version 2

Decision Academic Graphics
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GradeBook

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Chapter 1 Getting Started

Introduction

GradeBook is an innovative and flexible student information solution from Decision Academic Graphics Inc. (DAG). It is a user-friendly system that can be fitted exactly to the different needs of universities and colleges worldwide. Accessed through the Internet, it provides ease of entry from virtually every computer. Administrators, instructors, and students have different forms of access to GradeBook; therefore, all parties can participate in the evaluation process, while ensuring high security standards.

GradeBook makes everyone's life easier.

With GradeBook **administrators** can:

- Maintain up-to-date enrollment information.
- Track and monitor students' performance.
- Receive grades electronically.

With GradeBook **instructors** can:

- Create secure and confidential student assessments.
- Control security by granting *teaching assistants* partial or full access to student assessments.
- Easily generate reports on student and class standings.
- Receive and respond to communications from students concerning marks and grades.
- Send grades to the administrative office electronically.
- Export data to other applications such as MS Excel®

With GradeBook **students** can:

- View grades.
- Communicate with their instructors.

How to use this manual

This manual is intended to familiarize users with the functionalities of GradeBook in a straightforward and easy-to-use format. To accomplish this, the manual has been organized as follows:

Chapter 1: Getting Started presents the basics for effectively using the user's manual, and how to install GradeBook.

Chapter 2: GradeBook Environment serves as an overall introduction to GradeBook's set of tools, functions and general appearance.

Chapter 3: GradeBook Spreadsheet describes in detail the spreadsheet tool; with instructions on opening the tool, building and managing student evaluations, partitioning the class into sections and blocks, and creating Grade Notes. It also describes the process of exporting data from GradeBook.

Chapter 4: Formulas examines the process of creating and assigning formulas within the GradeBook Spreadsheet.

Chapter 5: Plugin Editor familiarizes the user with the creation and use of *plugins* within GradeBook.

Chapter 6: Template Editor introduces the user to *narrative evaluation* templates, with instructions on both building and using templates within GradeBook.

Chapter 7: Importing & Exporting presents several administrative tools useful for importing and exporting grades, and submitting class grades to higher levels of authority.

Chapter 8: Teaching Assistants (TA) describes in detail the action of assigning *teaching assistants* to a class.

Chapter 9: Instructor Manager presents the various security options available to instructors in sharing marking duties with other faculty and teaching assistants.

Chapter 10: Block Manager introduces the user to sectioning a class through blocks.

Chapter 11: Student Manager describes the various options available for creating and modifying student enrollment status.

Chapter 12: Reports discusses the various reporting tools available to instructors using GradeBook.

Chapter 13: User Tools explores the tools for maintaining a user's profile, adding new *test activities*, and accessing information regarding past terms.

Chapter 14: Student Access discusses the GradeBook access available to students.

Chapter 15: High Level Access presents the GradeBook tools available to the various levels of administrative staff.

Chapter 16: Glossary defines some of the technical terms used by GradeBook for quick reference.

Typographical Conventions

Throughout this manual the following typographical conventions have been used.

Italic Text	Words defined within the glossary are written in italics throughout the manual.
	A list of commands is always preceded by an arrow.
‘Single Quotations’	Words or phrases written in single quotation marks within the manual indicate that the same phrasing appears within the GradeBook program.
Note	Shaded text boxes highlight key points for effectively using GradeBook functionalities.

Chapter 2 GradeBook Environment

Introduction

GradeBook enables instructors to access vital information about their classes; to do this several tools are included with the GradeBook software. Access to these tools may require the user to hold the required privilege. The details of the tools presented below will be expanded upon in the following chapters.

Login

Every GradeBook software user has a unique ID and password, which must be used to log into the program. This ensures the confidentiality of staff and student information.

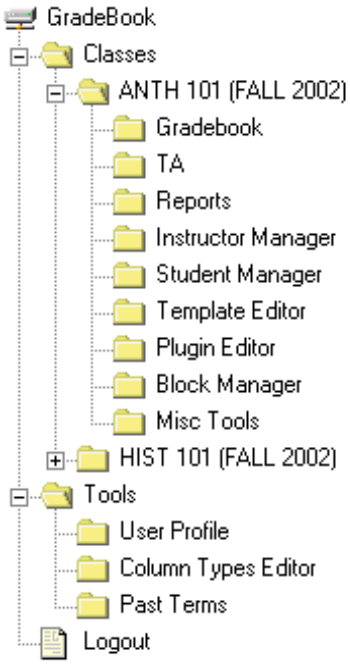


Figure 2-1: *Primary menu*, as seen by instructors

Upon logging into GradeBook instructors see a *primary menu* similar to that shown in Figure 2-1. The class tools are listed under the individual class folders, ['ANTH 101 (FALL 2002)' or 'HIST 101 (FALL 2002)' in the case shown]. The user tools are listed under the 'Tools' folder.

Class Tools

The class tools refer to those tools that are used to register one specific class' evaluation. They are the key functionalities of the GradeBook software and are accessed through the *primary menu*. These tools may not all be available to an instructor, as several do require that the user hold a certain privilege.

These tools are:

- GradeBook Spreadsheet
- Teaching Assistants (TA)
- Reports
- Instructor Manager
- Student Manager
- Template Editor
- Plugin Editor
- Block Manager
- Miscellaneous Tools

User Tools

The user tools refer to those tools that can be applied to all the classes that an instructor teaches.

These tools are:

- User Profile
- Column Types Editor
- Past Terms

Logout

Users may logout at any time using the 'Logout' link at the bottom of the *primary menu*.

After a pre-set period of inactivity (approximately 20 minutes), GradeBook will log you out automatically.

Chapter 3 GradeBook Spreadsheet

In brief…	
Part of standard GradeBook package:	Yes
Scope:	Local
User(s):	All instructors

Introduction

The GradeBook Spreadsheet is the most powerful tool in the GradeBook software package. In general terms it helps instructors record student marks throughout the term, in a simple spreadsheet environment. Marks for various *test activities* can be entered numerically or with text using keyboard inputs or dropdown menus. It also facilitates communication between instructor and students by means of the 'Grade Notes' feature.

Every action that an instructor may need to plan a class is available through the GradeBook Spreadsheet.

The GradeBook Spreadsheet Window

To open the GradeBook Spreadsheet

1) Log in to the GradeBook software program, if it's not already active.
2) From the *primary menu*, click on the 'Classes' folder, and click on the specific class that you wish to work on.
3) Click on the 'GradeBook' folder.
4) The GradeBook Spreadsheet window will appear, similar to that shown in Figure 3-1.

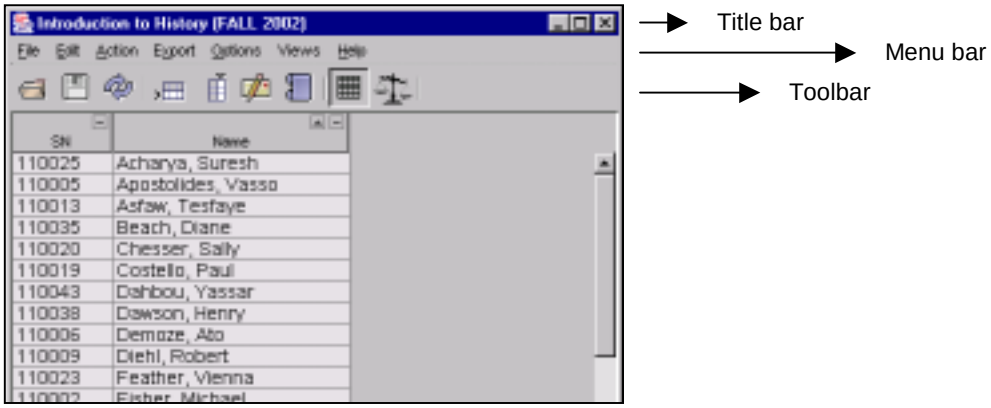


Figure 3-1: GradeBook Spreadsheet Window

Title Bar

Displays the full class name of the current application. If more than one window is open, the active window has its title bar colored blue; inactive windows have gray title bars.

Menu Bar

Contains the available menus for the spreadsheet. These dropdown menus are briefly described below:

File

'Open' – Opens another class spreadsheet, and closes the current one.

'New Window' – Opens a blank class spreadsheet, but does not close the current one.

> Using the 'New Window' command and then the 'Open' command an instructor can have **multiple class spreadsheets open at once**.

'Save and Refresh' – Saves changes to the spreadsheet layout and formula values.

'Close' – Closes the active window.

'Refresh' – Refreshes the view, without saving the changes.

Edit

This menu is only available when you are working within the *Formula view*.
'Delete' – Deletes the current active formula, highlighted on the formula panel.

Action

'Add Letter Conversion Column' – Creates a new column that references an existing column of type *final numeric,* and converts it to the corresponding letter grade. This new column will be of type final alpha, and is unique to a class spreadsheet.

'Iconify all columns' – Minimizes the individual spreadsheet columns and creates buttons to restore them, located along the bottom of the window.

'Links – Update *Narrative Evaluation* Formula Values' - Updates and saves *narrative evaluation* text.

Export

'To User Files' – Enables column data to be exported to the user in a text format. This command is expanded in further detail later

in this chapter under the sub-section title ‘Exporting Spreadsheet Data’.

Options

‘Look and Feel’ – Changes the appearance of the spreadsheet. Three options are available including ‘Metal’, ‘CDE/Motif’, and ‘Windows’.

‘Scroll Type’ – Changes the repainting scheme. Three options are available including ‘Normal’, ‘Alternative 1’, and ‘Alternative 2’.

‘Row Height’ – A sliding scale that uniformly changes all row heights.

‘Save Grades Immediately’ – By default this option is active, as noted by the checkmark beside it within the menu; this automatically saves grades as they are entered in the spreadsheet. To deactivate this option, click on it in the menu and the checkmark will disappear.

‘What-if Mode’ – Enables a fictitious scenario to be evaluated in the spreadsheet. When active, grades entered in the spreadsheet will not be sent to the database and upon exit changes will not be saved. To activate this mode click on the ‘What-if Mode’ option, a checkmark will appear beside it on the menu and a yellow text box appears in the bottom left corner of the spreadsheet. To deactivate this option, click on it again in the menu, both the checkmark and text box will disappear.

Views

‘Create New View’ – Helps simplify complex spreadsheets by enabling different views to be created, edited and recalled. See the sub-section entitled ‘Spreadsheet Views’ (later in this chapter) for more details.

Help

‘Documentation’ – Brings up this user manual.

‘About DAG GradeBook’ – Displays product information regarding the GradeBook software.

Toolbar

The toolbar contains buttons that link to the most common spreadsheet commands. These buttons are briefly described below:

Save and Refresh
By default, every entry in the spreadsheet’s cells is saved automatically. If you turn off the the ‘Save Grades Immediately’ function through the ‘Options’ menu, then you must use ‘Save and Refresh’ to save any changes to the spreadsheet.

Refresh
After making changes through another GradeBook tool, update the *spreadsheet view* by using 'Refresh'. 'Refresh' does not save a new column order that you have created.

Add a New Column
Adds a new *test activity* directly to the class spreadsheet. Further information regarding this command can be found later in this chapter under the sub-section title 'Adding a New Column'.

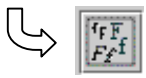
Enroll a New Student
Adds a row to the spreadsheet so that data for a new student can be entered. This command does not formally enroll a student in a class. Further information regarding this command can be found later in this chapter under the sub-section title 'Enrolling New Students'.

Grade Notes
Accesses the 'Grade Notes' feature for the selected grade, wherein the instructor can communicate with students or record a private note. Further information regarding this command can be found later in this chapter under the sub-section title 'Grade Notes'.

Narrative Evaluations
Enables an instructor to view and edit the *narrative evaluations* for a selected grade. Further information regarding this command can be found later in this chapter under the sub-section title '*Narrative Evaluations*'.

Spreadsheet View
This view is the standard GradeBook *Spreadsheet view*, allowing users to view student information in a tabular format.

Formulas View
Brings up a list of the formulas associated with the active spreadsheet.



Create New Formula
Accessed only through the 'Formulas View'. Enables instructors to create simple and complex formulas, building upon five basic types of formulas: 'If', 'Simple Weighting', 'Code', 'Numeric to Alpha', or 'Custom Letter Grade'. Further information regarding this command can be found later in this chapter under the sub-section title 'Formulas'.

System Colors

The GradeBook color definition is fully configurable by the installer, and thus may vary by educational institution. While the following list of system colors may not be universal, it does highlight some of the meanings behind the color-coded spreadsheet column and cells.

Student Number	Default (gray)	⇒	active student status
	Other (red)	⇒	inactive student status
Name	Default (gray)	⇒	active enrollment status
	Other (pink)	⇒	inactive enrollment status
Column Heading	Default (pink)	⇒	*pending*
	Other (gray)	⇒	*public*
Cell containing a grade	Default (gray)	⇒	no message
	Other (yellow)	⇒	unanswered Grade Note
	Other (green)	⇒	answered Grade Note
Column / Cell	Default (white)	⇒	no formula in use
	Other (gray)	⇒	formula in use

Viewing Student Information

'Student Number' (SN) and 'Name' are the default columns prepared by GradeBook. Additional information regarding student status and enrollment status can be accessed through these columns. Right clicking on cells within these columns reveals a message box as shown in Figure 3-2.

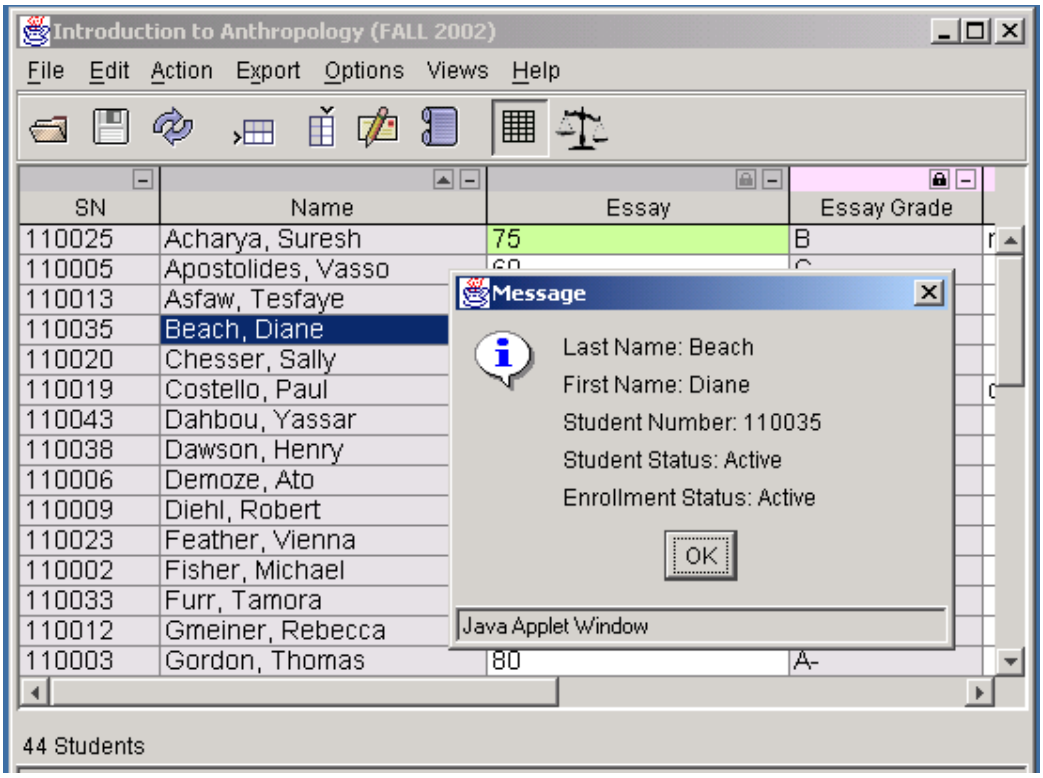


Figure 3-2: Student information message box

Student numbers or names that are highlighted in a color different from that of the rest of the class, indicates that either the student status or enrollment status is not active; revisit the previous sub-section for more details.

Adding a New Column

Within the GradeBook spreadsheet, student data and marks are managed in columns.

A new column would be added if an instructor wanted to:

- Enter a new *test activity*
- Partition the class into sections
- Compute final grades…etc.

➢ Adding new columns to the spreadsheet

1) Click on the 'Add a new column' [ ] button, located on the toolbar.
2) A dialogue box will appear and prompt the instructor to enter 'Column Properties', as shown in Figure 3-3.

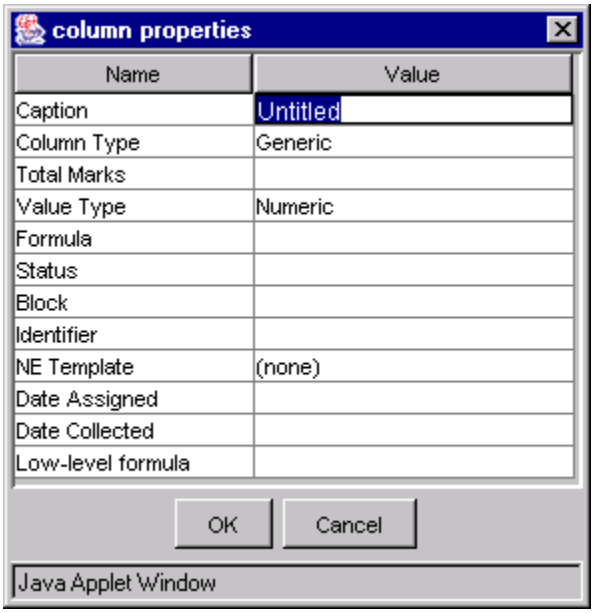


Figure 3-3: Column Properties Dialogue Box

Column Properties

New columns must be defined by user inputs prior to creation through the 'Column Properties' dialogue box. While a default column can be created without user inputs,

functionalities can be specified to tailor the column to the instructor's needs. These functionalities can also be applied to a column after its initial definition.

The 'Column Properties' are discussed below:

Caption	User inputted title that will appear at the top of the new column.
Column Type	A dropdown menu that specifies the type of data that will be entered in the new column. Options include: 'Final Alpha', '*Final Numeric'*, 'Generic' (default), 'Lab Section', 'Lecture Section', and *'Narrative Evaluation'*…etc.
Total Marks	User inputted numerical value for a given *test activity*, where applicable*.*
Value Type	A dropdown menu that specifies how the data will appear in the column. This could be either numeric (default) or a predefined *plugin* [see Chapter 5: Plugin Editor for information on defining *plugins*]*.*
Formula	A dropdown menu that links a formula to the column. The menu will only present predefined formulas (and thus, may be empty on first use).
Status	A dropdown menu that specifies whether the column status is *public* or *pending.* If this is unspecified, the default setting is *pending*.
Block	A dropdown menu that assigns spreadsheet access to other instructors to particular groups of columns. Typically used when multiple instructors share teaching duties within the same class.
Identifier	[An optional field] Alpha/Numeric identifier useful for referencing a column within a code (e.g. when referencing a column in a formula).
NE Template	A dropdown menu that enables a *narrative evaluation* (NE) template to be applied to a column. The menu will only present previously assigned templates (and thus, may be empty on first use). Must used in conjunction with the 'Column Type' parameter set to '*Narrative Evaluation*'.
Date Assigned	User inputted date, relevant only if column contains data regarding a *test activity*.
Date Collected	See previous.
Low Level Formula	User inputted formula to manipulate column values. This field is automatically filled-in when a formula has been applied to the column by means of the column's 'Formula' property.

Column Operations

Locking / Unlocking

When a column is locked, the contents of any cell within the column cannot be changed. A small lock icon located within the column heading indicates whether the contents of that column are locked. With reference to the Figure 3-4, note that the locked column has a dark icon while the unlocked column has a shaded icon. To change between locked or unlocked status, simply click on the lock icon.

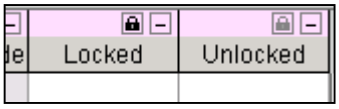


Figure 3-4: Locked and unlocked columns

By default, all columns with a '*Value Type*' set to a *plugin* are locked. This helps to prevent inadvertent changes being made to column data.

Entering Data

Data can be entered into a spreadsheet cell in one of three ways: keying-in, using a dropdown menu, or by associating a formula to the entire column. By clicking on any cell within the spreadsheet, it will change color to show that it is active. Once active, a (unlocked) cell can have data inputted in it.

Keying-in Data can be keyed-in to any active cell in a column whose property of '*Value Type'* is set to 'Numeric'; this data can be of type numeric, alphabetic, or narrative. To initially enter data into a cell, simply activate the cell and begin typing. To edit or delete data, double-click within the cell and re-enter or delete the data as desired.

Using a dropdown menu If a column's '*Value Type'* is set to a predefined *plugin*, an active cell will open a dropdown menu containing fixed data choices. To enter or edit data, click on the desired option from the dropdown menu. Once a cell contains data it can only be returned to a blank cell if the dropdown menu contains a blank option. Figure 3-5 shows a dropdown menu being used to enter comments into the spreadsheet. See Chapter 5: 'Plugin Editor' for more information on defining *plugins*.

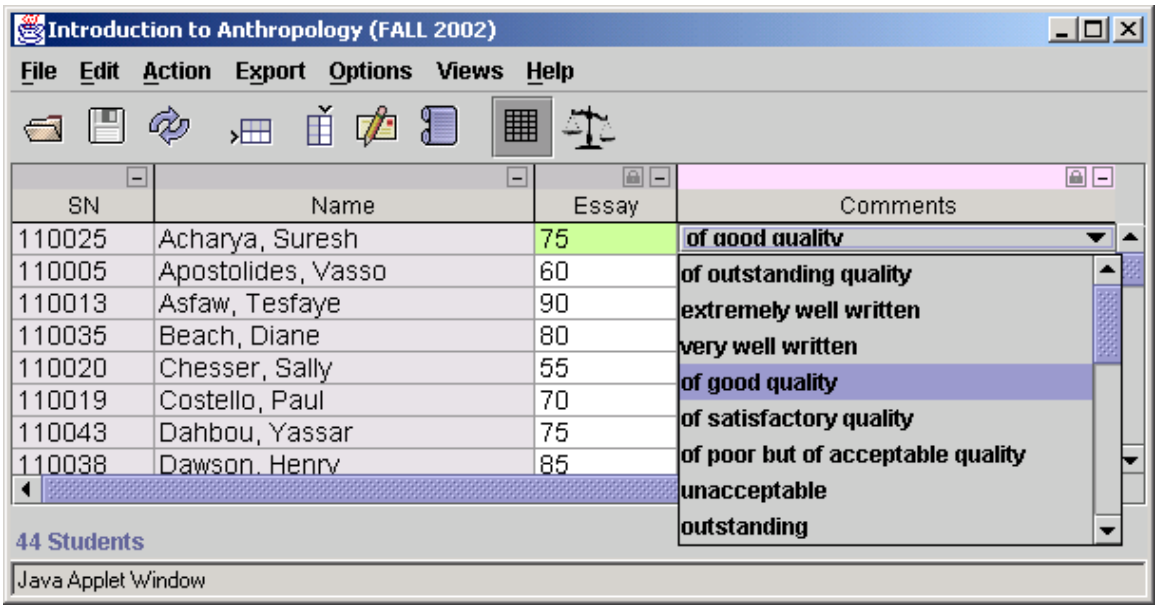


Figure 3-5: Dropdown menus for use in entering

Associating a formula If a column has a predefined formula linked to it through 'Column Properties', the formula will automatically fill the column as specified. To override this formula and delete the associated data you must enter 'Column Properties' and delete both the 'Formula' and 'Low-level Formula'. Further information regarding formulas can be found later in this chapter under the sub-section title 'Formulas'.

Column Override

Columns that contain formulas can be manually overridden. If a value is manually keyed-in to a cell containing a formula, the warning shown in Figure 3-6 will appear.

Figure 3-6: Warning Prompt for Column Override

An overridden cell will appear in a different color than the rest of the column. Deleting the new value will return the cell back to the control of the formula.

Limiting Column Override

If a formula references a *plugin*, that *plugin* can be used to restrict column override. Within the 'Column Properties' of the given column, assign the *plugin* to the '*Value Type*'. This ensures that only the *plugin* options can be inputted into the column's cells. To return a modified cell back to the control of the formula, the '*Value Type*' must be returned to 'Numeric'.

Formatting Columns

The GradeBook Spreadsheet has numerous options to enable the user to format the spreadsheet to their specifications. These options include changing row height, column width, and column order.

Changing Row Height To uniformly change row heights click on 'Options' (located on the menu bar), and select the 'Row Height' command. Click-and-drag the tab along the sliding scale [ ] to the height that you prefer.

Changing Column Width To change a single column width, position the cursor to either the left or right seam of the column heading, a double-ended resize arrow (↔) will appear when you're in the right spot. Drag the resize arrow left or right to adjust the column width.

Column Order To reorder the columns within your spreadsheet, click-and-drag the column heading to the desired new location.

Sorting Columns

The spreadsheet is sorted according to the 'Name' column by default, as noted by the small triangle [▲] in the top left-hand corner of the column heading, see Figure 3-7.

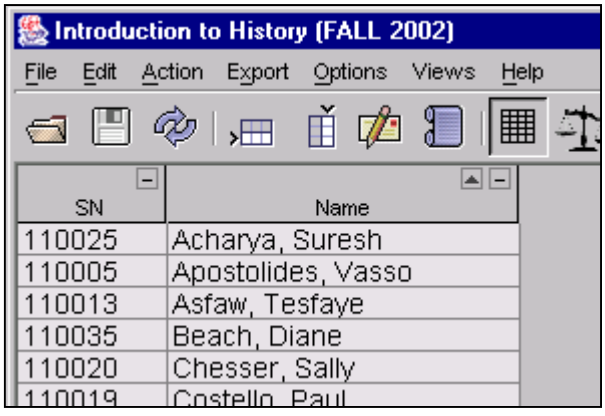


Figure 3-7: Default sorting of 'Name'

Double-clicking on a column heading will re-sort the spreadsheet according to that column's data. The newly sorted column will be identified by the icon in its heading. Numerical data is sorted from lowest to highest numbers, and alphabetic data is sorted from 'A' to 'Z'.

Minimizing Columns

Minimizing columns can be helpful in simplifying complex spreadsheets by enabling columns to be temporarily removed from the spreadsheet. The minimize icon is a small square with a dash in it [ ], located at the top of a column's heading, as shown in Figure 3-8.

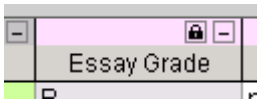


Figure 3-8: Column heading with minimize icon

Clicking on this icon removes the column from the spreadsheet, and places it as a button along the bottom of the spreadsheet. To restore the column, simply click on the button.

Spreadsheet Views

New views preserve a particular spreadsheet layout, including such things as column widths, positions and minimized columns.

Creating Spreadsheet Views

(1) Within an active spreadsheet, click on the 'Views' option located on the menu bar.
(2) Select the link entitled 'Create New View'.
(3) A window will appear, similar to that shown in Figure 3-9.

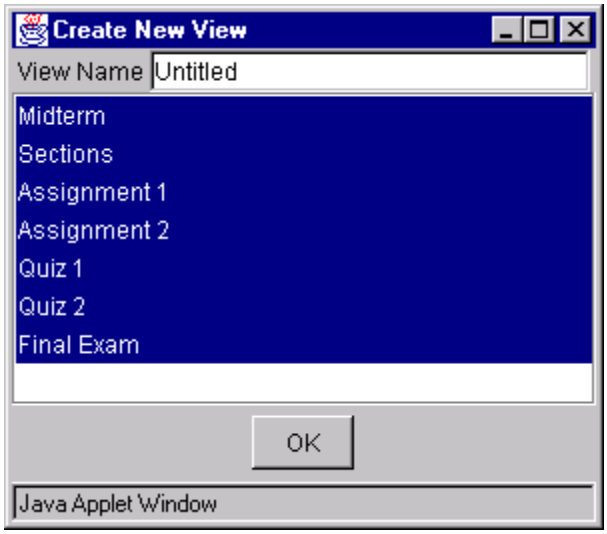


Figure 3-9: Create New View Window

(4) Key-in a 'View Name', and highlight those column that you wish to show within the new view.

To select multiple options, hold down the keyboard's CTRL key as you are clicking on the desired options. This action will highlight all the selected options.

(5) Upon clicking 'OK', the *spreadsheet view* will reorganize to show only the selected columns; other columns are minimized at the bottom of the view.

Modifying Current Spreadsheet View

(1) Within an active spreadsheet, click on the 'Views' option located on the menu bar.
(2) The current view is marked with a small circle, as shown in Figure 3-10.

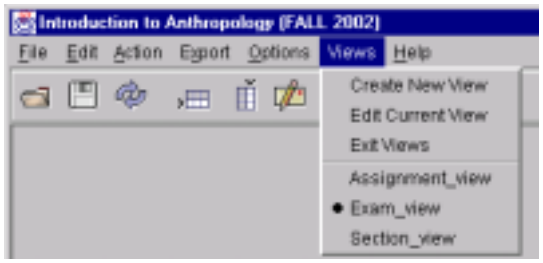


Figure 3-10: Modifying Current View

(3) Select the 'Edit Current View' link, and a window similar to that shown in Figure 3-11 will appear.

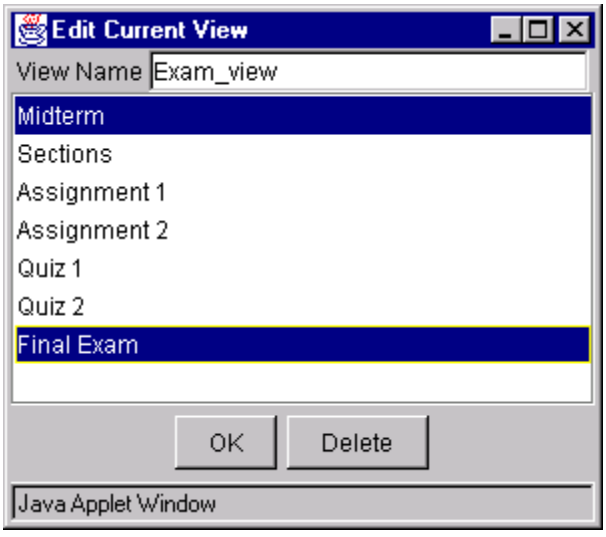


Figure 3-11: Edit Current View Window

(4) From this window, the current view can be edited or deleted.

Return to Original Spreadsheet View

(1) Within an active spreadsheet, click on the 'Views' option located on the menu bar.
(2) To return to the original *spreadsheet view*, select 'Exit Views'.
(3) If this option is not available, this means that you are currently in the original spreadsheet view.

Releasing Grades

To make marks for a *test activity* available to students, the *main instructor* must change the *pending* setting to *public* in the status of the *test activity*'s 'Column Properties' box. Students who have logged in with their correct user name and password will not see their grade if the setting is still at *pending*, as the grade has not yet been finalized. *Pending* or *public* status is noted by the coloring of the column heading (pink or gray respectively).

Sectioning a Class

Partitioning the class into sections can be useful when assigning teaching assistants controlled access to the spreadsheet for marking purposes. Defining sections is as simple as adding a new column. When defining the column properties, 'Column Type' must be set to 'Lecture or Lab Section' and the '*Value Type*' set to a *plugin* for sections.

Once students are assigned into sections the 'Instructor Manager' tool can be used to assign spreadsheet access rights.

Enrolling New Students

The optional enroll function embedded in the GradeBook spreadsheet is not intended for official enrollment. By enrolling a new student through the spreadsheet, the administration is not notified. Rather, it is intended to add flexibility to the spreadsheet by enabling grades to be entered for students who don't appear on the class list. These 'enrollments' are akin to making a note on the spreadsheet; so as not to lose information regarding a submitted *test activity* that cannot be entered normally due to incomplete registration or illegible test papers. To properly enroll a new student, see Chapter 11: 'Student Manager'.

Enrolling a new student

1) Click on the 'Enroll a New Student' [] button, located on the toolbar.
2) A dialogue box will appear and prompt the instructor to 'Enroll Student', as shown in Figure 3-12.

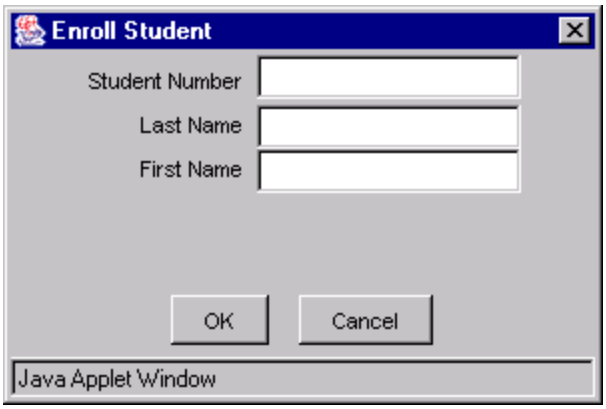


Figure 3-12: Enroll Student dialogue box

The fields shown in Figure 3-12 are not mandatory, and as such can remain partially or fully incomplete. If the 'Student Number' field is left empty, GradeBook will assign a number preceded by the letter 'Z' (e.g. Z000001). If either of the 'Name' fields is left empty, GradeBook will leave that information incomplete within the spreadsheet.

All enrollments made through this spreadsheet function will be marked in a different color from that of the rest of the class.

Grade Notes

If a column contains a numeric or letter grade for a *test activity*, an instructor and student may communicate via a 'Grade Note'. Either the instructor or the student can initiate these 'Grade Note' communications.

➢ Creating or viewing a 'Grade Note'

1) Click on the grade that you wish to discuss, so that it is highlighted.
2) Click on the 'Grade Notes' [] icon, located in the toolbar.
3) The 'Grade Notes' interface will appear on the main screen, as shown in Figure 3-13.
4) Write the text within the appropriate text boxes.
   Note: Submits a note that can be read by both the instructor and the student recipient.
   Private Note: Saves a note that can only be read by the instructor.
5) Upon writing the desired note, click on the 'Submit' or 'Save' button below the text box.

Unread 'Grade Note' messages from students about a particular grade are flagged by a yellow highlight in the corresponding test activity's cell. Completed discussions are flagged by a green highlight.

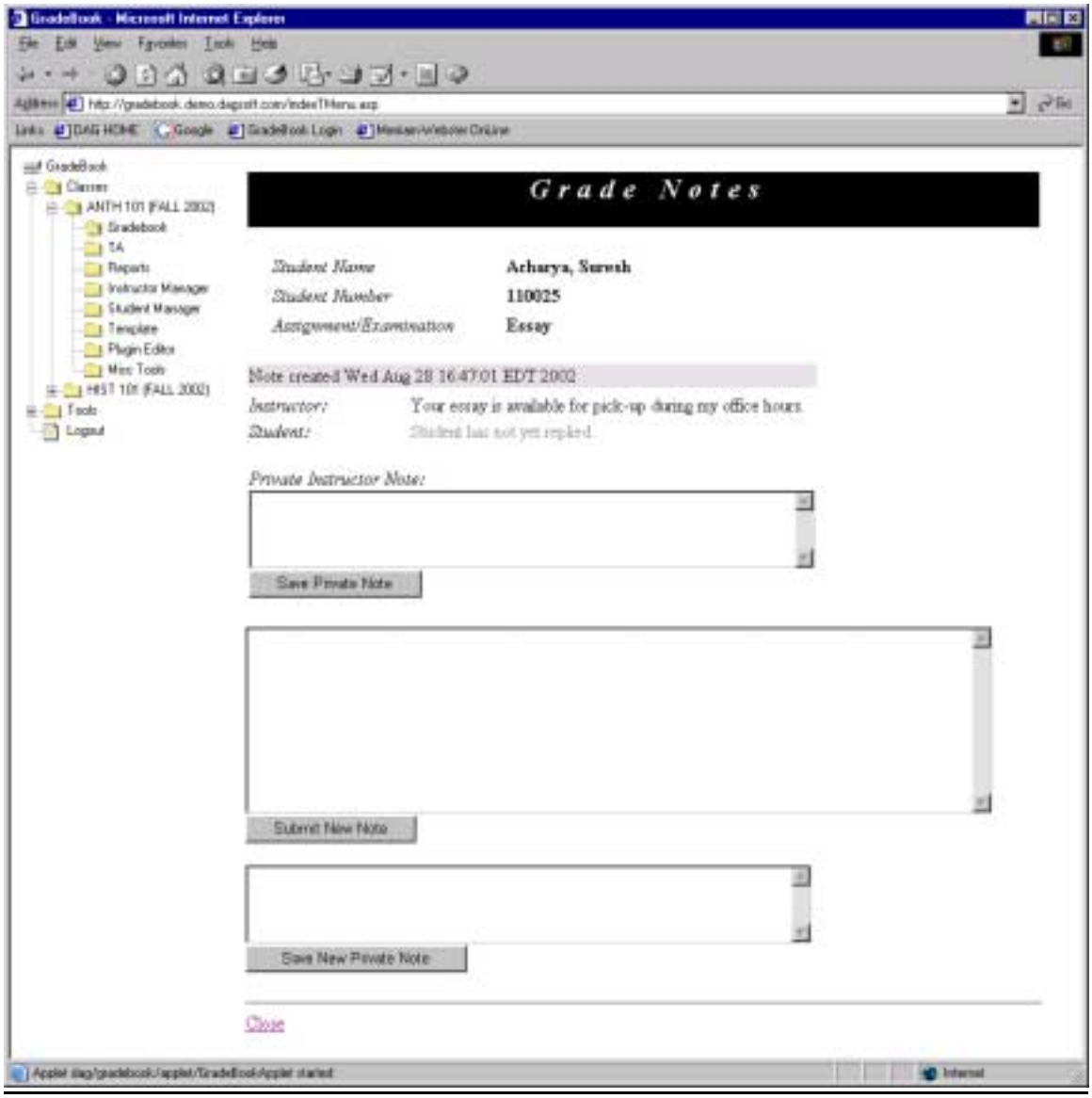


Figure 3-13: Grade Notes Interface

Chapter 4 Formulas

Introduction

The GradeBook functionality enabling the creation and assignment of formulated grading schemes to *test activities* within the spreadsheet is very powerful. As defined within GradeBook, a formula can be one of five types: 'Simple Weighting', 'Numeric to Alpha', 'Custom Letter Grade Conversion', 'Code', or 'If'.

Creating a new formula

(1) From an open spreadsheet, click on the 'Show formulas view' button [], located on the toolbar. This will display a *formula view* similar to that shown in Figure 4-1. Within the *formulas view*, any formulas that have already been created in and assigned to this class are listed within the left frame.

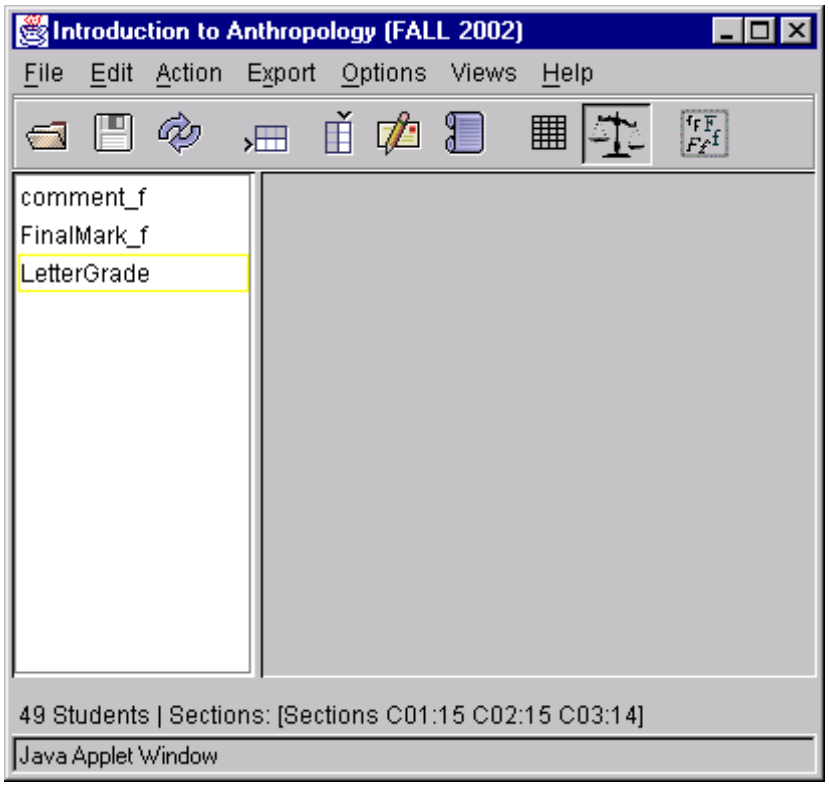


Figure 4-1: Formula View

(2) Click on the 'Create a new formula' button [], located on the toolbar
(3) The 'New formula' window appears, as shown in Figure 4-2.

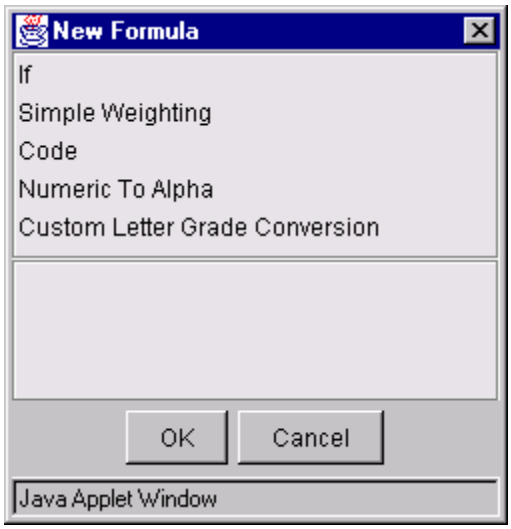


Figure 4-2: New Formula Window

(4) Click on the appropriate formula type to highlight it, and then click on the 'OK' button at the bottom.
(5) The final definition of each of the five formula types is unique and will be explored in the following sub-sections.

Simple Weighting

Enables weighting of either individual tests or test types, it also allows the lowest 'n' grades to be dropped. 'Simple Weighting' is the most used formula type within GradeBook.

The following two examples demonstrate how different approaches can accomplish the same final grading scheme. The first example manually averages individual *test activities*, the second groups similar test types to automatically average the various *test activities*.

Weighting Individual Test Activities

(1) Three options are available within the 'Simple Weighting' formula, click on the 'Tests' tab.
(2) A list of all the available *test activities* appears, with default weights of 1.0 applied.
(3) Double-click on the 'Weight' cell that you wish to alter, and then type in the desired new weight value. A weight of zero can be applied; this excludes the *test activity* from the grade formulation.

GradeBook applies **weight values** in proportion to one-another. Weight values do not need to add up to any particular number, nor do they relate to test total marks.

(4) The 'Weighting Individual Test Activities' formula definition is depicted in Figure 4-3. The resulting grade will be out of 100 ('Total Marks'); with two assignments averaged to 10%, two quizzes averaged to 10%, a midterm worth 30%, and a final exam worth 50%

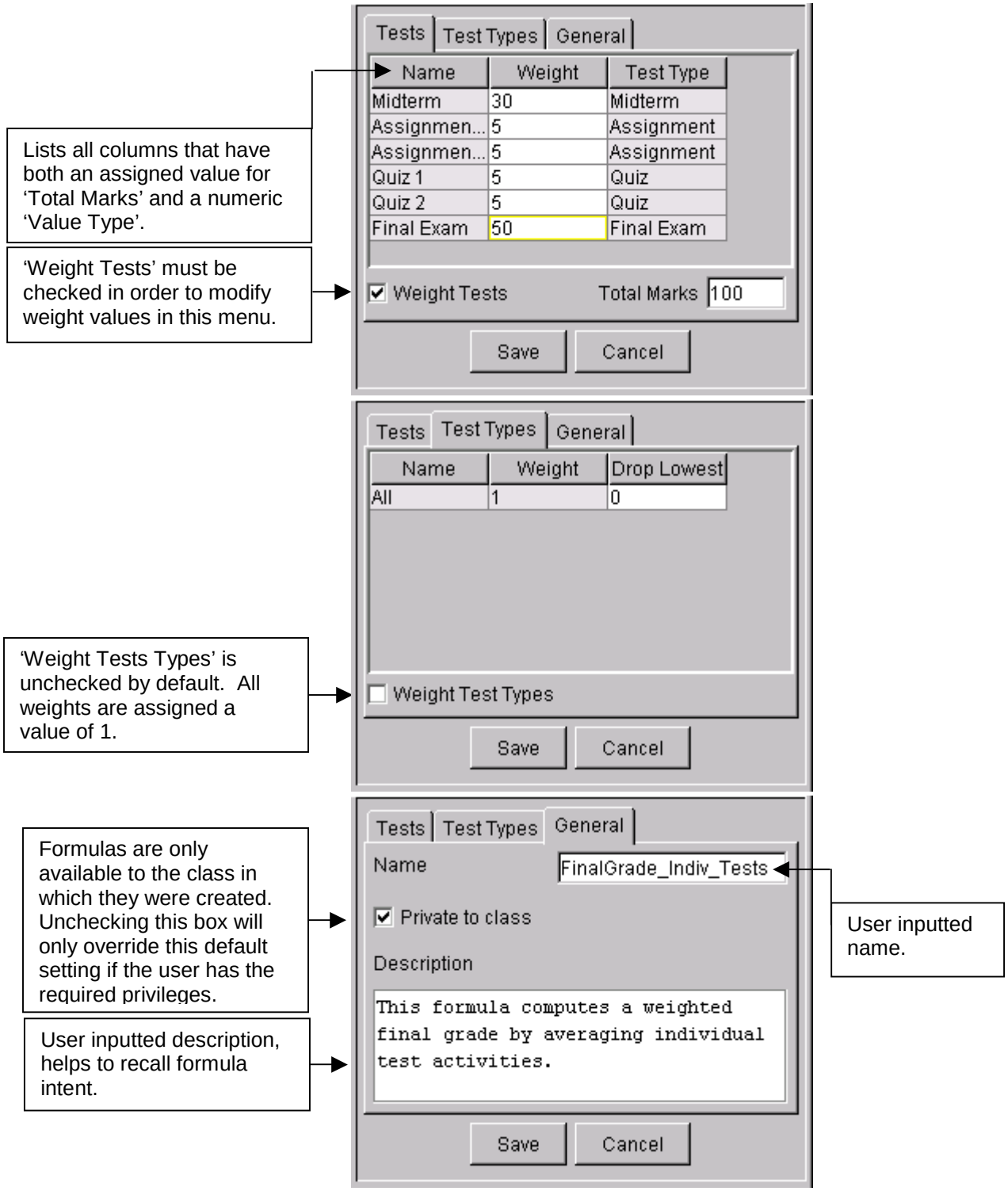


Figure 4-3:Weighting Individual Test Activities

Weighting Test Types

(1) Three options are available within the 'Simple Weighting' formula, click on the 'Tests Types' tab.

(2) A list of all the available test types appears, with default weights of 1.0 applied.

'Test Types' must be assigned to each of the test activities, by means of 'Column Properties', to ensure that the grade formula is properly applied.

(3) Double-click on the 'Weight' cell that you wish to alter, and then type in the desired new weight value. A weight of zero can be applied; this excludes that test type from the grade formulation.

GradeBook applies **weight values** in proportion to one-another. Weight values do not need to add up to any particular number, nor do they relate to test total marks.

(4) The 'Weighting Test Types' formula definition is depicted in Figure 4-4. As in the previous example, the resulting grade will be out of 100 ('Total Marks'); with two assignments averaged to 10%, two quizzes averaged to 10%, a midterm worth 30%, and a final exam worth 50%.

The **'Drop Lowest'** option is also available from this view, simply type in the number of test activities to be dropped from the chosen test type.

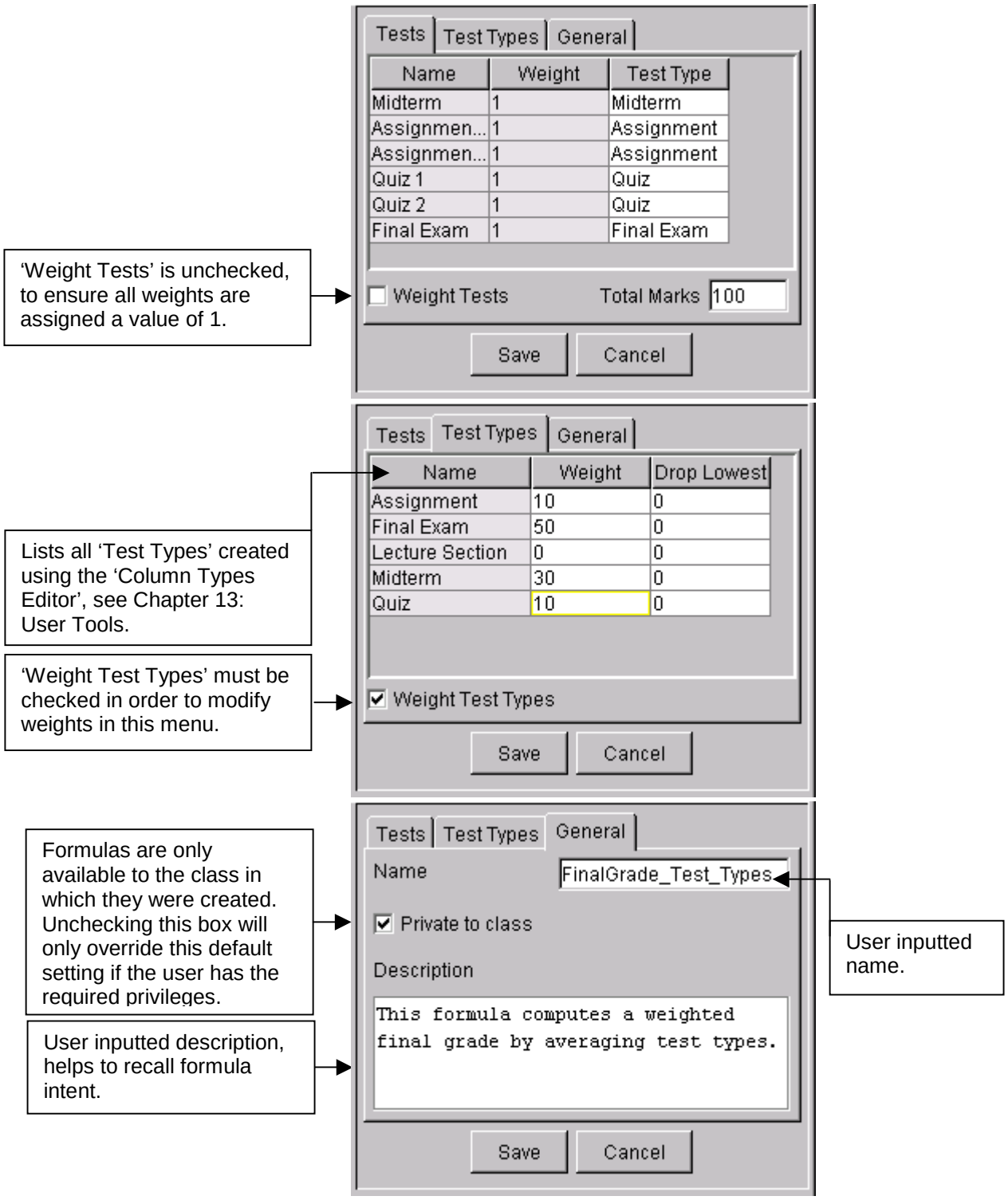


Figure 4-4: Weighting Test Types

Numeric to Alpha

This formula type converts a numeric valued column into one with an alpha value (e.g. a letter grade, a descriptive comment...etc.). To define this formula, select a spreadsheet column and associate with it a lower bound *plugin*. A lower bound *plugin* is described in detail in Chapter 5: Plugin Editor; in brief it is a grouping of descriptive comments that represent a given interval of numerical grades. The 'Numeric to Alpha' formula definition is depicted in Figure 4-5.

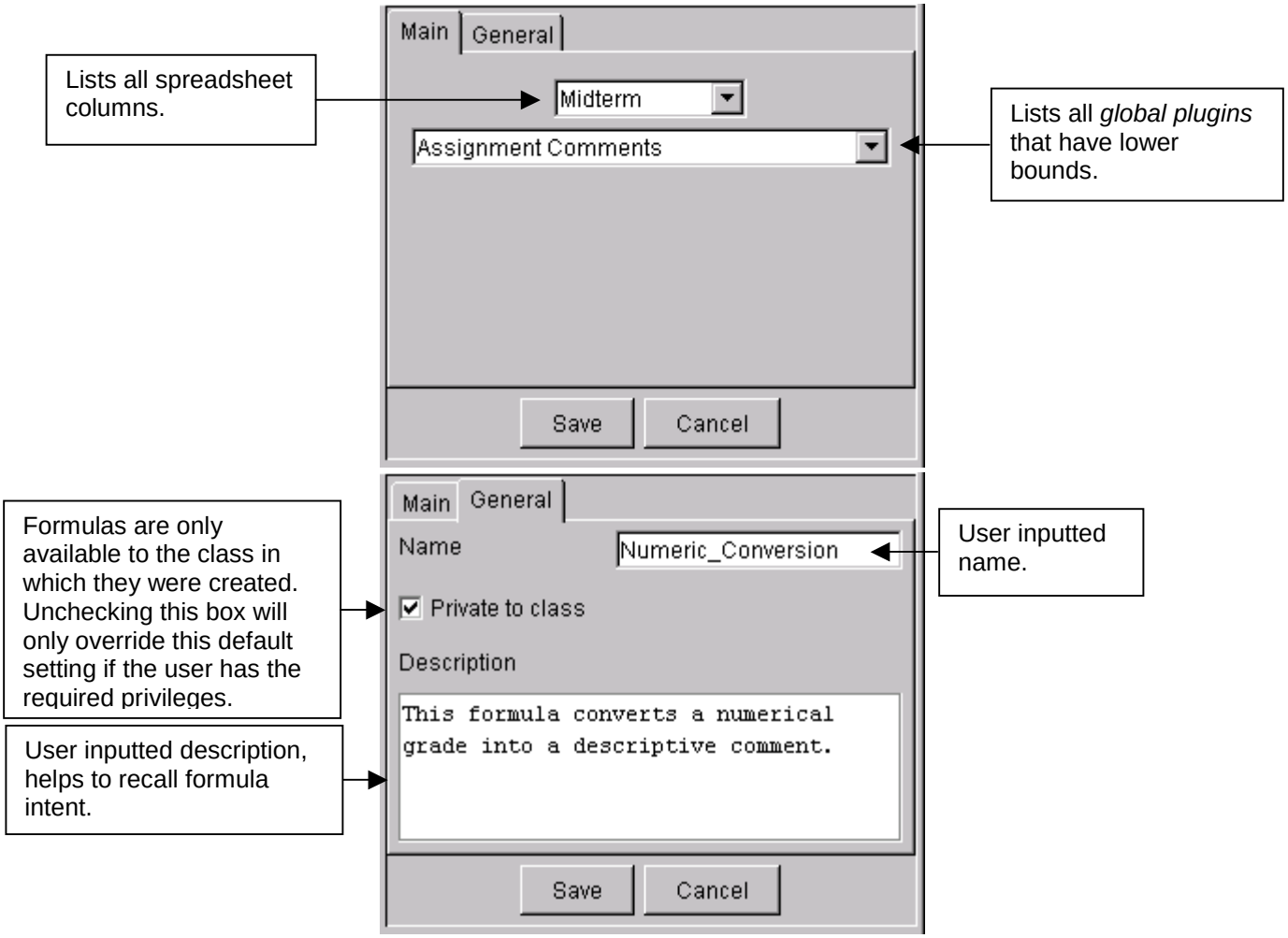


Figure 4-5: Numeric to Alpha Formula

Custom Letter Grade Conversion

This formula type converts a numeric grade to a letter grade in a manner specified by the user. It uses source code to set the intervals between letter grades, bound by a given lower value and an implicit upper bound from the next higher interval. In Figure 4-6, the resulting formula assigns an 'A+' to all grades above a 95, and an 'F' to all grades below a 95. A rough class!

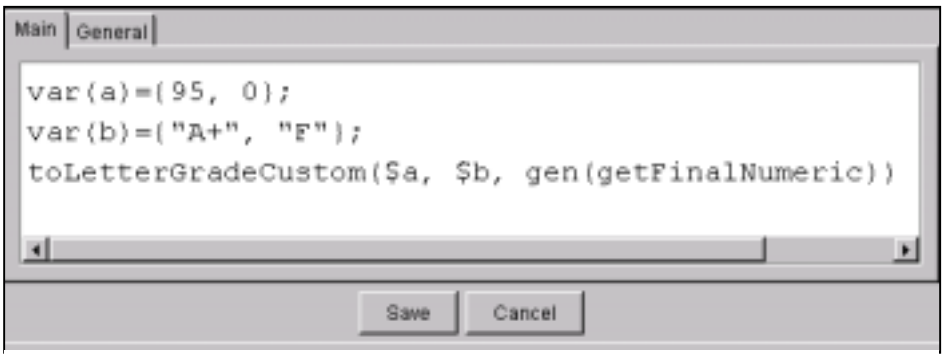


Figure 4-6: Custom Letter Grade Conversion

Code

A formula created via the JavaScript source code. See Appendix A for further details.

If

Returns one value if a condition you specify evaluates 'True' and another value if it evaluates as 'False'. It can compare either two formula results or one formula result and a fixed value. Six mathematical operators are available for defining the 'Logic test': less than [<], less than or equal to [<=], greater than or equal to [>=], greater than [>], inequality [<>], equal to [=].

An example of an 'If' formula definition is depicted in Figure 4-7. This formula compares two grading schemes and selects the highest resulting grade. The two formulas being compared were developed as weighted formulas types; one including the midterm mark within the final grade calculation and the other omitting the midterm mark.

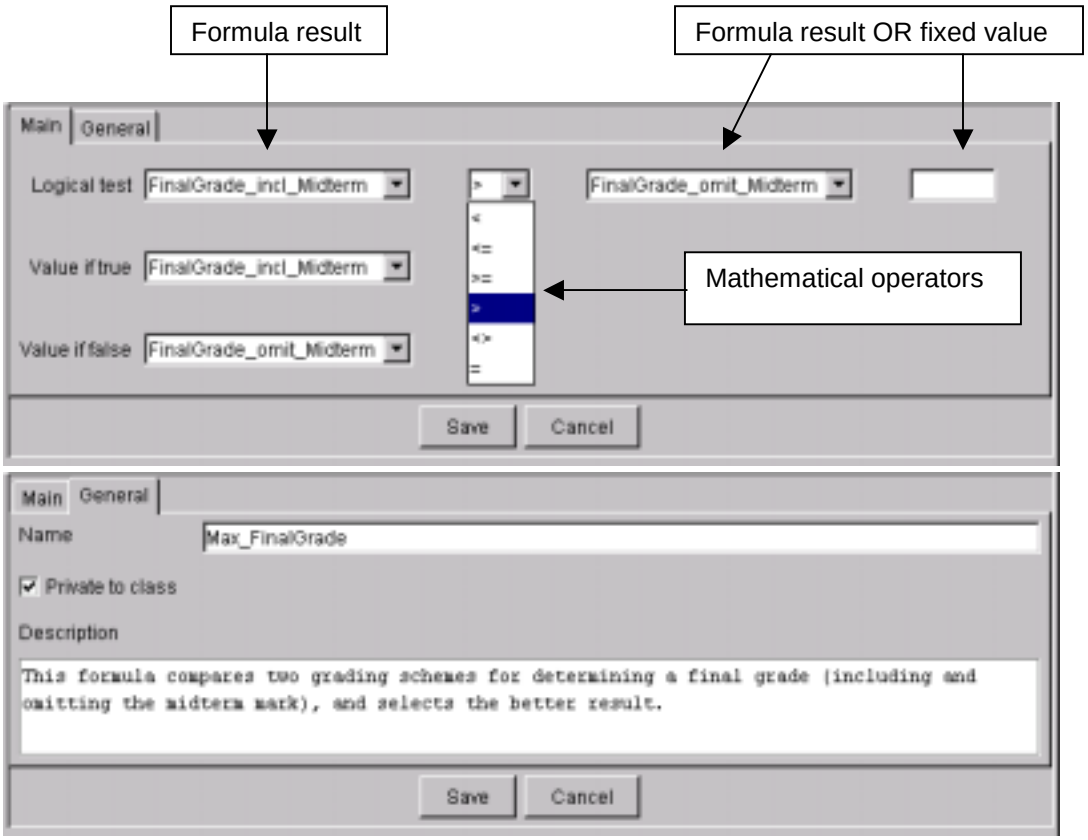


Figure 4-7: 'If ' Formula Type

Using formulas in GradeBook

(1) A formula must be assigned to the particular class before it will appear as an option within the GradeBook Spreadsheet. This would include any *global* formulas, or any formula created within the class.
(2) Select the 'Add a New Column' icon from the toolbar.
(3) Define the column properties as shown in Figure 4-8. Note that the '*Caption*' [Final Grade], the 'Formula' [FinalMark_f], and the 'Low-level formula' [ewf(14)] in Figure 4-8 are specific to this example.

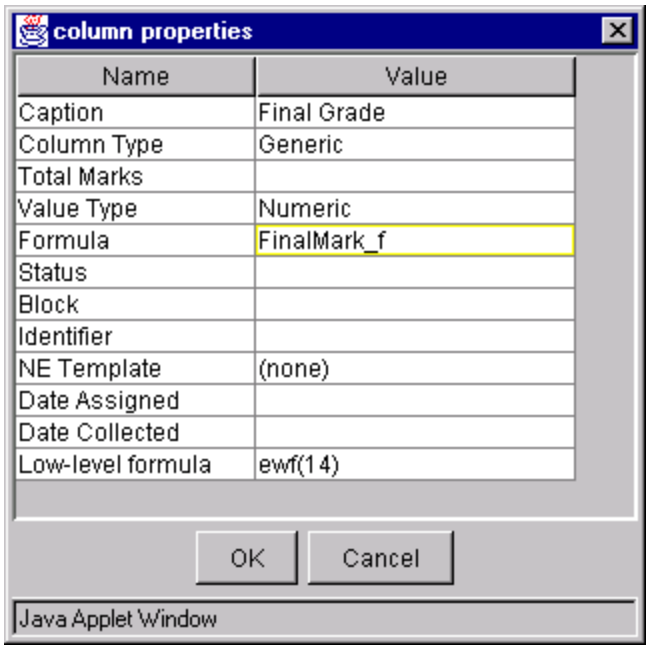


Figure 4-8: Column Properties for Formulas

(4) After defining all the column properties, click 'OK' and the formula will be automatically applied to all cells within the column.
(5) Once a formula has been applied, that column will be shaded gray.

Functions are limited to the availability of column data. **If a function calls upon an empty cell**, it will interpret it as either a zero value or simply omit it from the calculation, as directed by the educational institution.

Formula calculations are not automatically saved within GradeBook; formula values within the spreadsheet must be manually saved using the 'Save and Refresh' button [ ], located on the toolbar.

Chapter 5 Plugin Editor

In brief…	
Part of standard GradeBook package:	No
Scope:	*Local* or *Global*
User(s):	Main instructor

Introduction

Plugins contain groupings of text or phrases for use in dropdown menus throughout GradeBook. They are especially useful when entering repetitive data in the GradeBook Spreadsheet.

The *local* 'Plugin Editor' is found within a specific class folder; l*ocal plugins* can only be accessed from within the class they were created. The *global* 'Plugin Editor' is found within the 'Tools' folder; all instructors in all classes can access *global plugins*. The user requires an extra privilege to create *global plugins*.

Upon selecting 'Plugin Editor' for the *primary menu* the interface shown in Figure 5-1 appears, enabling instructors to create, modify or delete *plugins*.

Figure 5-1: Plugin Editor interface

Creating a New Plugin

Having useful *plugins* is very important, and often requires creating them yourself. This section will illustrate the process of creating a new *plugin* by developing a simple *plugin*.

Creating a New Plugin

(1) Highlight 'Create New' from the 'Select *Plugin*' dropdown menu, and click on the 'Load *Plugin*' button.
(2) An empty 'Plugin Editor' interface will appear, as shown in Figure 5-2.

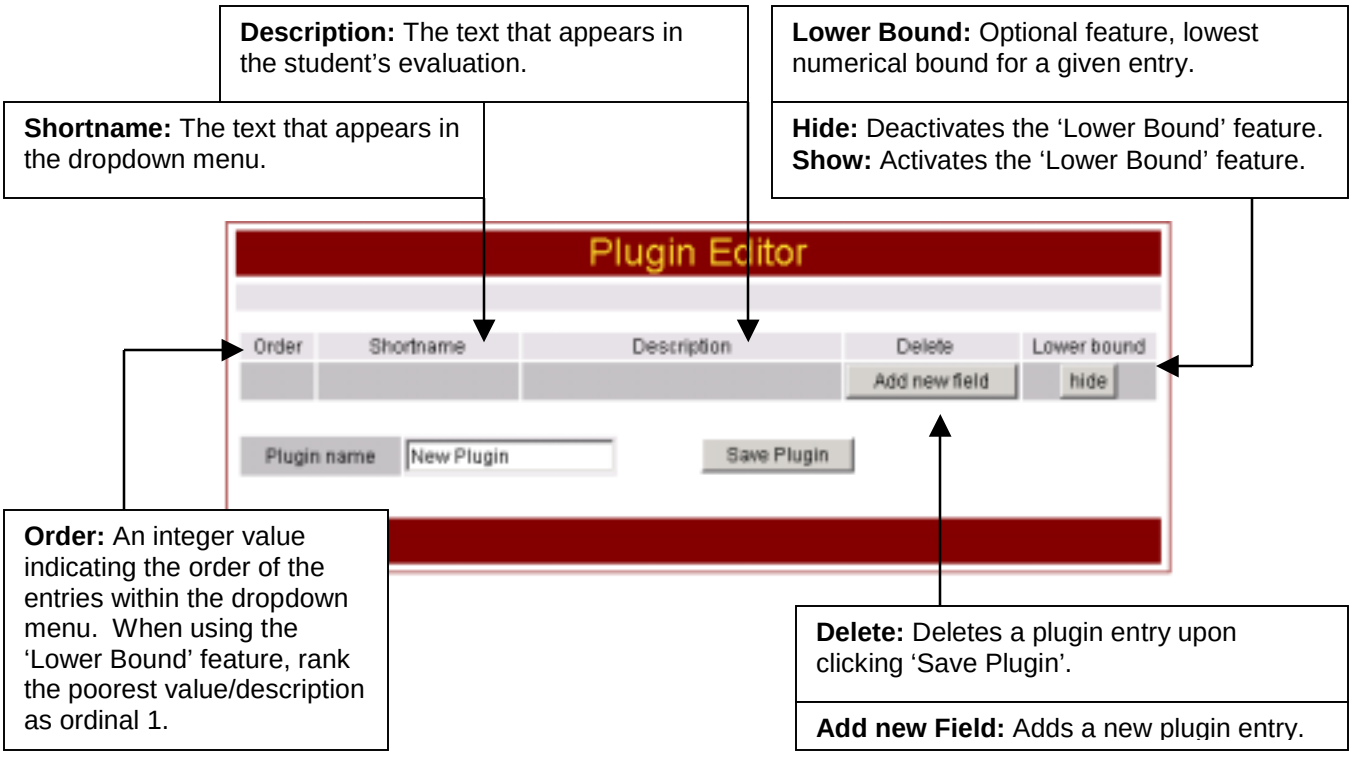


Figure 5-2: Plugin Editor page with descriptors

(3) Click on the 'Add new field' button, adding one entry for every option you intend to have in your *plugin*.
(4) Enter data in the mandatory fields e.g. 'Order', 'Shortname', and 'Description'.
(5) If you would like to associate number bounds on your descriptions, key-in their lower bounds. If your *plugin* does not need numerical value equivalents, click on the 'Hide' button.
(6) Enter a name for your *plugin* and click on the 'Save *Plugin*' button.
(7) Upon saving, the *plugin* it is ready for use in the GradeBook Spreadsheet and '*Narrative Evaluation'* tools.

Lower Bounds

Assigning a lower bound to a plugin is not mandatory. As noted in Chapter 4: Formulas, lower bound plugins can be used in 'Numeric to Alpha' formula types.

Lower bounds are implicitly upper bound by the next highest ordinal; it is thus important to properly order the entries, with the poorest value/description ranked as ordinal 1. Figure 5-3 shows an example of *plugin* created using the 'Lower Bound' feature. In this example the comment 'poor' is assigned to grades between 0 and 60 (not including 60); the comment 'fair' is assigned to grades between 60 and 70 (not including 70).

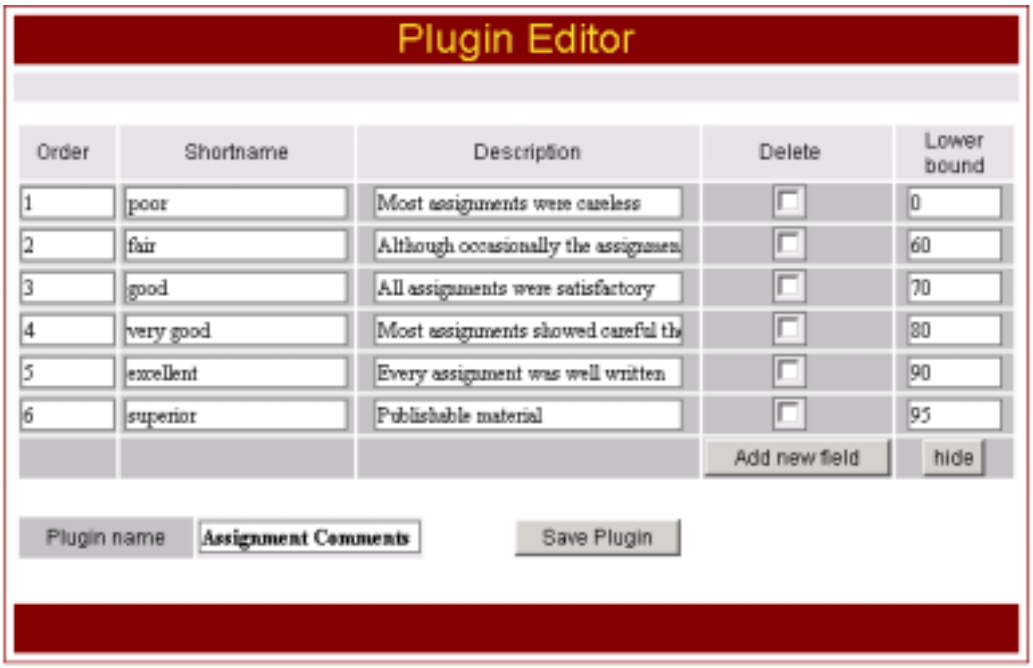


Figure 5-3: Example Plugin Editor page

Lower bound values are fixed numbers (not percentages) and must be specific to test total marks.

Using a Plugin in the GradeBook Spreadsheet

(1) Open the GradeBook Spreadsheet. Note, *local plugins* that you've created within the given class, along with *global* ones will be available in the database.

(2) Select the 'Add a New Column' [ ] icon from the toolbar.

(3) Define the column properties as shown in Figure 5-4.

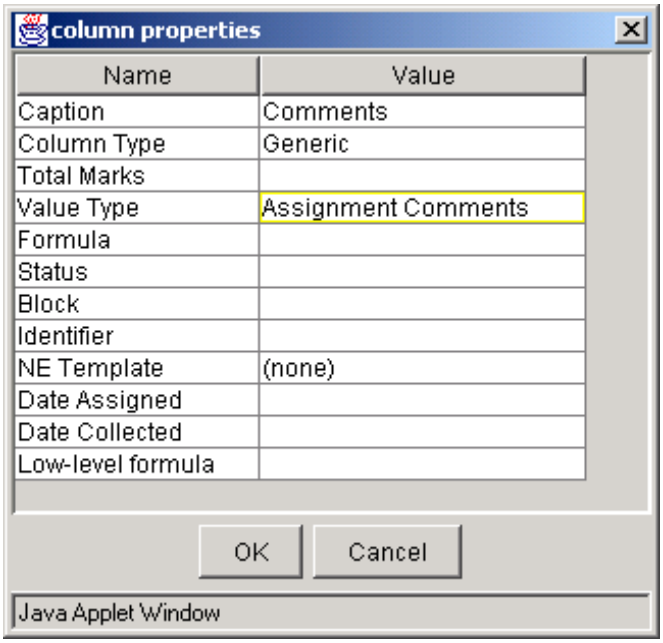


Figure 5-4: Column Properties for a column with a plugin

Note that both the '*Caption*' [Comments] and the '*Value Type*' [Assignment Comments] in Figure 5-4 are specific to this example. Your newly created *plugin* will appear in the list of options for '*Value Type*'.

(4) Highlight a cell within the newly created column, and double-click to see the *plugin*'s dropdown menu. If the menu does not appear, make sure that the column is unlocked, and then try again.

Modifying an Existing Plugin

Select the *plugin* for modification from the 'Select *Plugin*' menu on the '*Plugin* Editor' interface, and click on 'Load *Plugin*' to open the editing page. Modify any of the parameters, add or delete fields, as permitted. Ensure that all fields have been assigned a unique order and that all areas contain text.

If a plugin is in use within the GradeBook (either within the spreadsheet or template functions), then modifications are limited to adding entries. No deletions are permitted to a plugin already in use. Entries can be added or deleted to plugins that are not currently in use within GradeBook. Existing plugins can be renamed; GradeBook interprets this as a new plugin entity (not yet in use), in addition to the original.

Deleting a Plugin

From the 'Plugin Editor' interface, selected *plugins* can easily be deleted. Select the *plugin* for deletion and then click on the 'Delete *Plugin*' button.

Deletions are only permitted for *plugins* not currently in use within GradeBook. Users must possess *global* access to delete a *global plugin*.

Chapter 6 Template Editor

In brief…	
Part of standard GradeBook package:	No
Scope:	*Local* or *global*
User(s):	Main instructors

Introduction

The 'Template Editor' tool allows *main instructors* to create and modify templates for *narrative evaluations*. These templates enable uniform *narrative evaluations* to be inserted within the GradeBook Spreadsheet.

The *local* 'Template Editor' is found within a specific class folder; l*ocal* templates can only be accessed from within the class they were created. The *global* 'Template Editor' is found within the 'Tools' folder; all instructors in all classes can access *global* templates. The user requires an extra privilege to create *global* templates.

The main interface for the template functionality is shown in Figure 6-1. As this is a class tool, it is specific for a particular class [ANTH 101 – FALL 2002 as shown].

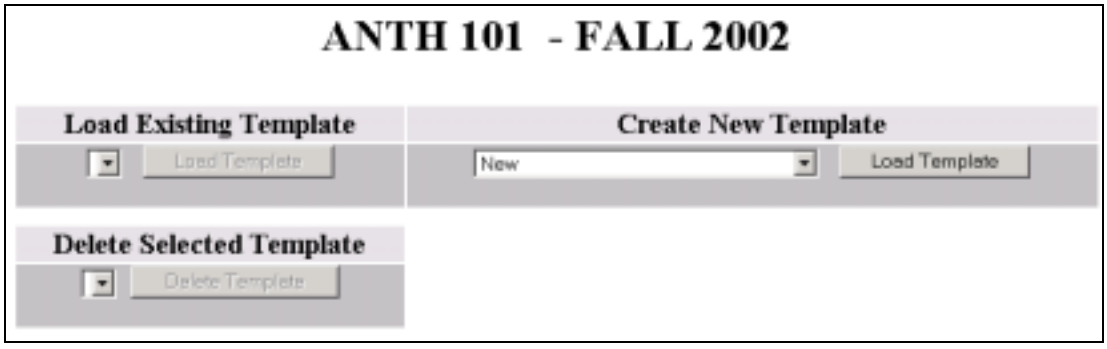


Figure 6-1: Template interface

Elements of Narrative Evaluation Templates

An efficient template is a combination of constant text, free text, and *plugins*; these elements are defined as follows.

Constant Text	Phrases and sentences in your template that never change.
Free Text	Free form personalized text that you add to each evaluation. In your template, you create entries for free text with free text windows.
Plugins	A group of grades, descriptive words, and/or phrases that appear in a dropdown menu throughout your template. If a suitable *plugin* is not available in the database, you may have to create your own, see Chapter 5: 'Plugin Editor' for more details.

Figure 6-2 illustrates how these different text elements make up a *narrative evaluation*.

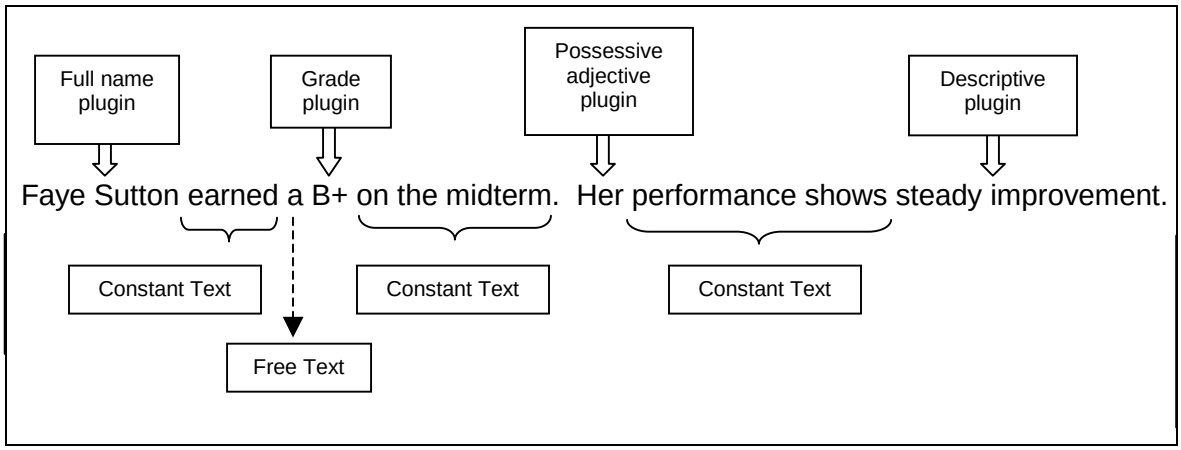


Figure 6-2: Elements of a *narrative evaluation*

Loading an Existing Template

The 'Load Existing Template' dropdown menu displays only those templates assigned to your class, and thus may be empty upon first use. A template is automatically assigned to a class once the instructor has accessed and saved it through the 'Create New Template' function

By assigning a template to your class from the 'Create New Template' menu, you are creating another version of that template. To differentiate between these versions, always **rename the template prior to saving**. Re-naming and saving copies keeps the original templates intact, this ensures that no information is lost due to modifications by other main instructors.

Creating a New Template

The 'Create New Template' dropdown menu is accessed through the template interface and lists all the templates that are held within the GradeBook database. These

templates include a blank template, several standard GradeBook templates, and those templates created or modified by other *main instructors*.

This section will illustrate the 'Create a New Template' function by developing a simple *narrative evaluation* template.

Building a Template

(1) Plan the layout of your template
- For the purpose of our example, we will draft a template for a narrative midterm evaluation:

> 'Student' earned a 'letter grade' on the midterm. His/Her performance shows 'level of improvement or understanding'

(2) From the 'Create a New Template' dropdown menu, select 'New' and click on 'Load Template.
(3) This brings up a blank template page, as shown in Figure 6-3.

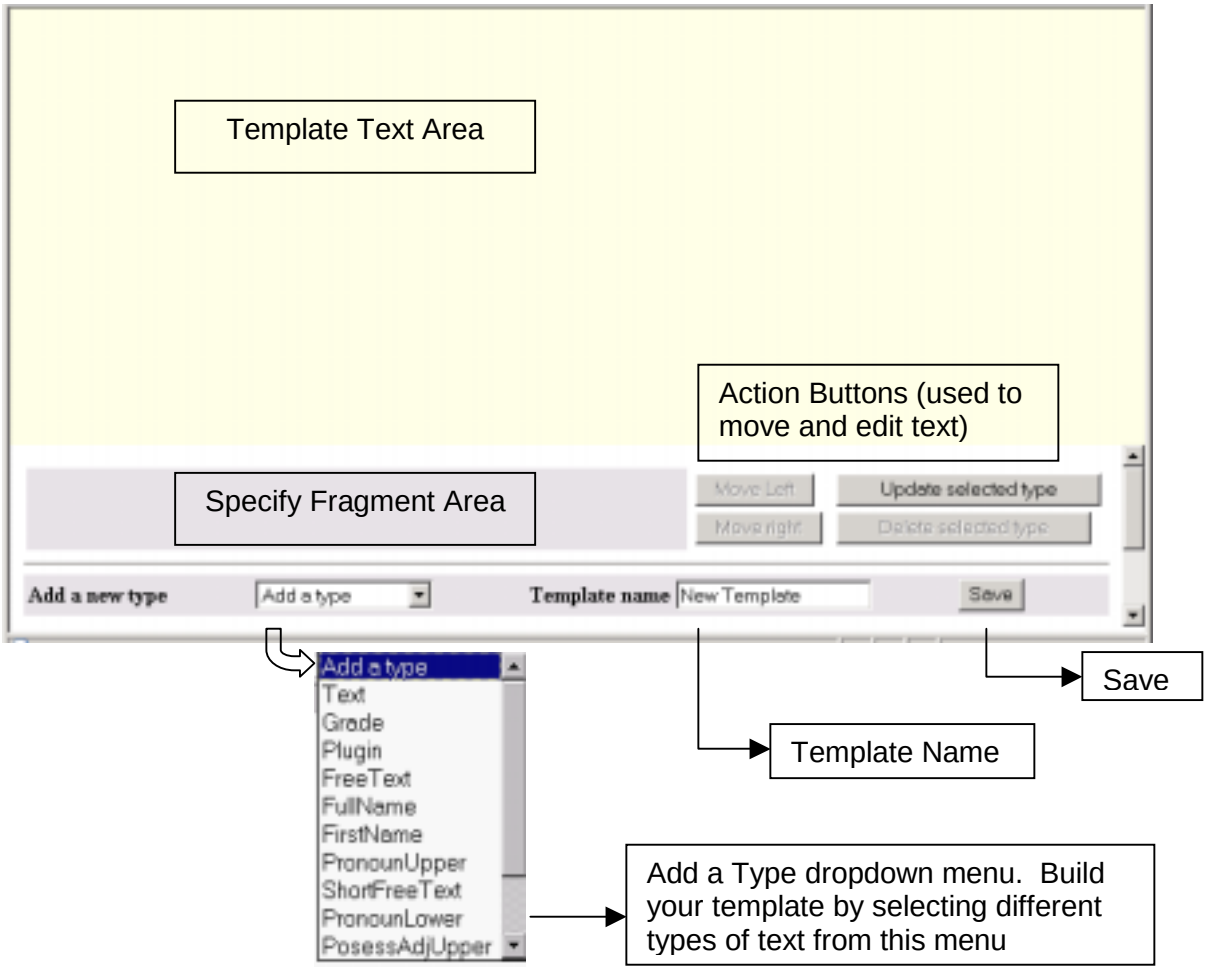


Figure 6-3: Blank template editing page with descriptors

(4) Change the template name from 'New Template' to 'ANTH101 – Midterm Results'.
(5) Build the template text by employing the 'Add a type' dropdown menu to insert text elements. These elements include text, *plugins*, student names, pronouns, possessive and objective adjectives.
(6) In GradeBook's generalized terms our draft evaluation becomes:

full name last name [Text] [Short Free Text] letter grades [Text] PossessAdjUpper [Text] plugin

(7) Clicking on any of the text elements will highlight them in yellow, notice when you highlight some elements you are prompted for more information in the gray area known as the 'Specify Fragment Area'. Add text or use the dropdown menus as needed to specify all text elements, updating after each entry.

When you enter text or select menu options from the 'Specify Fragment Area' **always click the 'Update selected type' button** on the right to save your entry; this update will appear in the 'Template Text' area.

(8) After specifying and updating all the text elements the template page should appear like that of Figure 6-4.
(9) Upon saving, the template it is ready for use in the GradeBook Spreadsheet.

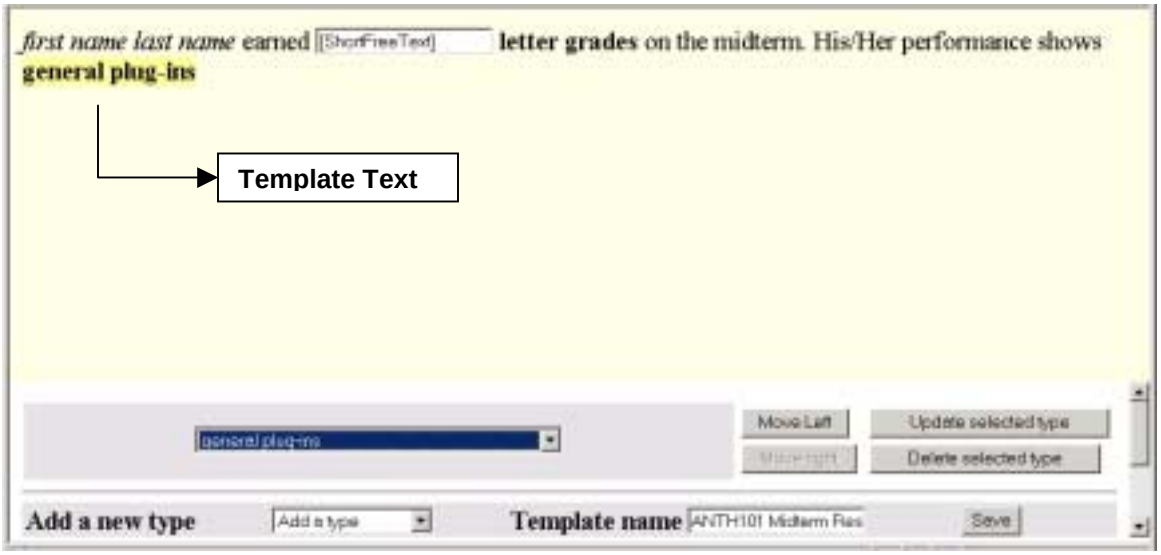


Figure 6-4: Template editing page

Making Additions to a Template

2) To make an addition to a template, load it from either the 'Create New Template' or 'Load Existing Template' menus.

3) Click the 'Add a Type' dropdown menu and highlight the type of text that you want to add. The new fragment will appear within the 'Template Text' window.
4) Use the 'Move Left' and 'Move Right' action buttons to move the fragment to the correct position in the template, if necessary.
5) Add text or use the dropdown menus as needed to specify the newly added fragment.
6) Update the selected text and save the template.

Using a Template in GradeBook Spreadsheet

(6) A template must be assigned to the particular class before it will appear as an option within the GradeBook Spreadsheet. To review how to assign a template, please refer back to the sub-section entitled 'Loading an Existing Template'.
(7) Open the GradeBook Spreadsheet for the same class you just assigned a template to.
(8) Select the 'Add a New Column' [ ] icon from the toolbar.
(9) Define the column properties as shown in Figure 6-5. Note that both the '*Caption*' [ANTH101 Midterm Results] and the 'NE Template' [ANTH101 – Midterm Results] in Figure 6-5 are specific to this example.

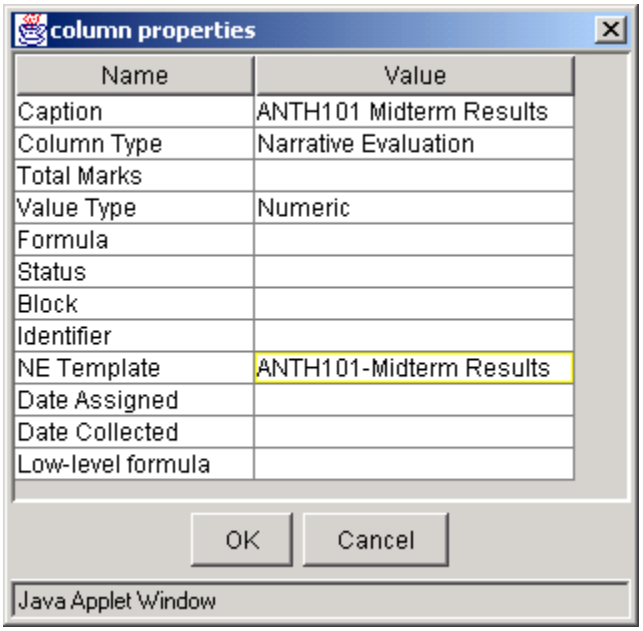


Figure 6-5: Column properties for a narrative evaluation

(10) Highlight the appropriate cell within the newly created column.
(11) Click on the '*Narrative Evaluation*' [ ] icon, located in the toolbar.

(12) The '*Narrative Evaluation'* interface will appear on the main screen, as shown in Figure 6-6.

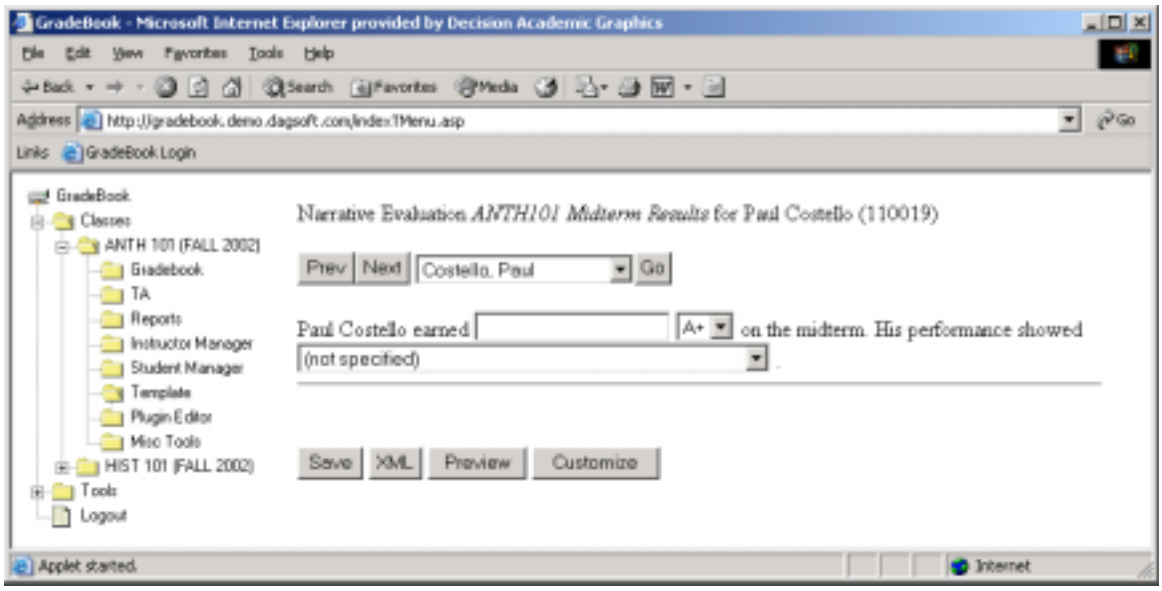


Figure 6-6: Narrative Evaluation interface

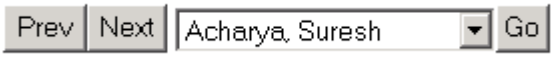
(13) Type in text or use the dropdown menus as needed to complete the evaluation.
(14) Save the evaluation, and then preview it to see how students will view it.

> **Previewing a narrative evaluation** before it has been saved will not display the new inputs you have made. Save first, preview second.

(15) Upon saving you may either continue writing evaluations or return to the GradeBook Spreadsheet window.

> **'Narrative Evaluations' do not appear in the spreadsheet cell**; they are viewed and edited only through the 'Narrative Evaluation' tool [ ].

Elements of the Narrative Evaluation Interface



Enables instructors to easily move between student's *narrative evaluations*. The 'Previous' and 'Next' buttons sequentially move through the class list, while the dropdown menu and 'Go' button allows you to jump to any entry.

Allows you to save a completed evaluation.

Allows you to view the evaluation as the student will view it. Must save the evaluation prior to using the 'Preview' action.

Gives instructors full editing control over the *narrative evaluation*, foregoing the fixed parameters of the template in favor of pure text.

If you 'customize' a student's evaluation and then return it into the 'Template' window, you keep none of the text changes made in the 'Customize' window.

Deleting a Template

From the template interface, selected templates can easily be unassigned to a class. Select the template for deletion and then click on the 'Delete' button.

Chapter 7 Importing & Exporting

In brief…	
Part of standard GradeBook package:	Yes
Scope:	*Local*
User(s):	All instructors

Introduction

The import and export tools add to the versatility of the GradeBook software package; facilitating the transfer of data between GradeBook and other data managing programs, and simplifying the grades submission process.

Exporting Data

Two methods exist for exporting spreadsheet data, from within the spreadsheet and through the 'Misc Tools'. Exporting data directly from the spreadsheet requires more steps, but ensures greater control over exported data. Exporting data using the 'Misc Tools' function can be used when this added control is not needed.

Exporting from Spreadsheet

(1) Select the 'Export' command from the spreadsheet menu bar, and follow the 'To User Files' link.
(2) A window entitled 'Export Options' will open prompting the instructor to select which data is to be exported; this window is shown in Figure 7-1. The displayed options correspond to the columns that have been created within the spreadsheet.

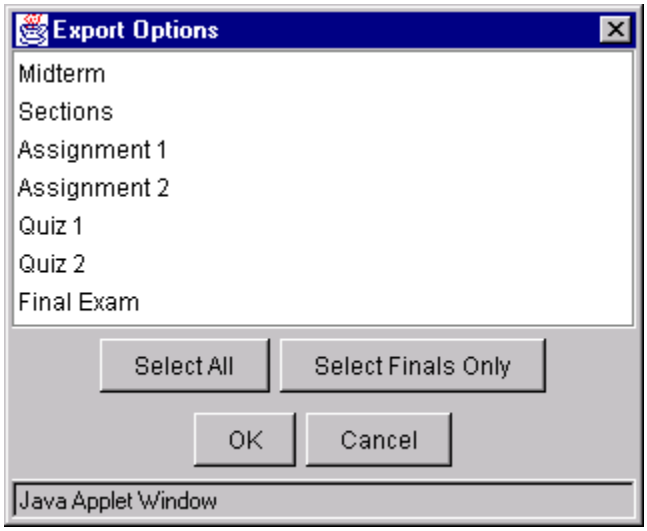


Figure 7-1: Export Options

(3) Select the data you wish to export by clicking on the option, or by using the 'Select All' or 'Select Finals Only' buttons.

To select multiple options, hold down the keyboard's CTRL key as you are clicking on the desired options. This action will highlight all the selected options.

(4) Upon selecting 'OK', another window appears entitled 'Question', as shown in Figure 7-2.

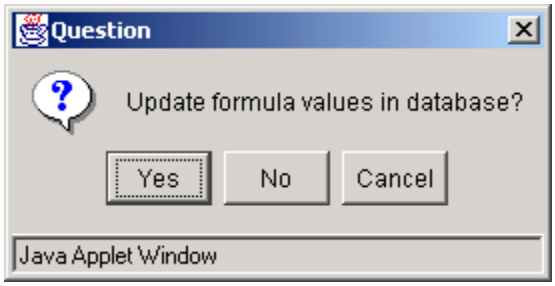


Figure 7-2: Question prompt

Formula calculations are not automatically saved within GradeBook; formula values within the spreadsheet must be manually saved. Updating the formula values in the database prior to exporting the data will also save these values.

(5) A final window appears, as shown in Figure 7-3, verifying the data that you wish to export.

Figure 7-3: Grades Download Confirmation

(6) GradeBook will then proceed to download the file with an '.asp' file extension. Ensure that the 'Save as type' option is set to 'All Files' and key-in the file name with an '.csv' file extension, as shown in Figure 7-4.

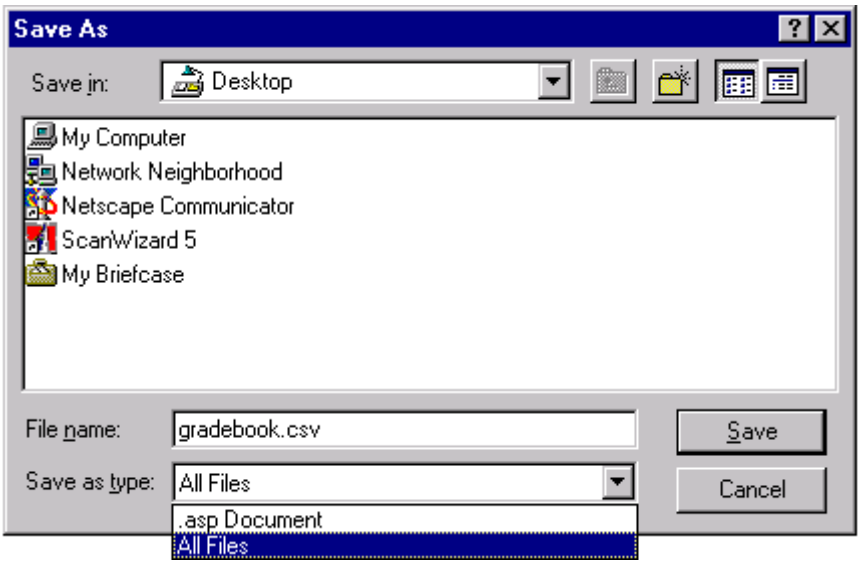


Figure 7-4: Windows 'Save As' Prompt

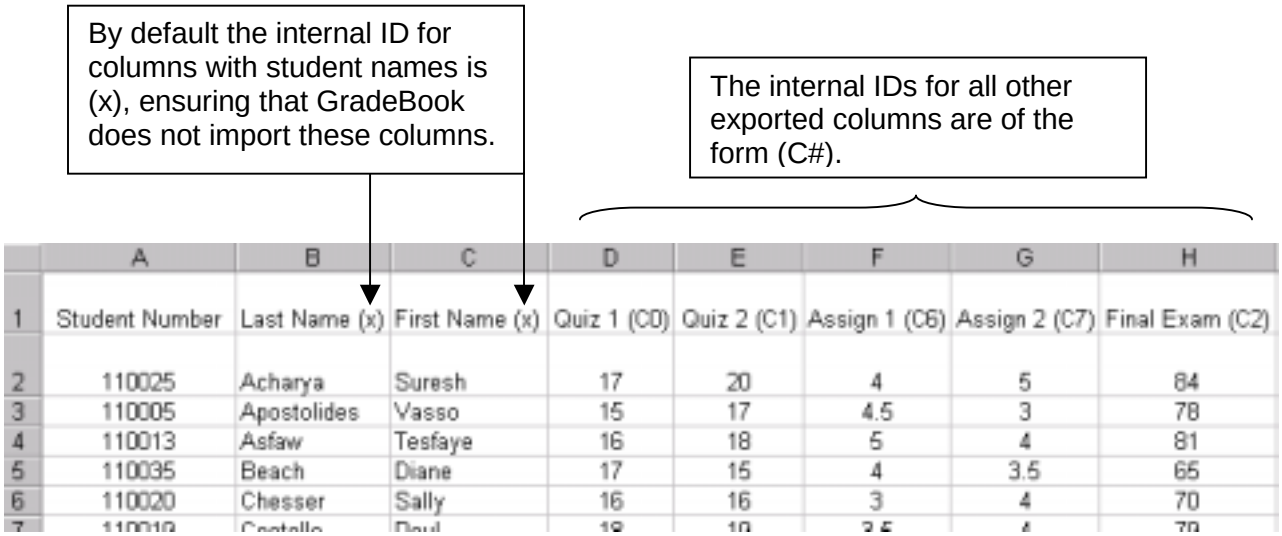
Exporting using 'Misc Tool'

(1) From the *primary menu* select the folder marked 'Misc Tools' and then click on the file entitled 'Export Grades'.

(2) A prompt will then appear, similar to that previously shown in Figure 7-3, verifying which spreadsheet data is to be downloaded.
(3) By default all spreadsheet columns are selected for download except for student names, to unselect any column, click on the checkmark beside the column title.
(4) GradeBook will then proceed to download the file with an '.asp' file extension. Ensure that the 'Save as Type' option is set to 'All Files', and key-in the file name with an '.csv' file extension, as was shown in Figure 7-4.

Notes on Exported Data

When GradeBook exports column data it assigns an **internal column identification code** to the column heading. Figure 7-5 shows how GradeBook data appears in Excel®. These IDs will ensure that upon import back into GradeBook, the data will be placed back into the original columns. Removing these IDs will result in duplicate columns being written. Changing the IDs to '(x)' will tell GradeBook no the import that column's data.



	A	B	C	D	E	F	G	H
1	Student Number	Last Name (x)	First Name (x)	Quiz 1 (C0)	Quiz 2 (C1)	Assign 1 (C6)	Assign 2 (C7)	Final Exam (C2)
2	110025	Acharya	Suresh	17	20	4	5	84
3	110005	Apostolides	Vasso	15	17	4.5	3	78
4	110013	Asfaw	Tesfaye	16	18	5	4	81
5	110035	Beach	Diane	17	15	4	3.5	65
6	110020	Chesser	Sally	16	16	3	4	70

Figure 7-5: Column Internal ID

'.csv' files are text based and can be opened in any spreadsheet application (e.g. MS Excel®, Quattro® Pro…etc). Excel is typically recognized as the default program to open '.csv' files, to open simply double-click on the file name. Other spreadsheet applications may require that the file be opened from within the application.

Columns containing formula values will appear empty if they have not been explicitly saved within the spreadsheet.

Importing Grades

This function enables an instructor to import grades from another spreadsheet application into the GradeBook Spreadsheet.

➢ Importing Spreadsheet Data

(1) From the *primary menu* select the folder marked 'Misc Tools' and then click on the file entitled 'Import Grades'.
(2) A prompt will then appear asking for the location of the file to be uploaded, as shown in Figure 7-6.

Figure 7-6: Column Upload prompt

(3) Use the 'Browse' button to find the file on your computer.
(4) The most common (and default) file type for upload is CSV (Comma delimited), but GBK, CAPA, and WebCT are also available.
(5) Click on the 'Submit' button to begin uploading the selected file to your computer.
(6) A message will appear upon successful completion of the upload.

Uploading will not overwrite existing spreadsheet columns. Should an uploaded column and existing column share the same name, GradeBook will create the new column in addition to the existing one.

'.csv' files can be created in such programs as MS Excel®. When creating your spreadsheet in Excel,

- Ensure that the first row contains the column titles, and subsequent rows contain student data (e.g. grades, descriptions…etc.)
- Having the first column contain student numbers will ensure that GradeBook knows how to properly assign the data. Without this student number column GradeBook will import the data as it is ordered in the imported file, regardless of whether the imported and existing spreadsheets follow the same order.
- Within Excel, use the 'Save As' function and set the file type to 'CSV'.
- The file is now ready to be imported into the GradeBook Spreadsheet.

Submitting a Class to a Higher Level

In brief…	
Part of standard GradeBook package:	No
Scope:	*Local*
User(s):	Main instructor

This function is used to export grades to a higher level of authority. In submitting a class, an instructor is transferring ownership of the class to another level.

Once a class has been submitted, the instructor has *read only access* to the class spreadsheet. To make changes to a class spreadsheet after it has been submitted, the ownership must be returned to the instructor.

The class submission tool serves as a checkpoint to validate to submitted spreadsheet. This validation will be unique to every educational institution, but it could check to see whether the following elements are present:

- acceptable grade formats (e.g. letter grades, numerical grades, narrative evaluations…etc.)
- unique column for final grades
- final grades for all students

Figure 7-7 shows the submit class interface. Note that only one option for submitting is shown in this example, there can be multiple options depending upon the educational institution (e.g. department, registrar, faculty…etc.)

Figure 7-7: Submit a class interface

Chapter 8 Teaching Assistants (TA)

In brief…	
Part of standard GradeBook package:	Yes
Scope:	*Local*
User(s):	Main instructor or activity main

Introduction

Teaching Assistants (TA) are defined as secondary instructors, lab assistants, or any aides/assistants who are denied complete access to class information. TAs can read and record only those student grades that have been assigned to them by the *main instructor*; all other access and editing rights belong to the *main instructor*.

Adding a New TA

Adding a new TA

1) Log in to the GradeBook software program, if it's not already active.
2) From the *primary menu*, click on the 'Classes' folder, then click on the specific class that you wish to assign a TA to.
3) Click on the 'TA' folder, and select the 'Add new TA' file.
4) The 'Adding a new TA' interface will appear on the main screen, as shown in Figure 8-1.

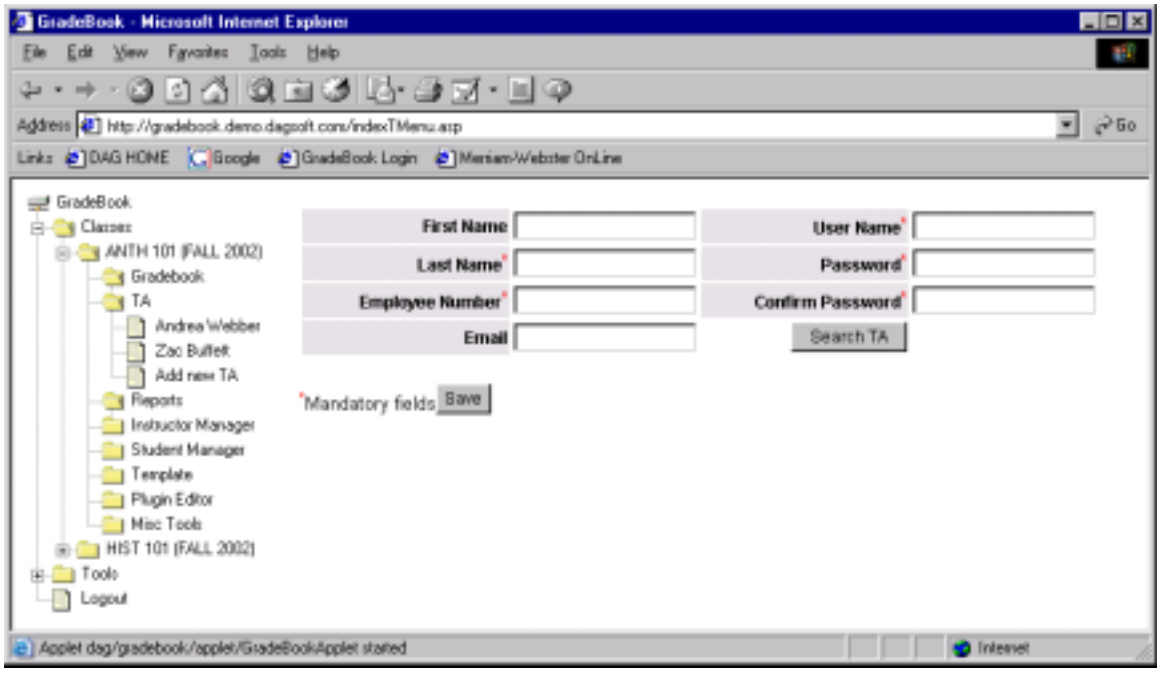


Figure 8-1: Adding a New TA Interface

5) Enter new TA data within this interface.
   - If the TA profile already exists within the database, you can import the data through the 'Search TA' [Search TA] button.
   - A new dialogue box will appear, as shown in Figure 8-2.

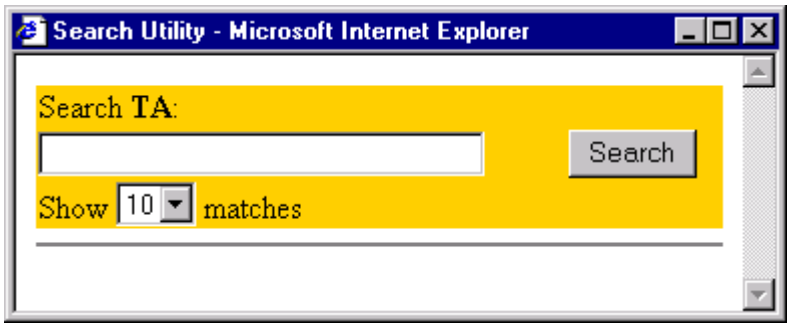


Figure 8-2: Search TA Dialogue Box

   - A specific TA's last name can be inputted at the prompt, or left blank to search all TA records.
   - Click on any name within the list of TAs to see their associated profile.

Teaching assistants only have limited access to the GradeBook Spreadsheet tool. That access is entirely controlled by the primary instructor through the 'Instructor Manager', as discussed in Chapter 9.

Main instructors cannot remove an assigned TA from their class. However, they can remove all TA *Read* and *Write* access to student records within a class, such that the TA can neither view nor edit spreadsheet data.

Chapter 9 Instructor Manager

In brief…	
Part of standard GradeBook package:	Yes
Scope:	*Local* or *global*
User(s):	main instructor or administration

Introduction

This tool enables the *main instructor* to share access to the GradeBook Spreadsheet with other faculty or teaching assistants. This access can be either r*ead only access (R)* or *read and write access (RW)*, as specified by the *main instructor*. Access can be granted in one of four ways: 'Section Assignment', 'Range Assignment', 'Student Assignment', or 'Test Assignment'.

Within the 'Instructor Manager' tool, a dropdown menu listing instructors is repeatedly used. This menu references the list of TAs added using the 'TA' tool (discussed in Chapter 8: 'Teaching Assistants (TA)'). If only the *main instructor*'s name appears in this menu, this implies that no TAs have been added yet.

Section Assignment

The Section Assignment tool enables instructors to assign spreadsheet access to teaching assistants in terms of sections predefined in the GradeBook Spreadsheet. These sections are initially created within the GradeBook Spreadsheet, see the sub-section entitled 'Sectioning a Class' in Chapter 3: 'GradeBook Spreadsheet', for details on sectioning. To bring up the 'Section Assignment' interface, click on the tab at the top of the 'Instructor Manager' tool, the interface is as shown in Figure 9-1.

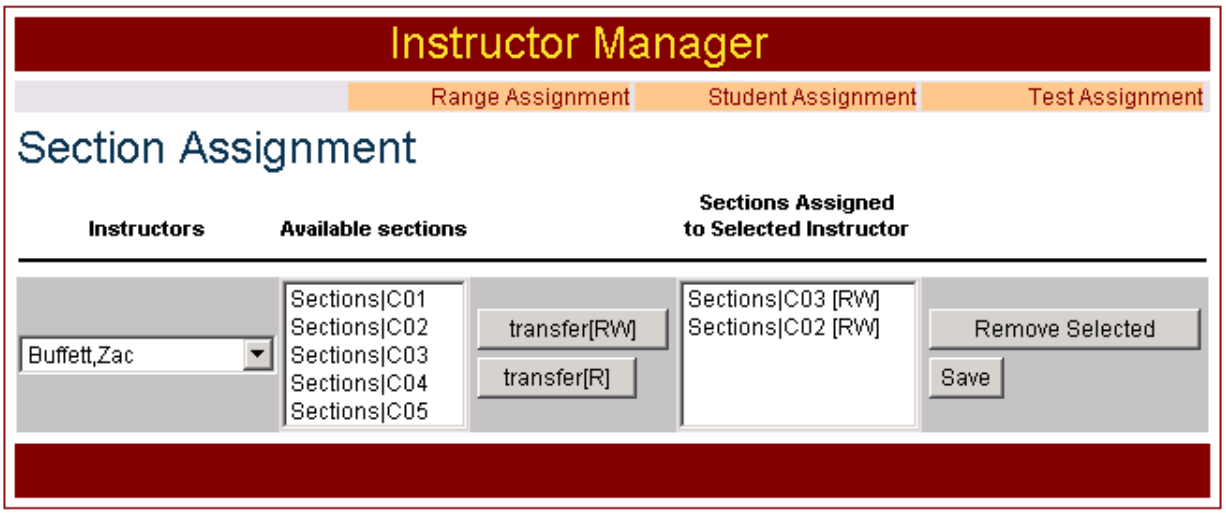


Figure 9-1: Section Assignment Interface

➢ Assigning sections to a teaching assistant

(1) Select the desired instructor from the dropdown menu.
(2) Highlight the desired section.
(3) Grant *read only* or *read and write access* by clicking on the appropriate 'Transfer' button.
(4) Multiple sections can be added in turn.
(5) Save the section assignment when finished with the selected instructor.

Range Assignment

The 'Range Assignment' tool enables instructors to assign spreadsheet access by sectioning classes by alphabetical order of student names. To bring up the 'Range Assignment' interface, click on the tab at the top of the 'Instructor Manager' tool, the interface is as shown in Figure 9-2.

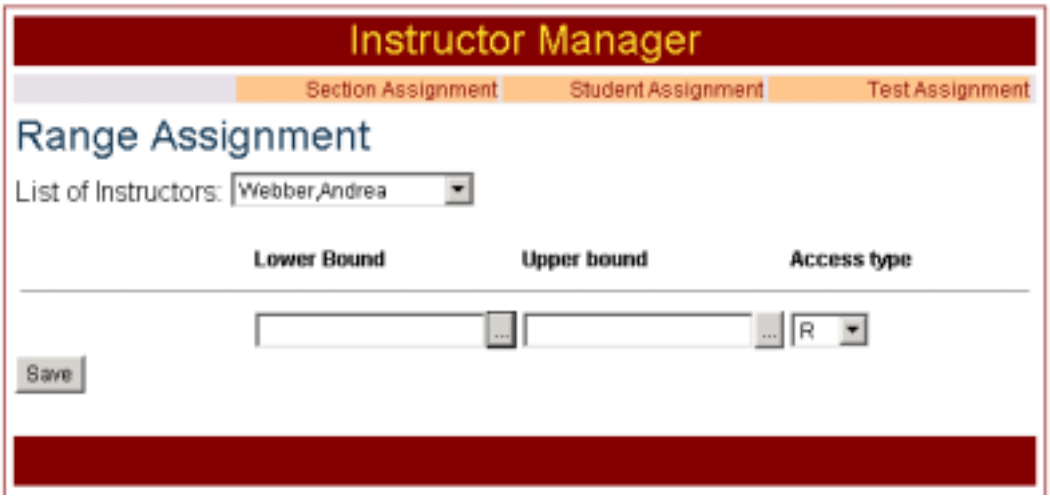


Figure 9-2: Range Assignment Interface

Assigning a range of students to a teaching assistant

(1) Select the desired instructor from the dropdown menu.
(2) Key-in the upper and lower bounds by entering the desired students' last names.
These bounds can also be filled by retrieving names from the class list, as follows:
- Click on the button to the right of the empty text box, this will open a new dialogue box as shown in Figure 9-3.
- Click on the 'Search' button to display the entire class list.
- Selecting a student from the list will automatically register them as a limit to the range assignment

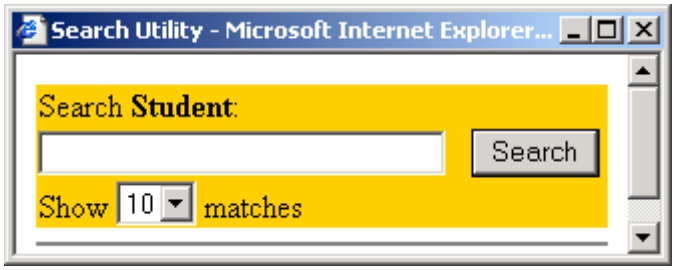


Figure 9-3: Search Student Dialogue Box

(3) Once both upper and lower bounds have been filled, define the 'Access Type' as either *read only* or *read and write access*.

If an upper bound is not specified, by default GradeBook will select all the students that satisfy the lower bound.

The range assignment is half open, meaning that the lower bound is included in the range while the upper bound is excluded from the range.

(4) Save the range assignment when finished with the selected instructor.

Student Assignment

The 'Student Assignment' tool enables instructors to assign spreadsheet access by manually sectioning classes by specific student names. To bring up the 'Student Assignment' interface, click on the tab at the top of the 'Instructor Manager' tool, the interface is as shown in Figure 9-4.

Figure 9-4: Student Assignment interface

➢ Assigning students to a teaching assistant

(1) Select the desired instructor from the dropdown menu.
(2) Manually assign access by clicking in the check boxes. Note that *read and write access* requires both boxes to be checked.
(3) The 'Save' button is located at the very bottom of the list, save the student assignment when finished with the selected instructor.

Test Assignment

The 'Test Assignment' tool enables instructors to assign spreadsheet access to specific *test activities*. To bring up the 'Test Assignment' interface, click on the tab at the top of the 'Instructor Manager' tool, the interface is as shown in Figure 9-5.

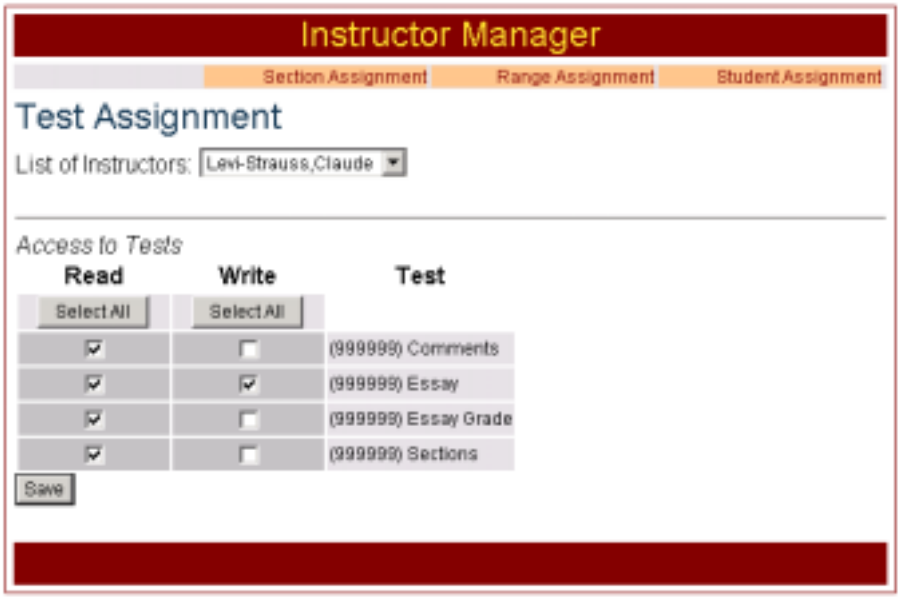


Figure 9-5: Test Assignment interface

Assigning tests to a teaching assistant

(1) Select the desired instructor from the dropdown menu.
(2) Manually assign access by checking the appropriate access for each *test activity*. Note that *read and write access* requires both boxes to be checked.
(3) Save the test assignment when finished with the selected instructor.

Chapter 10 Block Manager

In brief…	
Part of standard GradeBook package:	No
Scope:	*Local*
User(s):	Main instructor

Introduction

The 'Block Manager' is a useful tool for sectioning when multiple instructors teach within the same class. Each instructor holds similar spreadsheet access and uses the same class list, but is only responsible for a certain part of the instruction. Blocks enable multiple users to share a spreadsheet without seeing the columns generated by the other users. In such a class it is the course coordinator who would assign block access.

Creating a block requires a level of privilege that will not necessarily be available to all instructors.

Creating a Block

The creation of a block requires several steps, as detailed below.

Adding a New Block

The 'Block Editor' builds the framework for creating a block. If no blocks exist within a given class the 'Block Editor' will only display an 'Add a New Block' button. Clicking on this button creates fields for entering block 'Name', 'Description', and 'Type'. Define and save as many blocks as you need, likely one for every instructor teaching within your class.

An example of a 'Block Editor' interface with two defined blocks is shown in Figure 10-1.

Figure 10-1: Block Editor

Assigning Block Permission

Once a block has been added using the 'Block Editor' it must be assigned to an individual.

(1) Select the newly created block from the dropdown menu options and click on 'Go'.
(2) Two more options appear, enabling you to assign an instructor to the block and to specify their permission type, as shown in Figure 10-2.
(3) Use the 'Save' button to save these permissions within GradeBook.

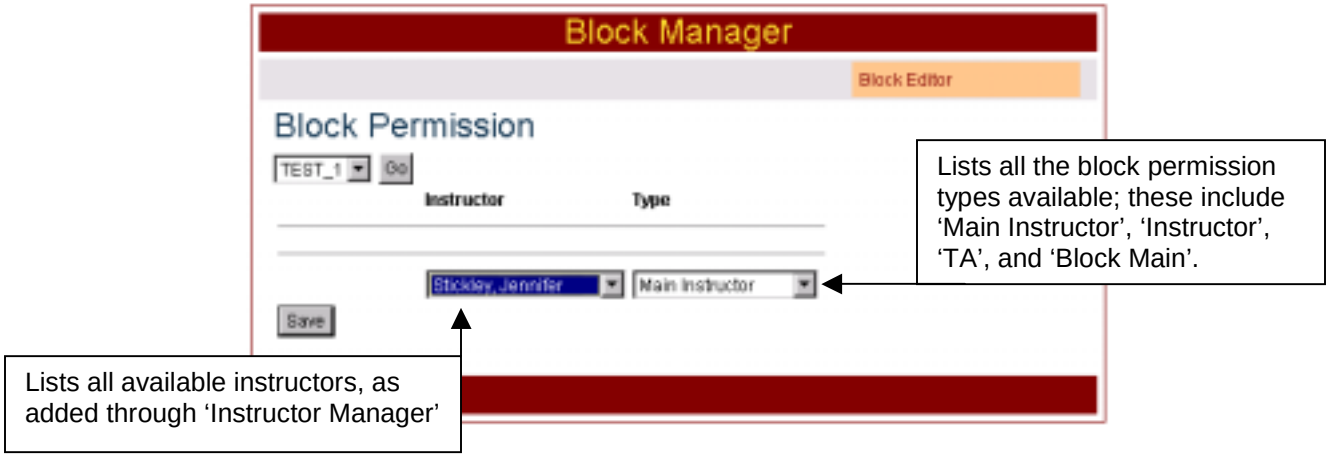


Figure 10-2: Block Permission Interface with Descriptors

Permission types define the access that an instructor will have over the assigned blocks. These types include 'Main Instructor', 'Instructor', 'TA', and 'Block Main'. If these permission conflict with the permissions held by that instructor within the class (as assigned within 'Instructor Manager') by default GradeBook recognizes the higher access. See Appendix B: Instructor Status for a detailed explanation of the different permission types

Using a Block in the GradeBook Spreadsheet

1) Open the GradeBook Spreadsheet for the same class that you just created and assigned block permissions to.
2) Right-click on the desired column to reveal the column properties.
3) The important parameter in assigning columns into a block is the 'Block' property. Your newly created blocks will appear as options within the dropdown menu for the 'Block' property.
4) Select the desired block and click on 'OK'. Once a column has been assigned to a block, that block title will appear in the column heading.

Multiple columns can be assigned to the same block by repeating the steps (2) and (3).

Chapter 11 Student Manager

In brief…	
Part of standard GradeBook package:	No
Scope:	*Local* or *global*
User(s):	Main instructor or administration

Introduction

The 'Student Manager' is used to create and enroll new students, as well as modify student enrollment status. These three components of 'Student Manager' are independent of one another; GradeBook can be made of any combination, depending upon the educational institution.

Creating a New Student

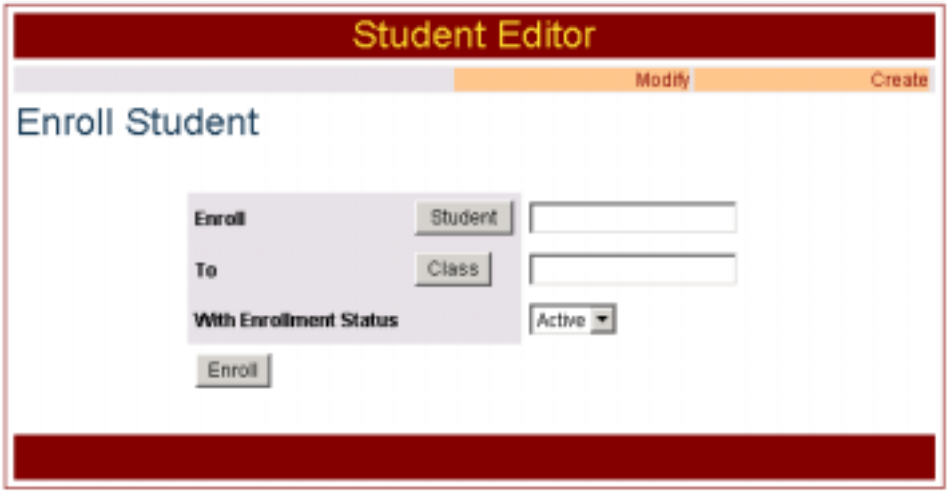
Depending upon the educational institution, **new students created using this function may be flagged to notify administrative staff** that an instructor has created the student.

This tool creates new student profiles within the database; it is shown in Figure 11-1. Student data is keyed-in to the various fields; you may also 'Search by Student Number' to see whether the student is already in the database.

Figure 11-1: Create a Student Interface

Enrolling a Student

The ‘Enroll Student’ tool registers students from the database into a new class; the interface for this tool is shown in Figure 11-2.



To select a student from the database click on the ‘Student’ button, this will bring up a search engine. This student search engine allows instructors to search all student profiles, or to specify last name, first name or student number, as shown in Figure 11-3. A list of student names will appear that match your search criteria, simply click on the appropriate name within this list to select them for class enrollment.

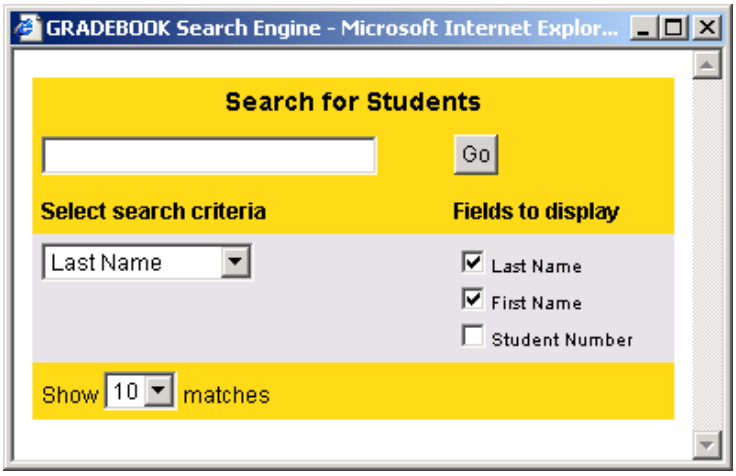


Figure 11-3: Student search engine

For the *local* ‘Student Manager’ the current class is selected by default, wherein the *global* version enables any class to be retrieved from the database.

Once both student and class fields have been entered, the enrollment status can be set to active. To finalize the enrollment process click on the ‘Enroll’ button.

Modifying Student Enrollment

This tool enables instructors to change a student's enrollment status to unspecified, inactive, or active. A standard search engine is again employed for retrieving student profiles by clicking on the 'Student' button. For the *local* 'Student Manager' the search is limited to those students within the current class, wherein the *global* version enables any student to be retrieved from the database.

Upon selection for modification the student's current course-load and associated status appear, as shown in Figure 11-4. Modifications made to student enrollment status are sent to the administrative office upon saving.

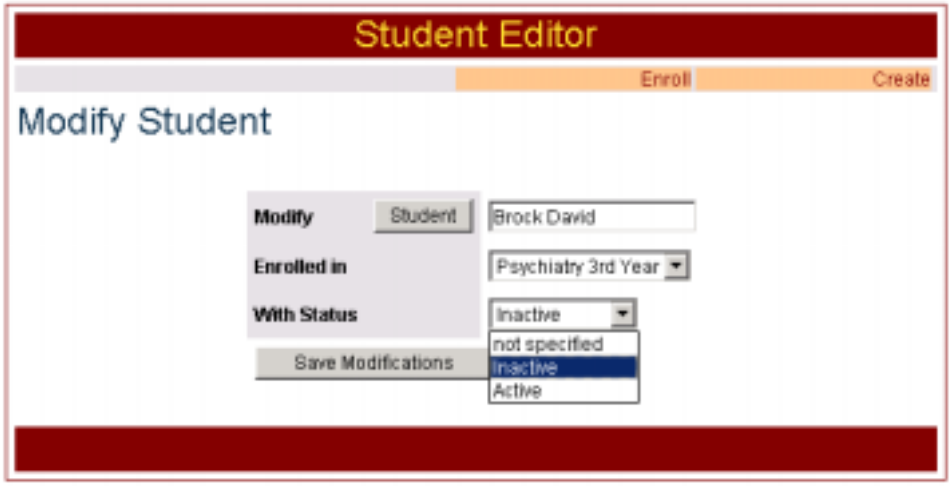


Figure 11-4: Modify Student dialogue box

Chapter 12 Reports

In brief…	
Part of standard GradeBook package:	Yes
Scope	*Local*
User(s):	All instructors

Introduction

This tool enables instructors to easily generate comparative reports for any of their classes. Reports can be produced for student grades, student ranges, or class statistics. All reports are generated from the same interface, which is shown in Figure 12-1.

Figure 12-1: Reports Interface

Student Grade Report

'Grade Reports' can be generated for all tests or specific *test activities* by clicking on the options within the menu. Details, such as test title, student name, enrollment status, instructor name, and class average, can be included in the report by clicking on the appropriate boxes. The report can also be formatted in the desired number of columns by modifying the value in the 'Show Columns' [Show 1 Columns] prompt. Figure 12-2 shows a sample 'Grade Report'.

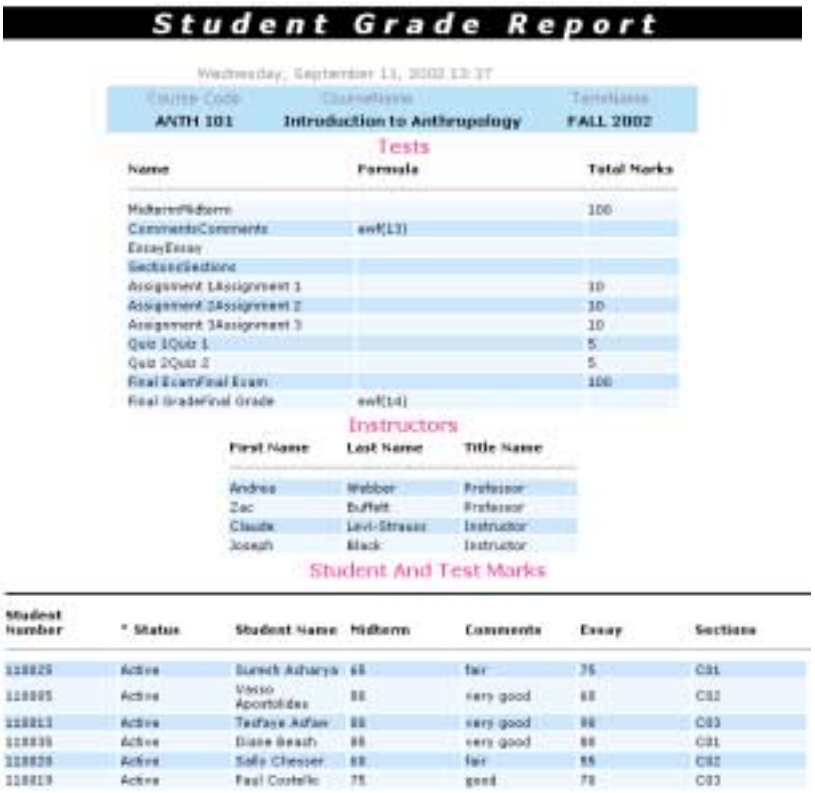
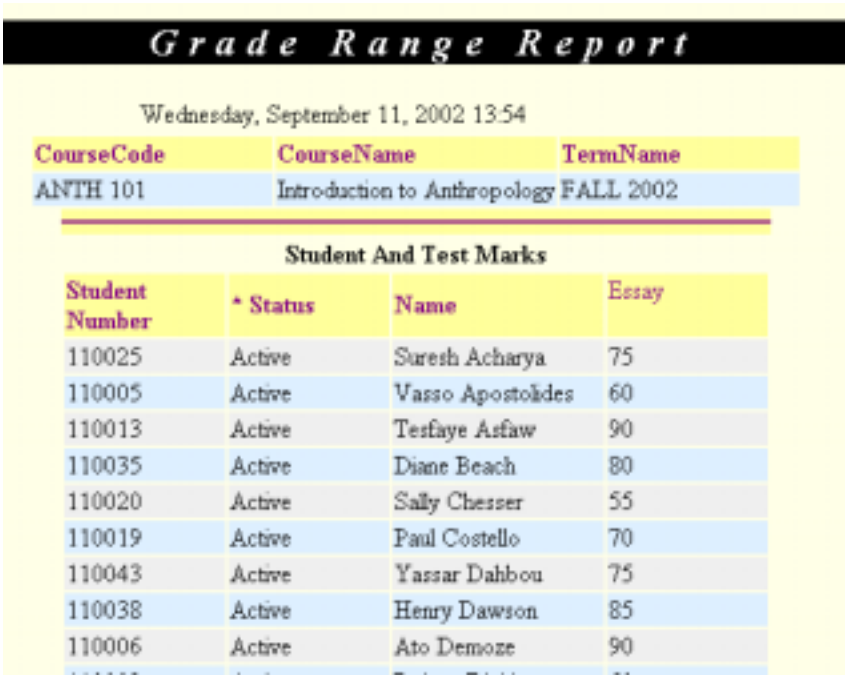


Figure 12-2: Student Grade Report

Formula calculations are not automatically saved within GradeBook; formula values within the spreadsheet must be manually saved using the 'Save and Refresh' button [ ], located on the spreadsheet toolbar. These **formula values will not appear in the report unless they have been saved.**

Student Range Report

'Range Reports' can be generated to show the range of grades received on a selected *test activity*. Only *test activities* whose *value types* are 'Numeric' are available for use in a 'Range Report'. The limits are defined as fixed numbers (not percentages) specific to test total marks. This report is formatted as shown in Figure 12-3.



Grade Range Report

Wednesday, September 11, 2002 13:54

CourseCode	CourseName	TermName
ANTH 101	Introduction to Anthropology	FALL 2002

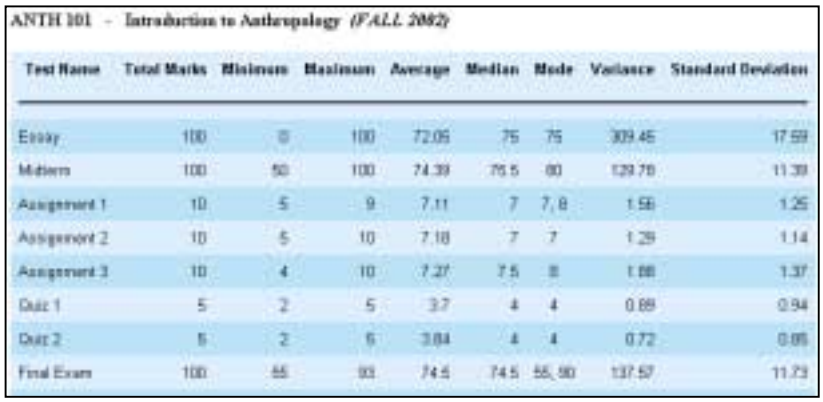
Student And Test Marks

Student Number	* Status	Name	Essay
110025	Active	Suresh Acharya	75
110005	Active	Vasso Apostolides	60
110013	Active	Tesfaye Asfaw	90
110035	Active	Diane Beach	80
110020	Active	Sally Chesser	55
110019	Active	Paul Costello	70
110043	Active	Yassar Dahbou	75
110038	Active	Henry Dawson	85
110006	Active	Ato Demoze	90

Figure 12-3: Grade Range Report

Statistics Report

'Statistics Reports' tabulate various statistical parameters on all *test activities* for a given class. These parameters include minimum and maximum grades, class average, median, mode, variance and standard deviation. Figure 12-4 shows a sample 'Statistics Report'.



ANTH 101 - Introduction to Anthropology *(FALL 2002)*

Test Name	Total Marks	Minimum	Maximum	Average	Median	Mode	Variance	Standard Deviation
Essay	100	0	100	72.05	75	75	309.45	17.59
Midterm	100	50	100	74.39	75.5	80	129.79	11.39
Assignment 1	10	5	9	7.11	7	7, 8	1.56	1.25
Assignment 2	10	5	10	7.18	7	7	1.29	1.14
Assignment 3	10	4	10	7.27	7.5	8	1.88	1.37
Quiz 1	5	2	5	3.7	4	4	0.89	0.94
Quiz 2	5	2	5	3.84	4	4	0.72	0.85
Final Exam	100	55	93	74.5	74.5	55, 90	137.57	11.73

Figure 12-4: Statistical Report

Chapter 13 User Tools

In brief…	
Part of standard GradeBook package:	Yes
Scope:	Not applicable
User(s):	Main instructor, block main, or activity main

User Profile

The 'User Profile' tool allows the user to see and modify their own profile. Figure 13-1 is an example of one such profiling tool. For security reasons, users can only modify their password and update their e-mail address.

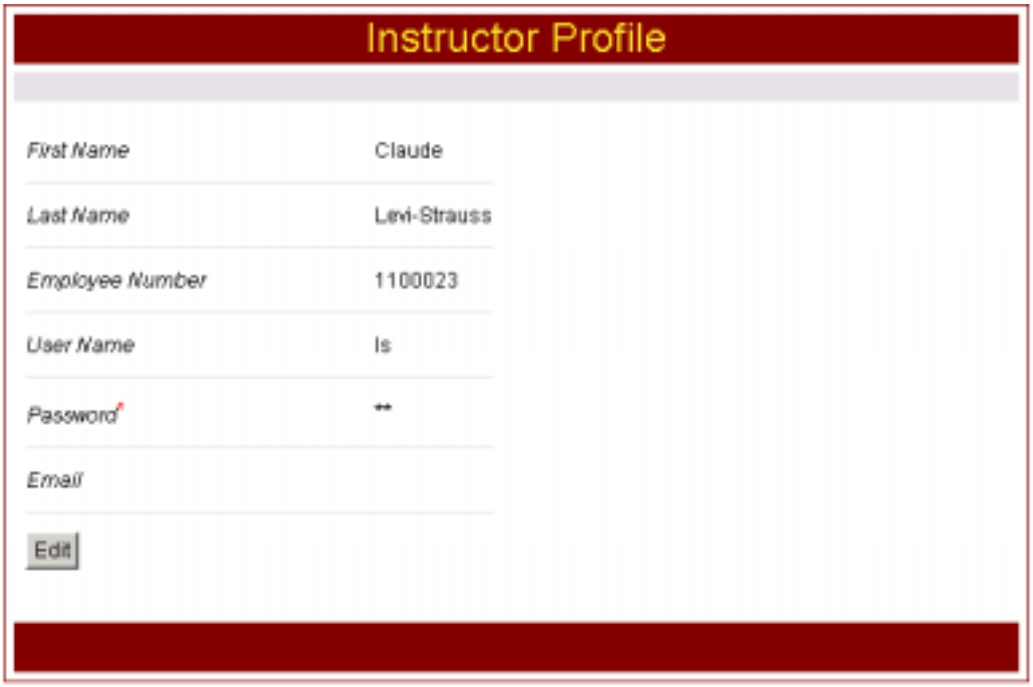


Figure 13-1: Modifying User Profile

Column Types Editor

Test Types are user defined. They provide a way of classifying different testing activities. Midterms, projects, exams, tests, homework assignments, these are all examples of Test Types. Through the Test Type Editor, you can define and describe the Test Types that your institution will use to classify its *test activities* within GradeBook.

Adding a new Test Type

Use this tool with **caution** as it is a *global* tool. Anything created, modified or deleted will occur throughout the GradeBook database, viewable by all instructors.

Figure 13-2: Test Type Editor

1) From the *Tools* folder click on the sub-folder for Test Type Editor, Figure 13-2 shows an example of a Test Types Editor.
2) From the Test Type Editing table, click the 'Add new field' button.
3) Create a new Test Type by assigning it a name and identifier. The Identifier allows you to describe the Test Type, should you desire more detail.
4) Save your changes to the Test Type Editor by clicking the Save Test Types button.
5) You will see your addition next time you enter a new *test activity* into any spreadsheet. In the Column Properties box, your new Test Type will be listed in the Type dropdown menu.

'Refresh' the GradeBook Spreadsheet application, to update it **after adding or modifying 'Test Types'**

Deleting an existing Test Type

Note: Only 'Test Types' not currently in use can be deleted. If it is in use within GradeBook, only modifications are permitted.

1) From the Test Type Editing table, click in the corresponding check box in the Delete column.
2) To finalize the deletion click the 'Save Test Types' button.

Pre-defined GradeBook Test Types

Generic tests
- default type
- accepts any value type

Lab section & Lecture section
- for sectioning a class
- not for grading purposes

Narrative Evaluation for templates
- must be used in conjunction with a narrative evaluation value type

Final Alpha test for a letter grade
- unique grading column within spreadsheet,
- displays letter grade for final mark

Final Numeric test
- unique grading column within spreadsheet
- displays numeric grade for final mark
- can be converted to final numeric using appropriate formula

Past Terms

Maintains an archive of class information from previous terms. An instructor can retrieve basic class information, statistic reports, student information, and view class spreadsheets for all his/her previous terms. The interface for this tool is shown in Figure 13-3.

Figure 13-3: Past Terms

Chapter 14 Student Access

Introduction

Students using GradeBook have a very different interface than instructors. Students are limited (for security reasons) to just some functionalities: viewing grades, communicating with their instructors, and modifying their user password.

Student Grade Report

The grades seen by students are only those made *public* by their instructors. As shown in Figure 14-1, each *test activity* displays the student's mark, the student's ranking within the class, and the class average.

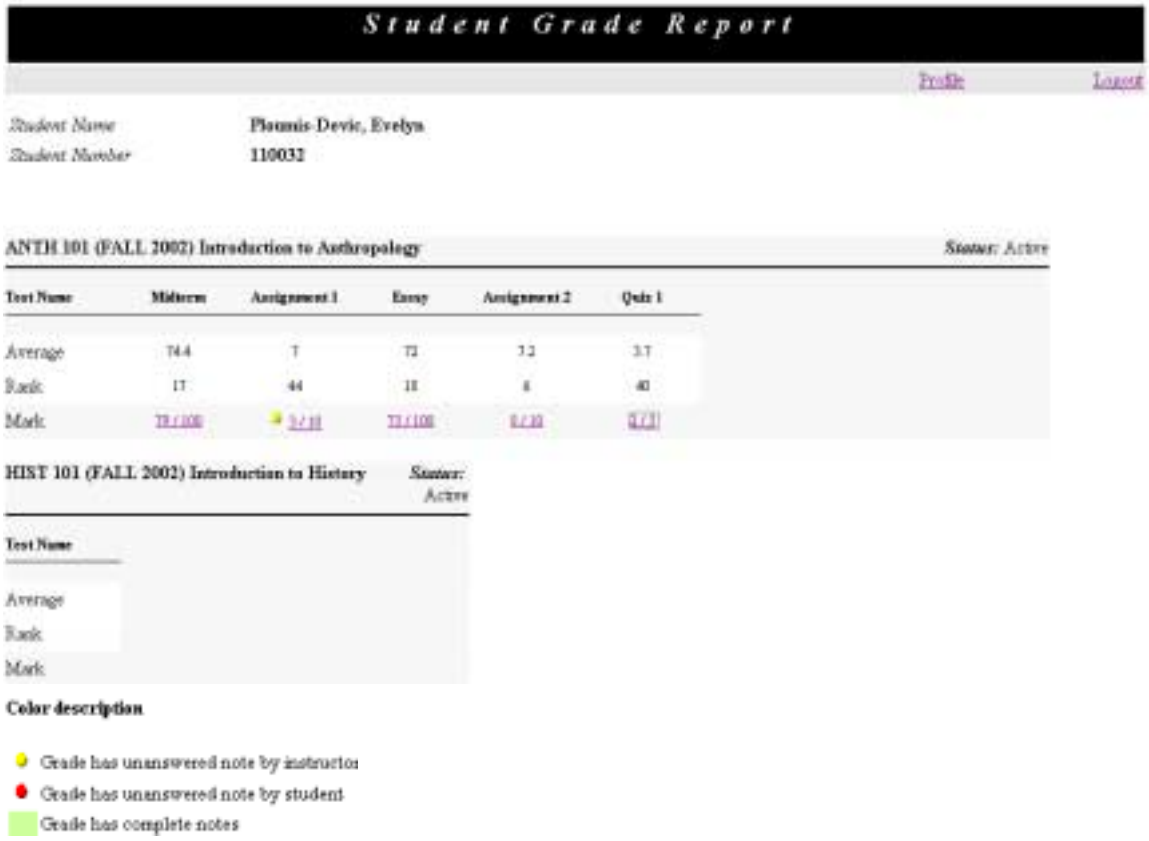


Figure 14-1: Student Grade Report

Grade Notes

Grade Notes can be created and/or viewed through any grade on the 'Grade Report'. Clicking on a particular 'Mark' will bring up the Grade Notes interface, as shown in Figure 14-2. Students may leave a message for their instructor by typing it within the text box and clicking on the 'Submit New Note' button, or simply view messages left by their instructor.

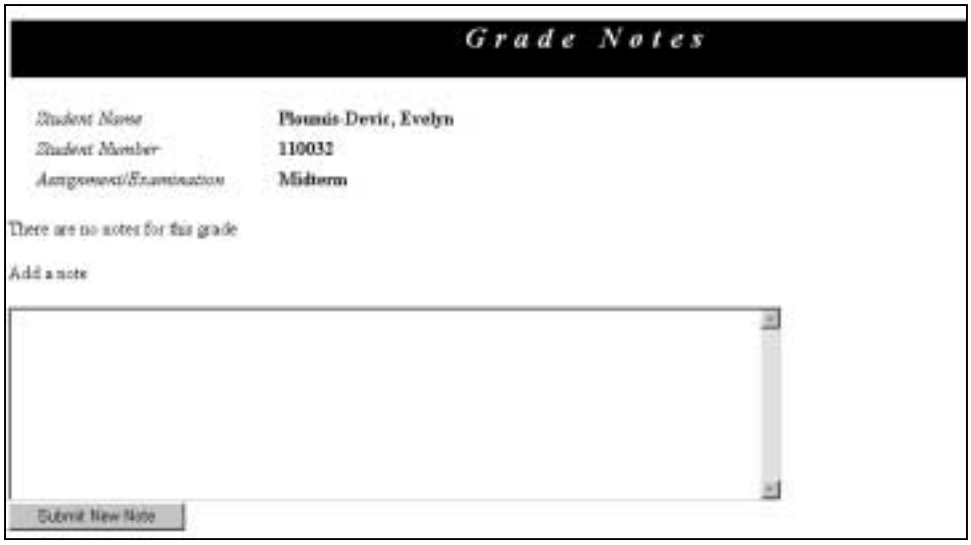


Figure 14-2: Grade Notes Interface

Grades that carry a Grade Note are marked within the 'Grade Report' with a colored dot to the left of the grade. A yellow dot denotes an unanswered note left by the instructor, a red dot denotes an unanswered note left by the student, and a green highlight denotes a completed communication.

Modifying Student Profile

A student's profile can be accessed through a link atop the 'Grade Report. The profile, as shown in Figure 14-3, enables students to change their user password.

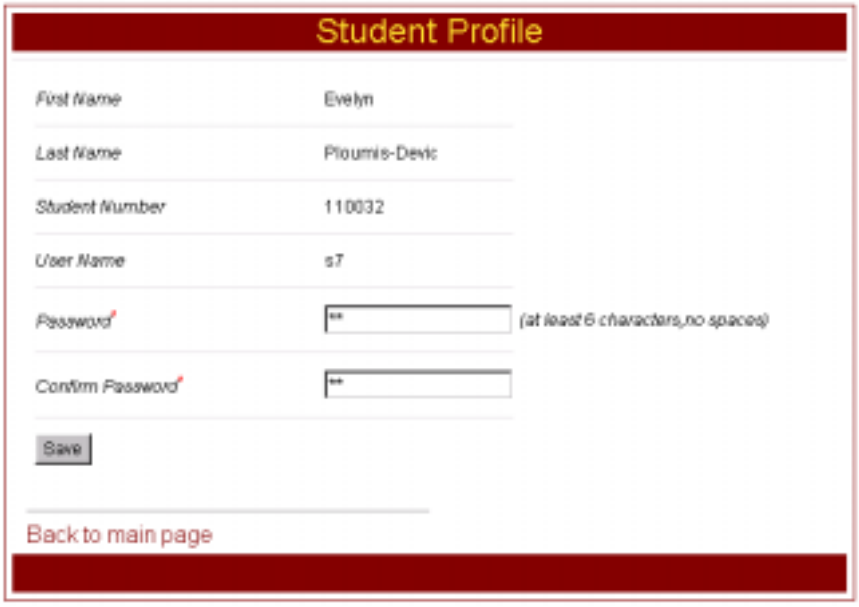


Figure 14-3: Modifying Student Profile

Logout

Students may logout at any time by clicking on the 'Logout' link atop the 'Grade Report'.

After a pre-set period of inactivity (approximately 20 minutes), GradeBook will log you out automatically.

Chapter 15 High Level Access

Introduction

GradeBook is a versatile piece of software that can be tailored to accommodate the administrative structure of any educational institution. Certain functionalities can be made available to all or some instructors, or reserved for administrative staff, as directed by the institution.

Figure 15-1 suggests one of the administrative structures that GradeBook can accommodate. Courses and instructors are assigned into departments. Departments are grouped into faculties. All faculties report to the highest administrative authority, the Registrar. This structure would place different duties upon the various administrative levels, thus requiring different GradeBook access at each level.

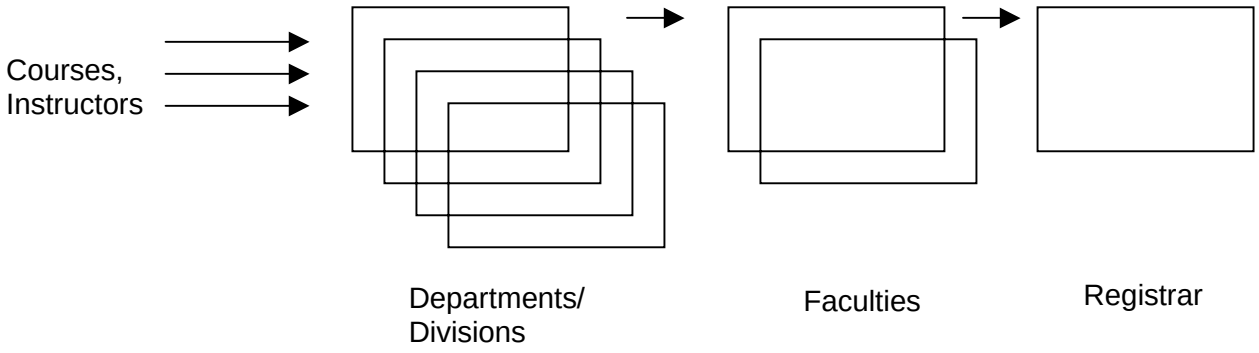


Figure 15-1: Administrative Structure

This chapter details all the tools available to the administration within GradeBook. Depending upon the administrative structure of your educational institution, these tools may not be available at all levels.

Upon logging into GradeBook administrators see a *primary menu*, similar to that shown in Figure 15-2. The details of the tools listed within the *primary menu* are expanded upon in the following sub-sections.

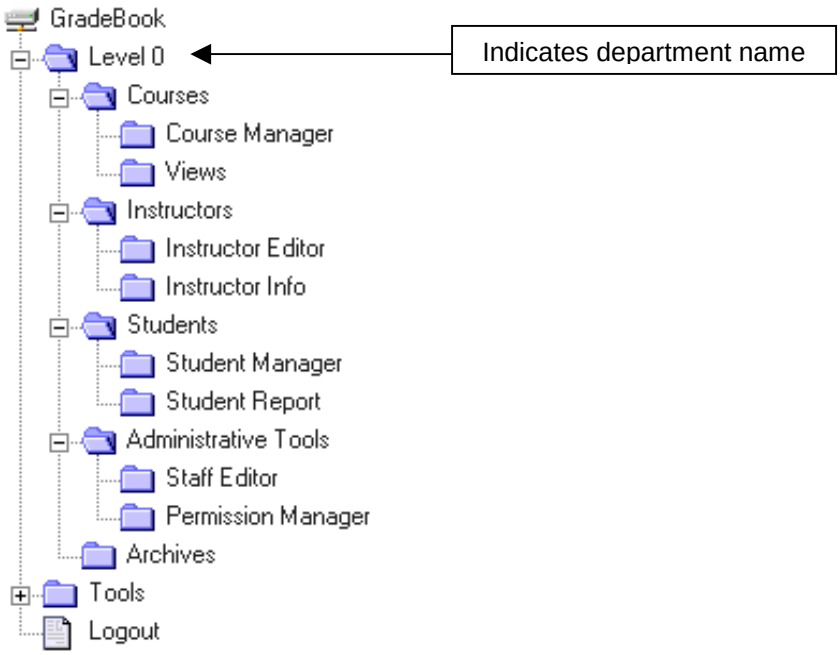


Figure 15-2: High level primary menu

Courses

Course Manager

Displays information regarding course ownership, as shown in Figure 15-3. From this menu administrators can access any class spreadsheet simply by clicking on the listed courses. If the class has not been submitted by the instructor yet (e.g. instructor has ownership of the class), the spreadsheet can be accessed with *read only* privileges. If the class has been submitted by the instructor (e.g. ownership has been transferred to the higher level), the spreadsheet can be accessed with *read and write* privileges.

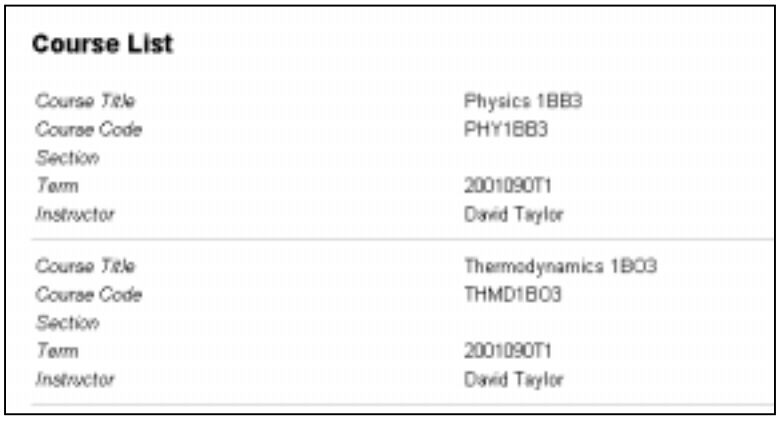
Course Ownership

Course	Owner
ANTH 101 (FALL 2002) Introduction to Anthropology	Instructors
Course IModule II (2nd Year) Course I	Instructors
HIST 101 (FALL 2002) Introduction to History	Instructors
MCNC2AA6A (2001090T1) Mechanics 2AA6	Instructors
MCNC2AA6B (2001090T1) Mechanics 2AA6	Instructors
MedicineModule III (1st Year) Medicine	Instructors
Medicine (3rd Year) Medicine	Instructors
PHY1BB3 (2001090T1) Physics 1BB3	Instructors
Psychiatry (3rd Year) Psychiatry	Instructors
THMD1BO3 (2001090T1) Thermodynamics 1BO3	Instructors

Figure 15-3: Course Ownership Menu

Views

Lists all course information in a report format. Course information includes course title, course code, section, term, and instructor for all courses. Figure 15-4 shows an example of a partial course list.



Course List

Course Title	Physics 1BB3
Course Code	PHY1BB3
Section	
Term	2001090T1
Instructor	David Taylor
Course Title	Thermodynamics 1BO3
Course Code	THMD1BO3
Section	
Term	2001090T1
Instructor	David Taylor

Figure 15-4: Course Information

Instructors

Instructor Editor

This editing tool enables users to modify existing instructor profiles, and create new profiles, as shown in Figure 15-5.

Figure 15-5: Instructor Manager Interface

To modify an existing profile, click on the instructor from the list shown, a new view will appear as shown in Figure 15-6. Instructor profiles can be edited with control over name, employee number, username, password, e-mail, and course load.

When assigning courses, permission types must be specified. These types include 'Main Instructor', 'TA', 'Activity Main' and 'Block Main'.
See Appendix B: Instructor Status for a detailed explanation of the different permission types

Figure 15-6: Modify Existing Instructor Profiles

Instructor Information

Lists all instructors with a link to their profile and course load in a report format.

Students

Student Manager

Please refer to Chapter 11: Student Manager, as this tool is identical to the optional instructor tool previously discussed.

Student Report

Creates a report for any student for all courses taken throughout their academic history with your educational institution. From the interface shown in Figure 15-7, administrators can select any student from the database by searching for Student Name or Student Number and clicking on the 'Go' button.

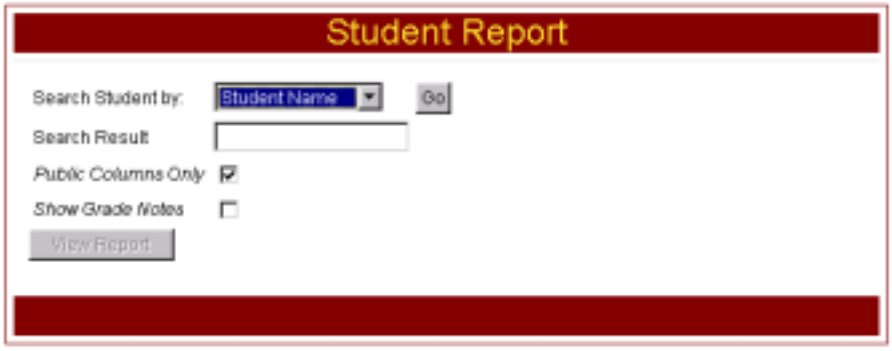
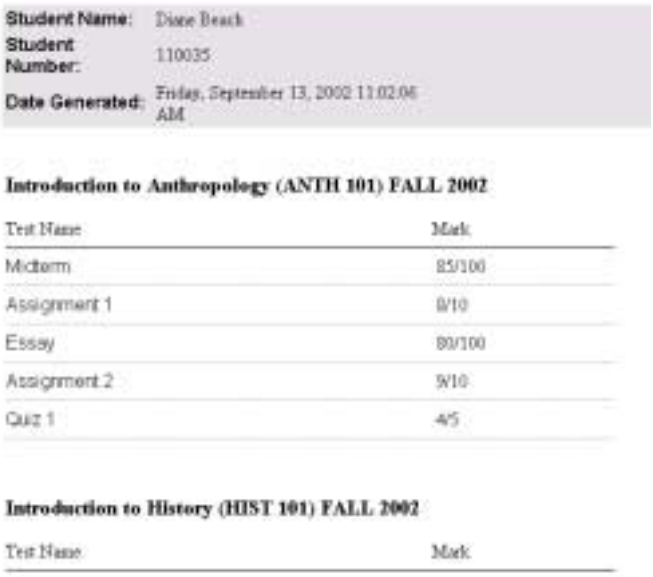


Figure 15-7: Student Report Interface

A search utility as shown in Figure 15-8, will appear.

Figure 15-8: Student Search Utility

Type in the student name or number to limit the search, or click on the 'Search' button to list all students within the database. Selecting a student from this list will automatically return the user to the 'Student Report' interface, click on the 'View Report' button to display the desired student report, as shown in Figure 15-9.



Student Name: Diane Beach
Student Number: 110035
Date Generated: Friday, September 13, 2002 11:02:06 AM

Introduction to Anthropology (ANTH 101) FALL 2002

Test Name	Mark
Midterm	85/100
Assignment 1	8/10
Essay	80/100
Assignment 2	9/10
Quiz 1	4/5

Introduction to History (HIST 101) FALL 2002

Test Name	Mark

Figure 15-9: Student Report

Administrative Tools

Staff Editor

Lists all staff members and enables the creation of new staff profiles, as shown in Figure 15-10.

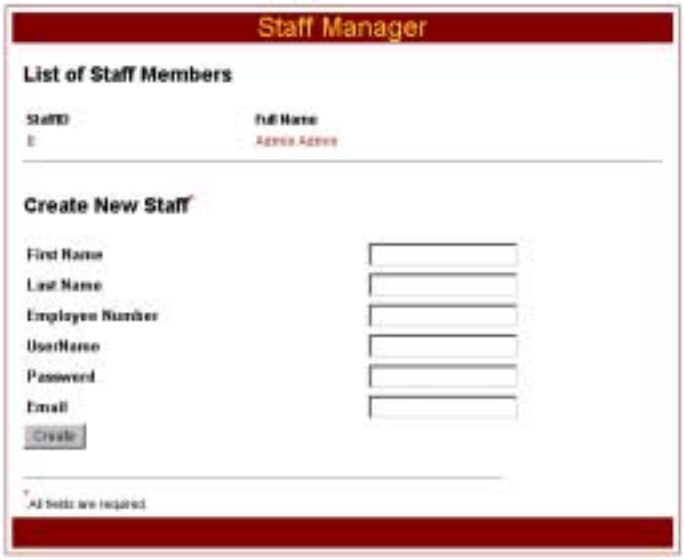


Figure 15-10: Staff Manager Interface

Permission Manager

Assigns permissions for instructors, as shown in Figure 15-11.

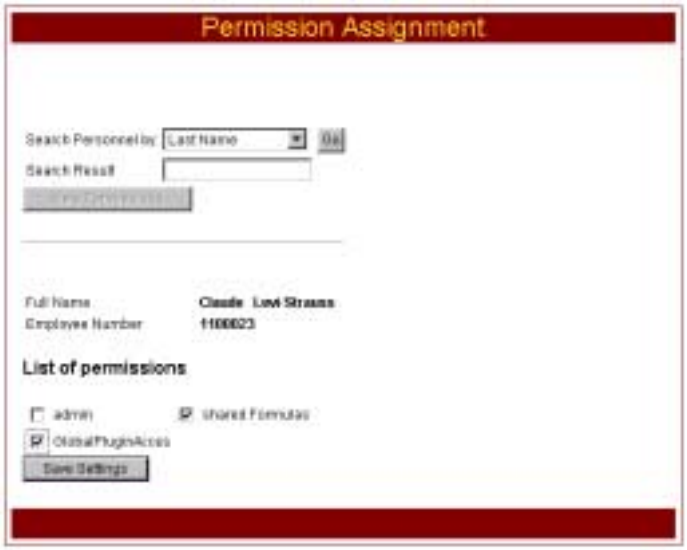


Figure 15-11: Permission Assignment Interface

Archives

Maintains an archive of all courses taught within the current term, under the control of the given administrative level. Basic course information, student grade reports, statistical information, and the class spreadsheet can all be viewed using this functionality.

Chapter 16 Glossary

Caption	User inputted title assigned to a spreadsheet column.
Final numeric	A 'Column Type' indicating that the column data is of the form numeric final grade. Only one column within a class spreadsheet can hold final numeric data.
Formula view	GradeBook Spreadsheet view enabling formulas to be created and modified.
Global	Functionality is accessible to all classes.
Local	Functionality is nested within a particular class.
Main instructor	The instructor in charge of the class. Controls and assigns all access rights to the GradeBook class spreadsheet.
Narrative evaluation	Written evaluation of a student's performance.
Pending	Default column status indicating that students cannot view column data; denoted by a pink column heading.
Plugin	A group of grades, descriptive words, and/or phrases that appear in a dropdown menu within the spreadsheet.
Primary menu	The menu of functionalities available to a user upon logging in to GradeBook. It is located at the left of the GradeBook operating window.
Public	Column status indicating that students can view column data; denoted by a gray column heading.
Read & write access	Level of access to the GradeBook Spreadsheet which entitles a person to both view and edit information.
Read only access	Level of access to the GradeBook Spreadsheet which entitles a person to view information.

Spreadsheet view	Standard GradeBook Spreadsheet view in which class information is presented in columns and rows.
Teaching assistant	Secondary instructors, lab assistants, or any aide/assistant who are denied complete access to class information. TAs can read and record only those student grades that have been assigned to them by the *main instructor*; all other access and editing rights belong to the *main instructor*.
Test activity	Any grading activity within a class.
Value type	A 'Column Property' specifying the type of data to be inputted into that column

Appendix A

DAG GradeBook Formula Language (DFL) Reference

Introduction

DAG GradeBook Formula Language (DFL) is an interpreted language. The DFL interpreter is initialized with a global context (or scope) in which names are bound to values. The interpreter may then evaluate expressions returning a value belonging to one of the primitive types. A parser is used to parse the text of a DFL expression into an expression tree. Some basic optimization procedures may be performed on the expression tree prior to its evaluation.

Core Language

Primitive Types

Type	Description
`empty`	An empty value
`boolean`	A boolean value: *true* or *false*
`integer`	An integer
`double`	A floating point number
`string`	A sequence of characters
`object`	A reference to an object, e.g. a Java object instance.
`list`	A list of values
`expression`	A DFL expression
`reference`	A reference to a binding in a scope
`function`	A function
`scope`	A scope. This is a context in which names are bound to values.

Literals

Examples of integer literals:

```
-1, -2, 0, 1, 2
```

Examples of floating point literals:

```
-1.1, -2.2, 0, 1.0, 3.141592653
```

Examples of string literals:

```
AString "AString" "A String" "A tab:\tA newline:\n"
```

There are no list literals *per se*, but a list may be constructed using the `{}` matchfix operator. Examples:

```
{1, 2, 3} {f(x), {2, 3, 4}, "abc"}
```

There are no boolean literals, but a scripting context may define its own using, e.g.

```
var(true) = 0==0;
var(false)= 1==1;
```

The types `object`, `expression`, `reference`, `function`, `scope`, are advanced topics.

General Purpose Functions and Operators

Infix Operators

Symbol	Meaning	Precedence
`->`	Member access	17
`@`	Function application	16
`+>`	Member function application	16
`*`	Multiplication	13
`/`	Division	13
`mod`	Modulus	13
`+`	Sum	12
`-`	Difference	12
`<`	Less comparison	10
`<=`	Less or equal comparison	10
`>`	Greater comparison	10
`>=`	Greater or equal comparison	10
`<>`	Inequality comparison	10
`==`	Equality comparison	9
`and`	Logical And	5
`or`	Logical Or	4
`,`	Pair	1
`=`	Assignment	1
`+=`	Add to	1
`-=`	Subtract from	1
`;`	Progression	0

"Matchfix" Operators

Symbol	Meaning
`()`	Grouping
`{}`	List

Builtin Functions and Operators

```
sum
product
average
drop
list
if
flatten
min
max
set
$
progn
while
function
operator
apply
eval
hold
foreach
concat
len
math
util
ref
lambda
lambdaHoldArgs
var
return
```

If Operator

Operator Name	`if`
Description	Choose between two values based on a condition.

Examples	`if(1 == 0, "no", "yes")`
	`  ==> "no"`
	`if(1 == 1, "no", "yes")`
	`  ==> "yes"`

Drop Lowest Operator

Operator Name	`drop`
Description	Drop a specified number of lowest values from a list of numbers

Examples	drop({80, 85, 47, 90, 60}, 2) ==> {80, 85, 90} drop({80, 85}, {47, 90, 60}, 2) ==> {80, 85, 90}

GradeBook Specific Functions and Operators

Grade Operator

Operator Name	g
Aliases	grade
Description	Return the grade for the column with the specified identifier, for the current student
Examples	g("HW1") ==> 85.0 g({"HW1", "HW2"}) ==> {85.0, 92.0} g(ttype("HW"), ttype("Quiz")) ==> {85.0, 92.0, 90.0, 88.0, 100.0}

TestInfo Operator

Operator Name	ti
Aliases	testinfo
Description	Return information about the column with the specified identifier.
Examples	ti("HW1", totalmarks) ==> 20 ti("HW1", tm) ==> Same as preceding ti("HW1", defaultweight) ==> 1 ti("HW1", dw) ==> Same as preceding ti("HW1", name) ==> "Assignment 1" ti("HW1", type) ==> "HW" ti("HW1") ==> {{"totalmarks", 20}, {"defaultweight", 1}, {"name", "Assignment 1"}, {"type", "HW"}}

TestTypeList Operator

Operator Name	`ttype`
Aliases	`testtypelist`
Description	Return list of identifiers for tests with the given type.
Examples	`ttype("HW")` `  ==> {"HW1", "HW2", "HW3", "HW4", "HW5"}`

General Operator

Operator Name	`Gen`
Description	Packages other GB-specific functions.

Examples	`gen(getFinalNumeric)`
	`  ==> 85.0`
	`gen(getStudentInfo, id)`
	`  ==> 123`
	`gen(getColumnValue, "HW1")`
	`  ==> 5`
	`gen(getNumericOrEmptyColumnValue, "HW1")`
	`  ==> 5`
	`gen(gnv, "HW1")`
	`  ==> Same as preceding`
	`gen(numericToAlpha, 157)`
	`  ==> "A+"`
	`gen(n2a, 157)`
	`  ==> Same as preceding`
	`gen(alphaToNumeric, 158)`
	`  ==> 55`
	`gen(a2n, 158)`
	`  ==> Same as preceding`

Additional GradeBook DFL related Information

Spreadsheet DFL interpreter init file

```
/GradeBook/www/global.xml
```

Spreadsheet DFL interpreter customer-specific init file. This will e.g. define a numeric to alpha conversion formula specific to the customer.

```
/GradeBook/www/global-custom.xml
```

Running the interpreter

Scripts may be tested within the GradeBook spreadsheet applet. Scripts which do not use GradeBook-specific functions may be tested by running the

`dag.util.expr.parse.Parser1` Java class. E.g. A script stored in a file `test1.dfl` may be executed using a command line similar to the following

```
java -cp D:/VSS/GradeBook/www/sGradeBook.jar dag.util.expr.parse.Parser1
-stdin <test.dfl
```

Instructor Status

Instructor and teaching assistant statuses

Main Instructor:

- holds all permissions within a class spreadsheet
- access to all functionalities within that class

Assistant Instructor (TA)

- access to class spreadsheet, as specified by main instructor (cannot create or delete columns, can modify cell data if given *write access*)
- access to Report and Import/Export functionalities

Main instructor for activities assigned to the instructor (Activity Main)

- access to class spreadsheet, all permissions within given section (can create, modify, and delete columns)
- access to TA, Reports, and Import/Export functionalities
- access to User Profile

Main instructor for blocks assigned to the instructor (Block Main)

- access to class spreadsheet, all permissions within given block (can create, modify, and delete columns)
- access to Reports and Import/Export functionalities