

Proof Wizard

User Manual

April 2016

Version 1.0

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1 Introduction

1.1 Scope and Purpose

This system is a tool for instructors and students to aid in learning/teaching inductive reasoning. Users of this system may have administrative, instructor, and/or student privileges. Administrators will be able to create/edit users and courses. Instructors will have the ability to create and assign quizzes for students to take and the system will automatically correct the assignments.

1.2 Getting Started

In order to begin using this system, a user with administrative permissions must be added directly to the database so users and courses can be added to the system. This is the only user that will be added via a database entry and not through the system itself.

1.3 Process Overview

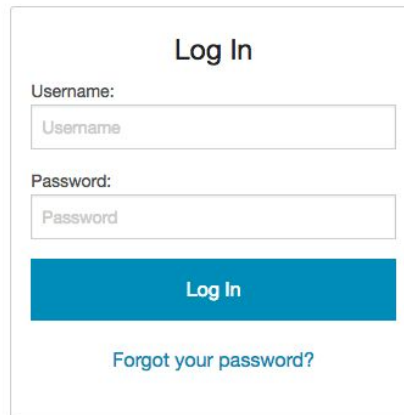
1. Logging On
2. Using Navigation Bar
3. Administrator:
 - a. Create Course
 - b. Edit Course
 - c. Create User
 - d. Edit User
4. Instructor:
 - a. Create Proof
 - b. Create Quiz
 - c. Assign Quiz
 - d. View/Edit Gradebook
5. Student:
 - a. Complete assignments

2 Processes

2.1 Logging On

Option 1 (when password is known):

1. Go to http://oraserv.cs.siena.edu/~perm_elite/Elite/loginform.php
2. Type correct username and password in the appropriate fields.
3. Click Log In. If correct credentials are entered, you will be logged on.



The screenshot shows a login form titled "Log In". It contains two input fields: "Username:" and "Password:". Below the fields is a blue "Log In" button and a link labeled "Forgot your password?".

Option 2 (when password is not known):

1. Click Forgot your password?
2. Enter email address.
3. Click Submit.
4. An email will be sent to the entered email address with a new password.
Use this new password to log in.



The screenshot shows a form titled "Forgot Password". It contains a single input field labeled "Enter Your Email:" and a blue "Submit" button.

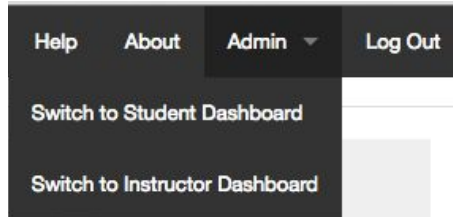
2.2 Using Navigation Bar

2.2.1 Switch User Type

1. Hover over User Type displayed in navigation bar.
 - a. All user types will drop down.
 - b. Click on desired user type to view that dashboard.

2.2.2 Other Navigation Options

- Help opens user manual
- About opens Team Elite's team website in a new tab.
- Logout will log user out of system and open the login form.

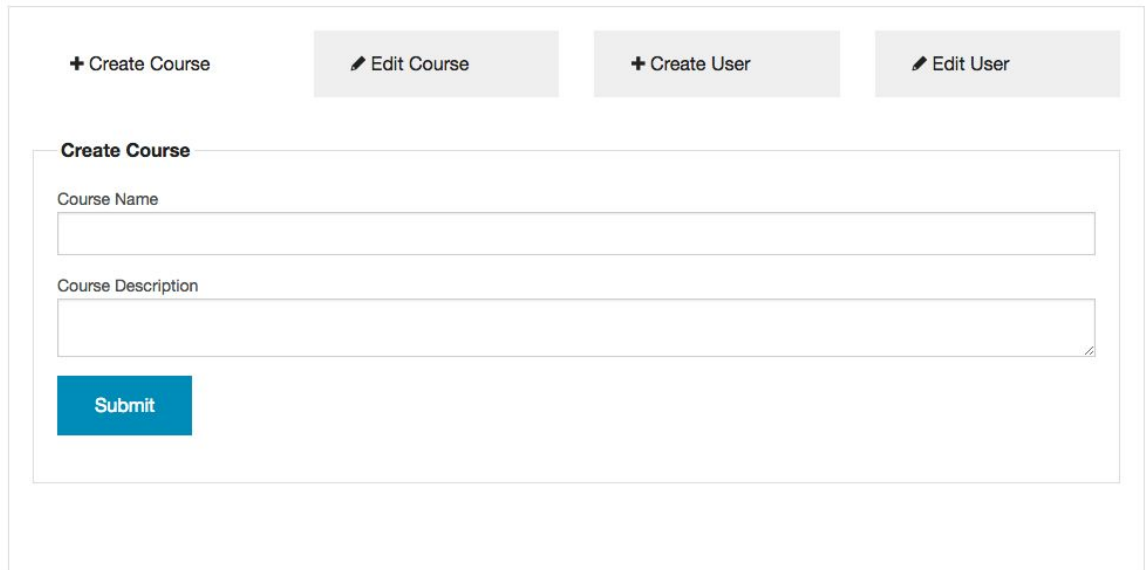


2.3 Administrator Processes

NOTE: User must have administrative privileges in order to do any administrative process and must be on the administrator dashboard.

2.3.1 Create Course

1. Click on the Create Course tab.

A screenshot of a web interface for creating a course. At the top, there are four buttons: '+ Create Course', 'Edit Course', '+ Create User', and 'Edit User'. Below these is a 'Create Course' section with a form. The form has two input fields: 'Course Name' and 'Course Description'. Below the 'Course Description' field is a blue 'Submit' button.

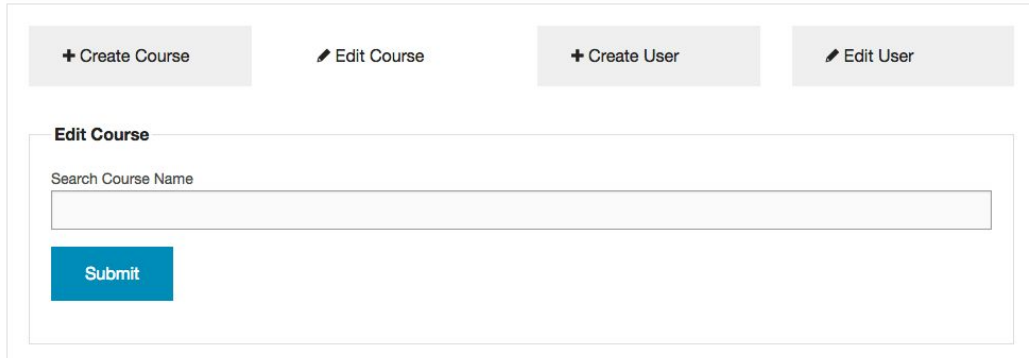
2. Enter a name for the course in Course Name.

NOTE: Each course must have a unique course name. If it is a duplicate of a current course, an error message will show on submit and the process will have to be started over.

3. Enter a brief description of the course in Course Description.
4. Click Submit.

2.3.2 Edit Course

1. Click on Edit Course tab.



The screenshot displays a user interface with four buttons at the top: '+ Create Course', '✎ Edit Course', '+ Create User', and '✎ Edit User'. Below these buttons is a section titled 'Edit Course' which contains a search bar labeled 'Search Course Name' and a blue 'Submit' button.

2. Type in the name of the course that is going to be edited in the search bar.
3. Click Submit. The following page will open with the course's information:

Edit Course

Course Name

Course Description

Add Instructor (full name, username, email)

Add a single student and/or add more by uploading a CSV file.
 Student's Email

Please specify a file to add students:
 No file chosen

Class Roster

Remove	Last Name	First Name	Email	Username
-	Persaud	Hemraj	h23pers@siena.edu	h23pers

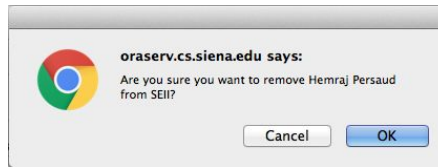
NOTE: If the searched course is not found, an error message will show and the process will have to be started over.

4. Change the desired fields.
5. To add a student to the course:
 - a. Option 1: Add individual student
 - i. Enter student's email address in Student's Email field.
 - b. Option 2: Add students via CSV file
 - i. Click Choose File.
 - ii. Select a csv file containing the students to add.
 1. The CSV file must be in the following format with the corresponding headers:

First Name	Last Name	Username	Email
Entry 1 first name	Entry 1 last name	Entry 1 username	Entry 1 email address

6. To remove a student from the course:

- a. Click on the minus sign next to the student's name in the class roster. A confirmation popup will show. Click OK to remove student or cancel to cancel the action.



7. After the desired edits are made, click submit. A summary of all changes will show.

2.3.3 Create User

1. Click on the Create User tab.

The screenshot shows a web interface with four tabs: "+ Create Course", "Edit Course", "+ Create User" (which is highlighted with a blue border), and "Edit User". Below the tabs is the "Create User" form. It contains the following elements:

- Instruction: "Create a single user by filling out all the fields and/or create multiple users by adding a CSV file."
- Form fields: "First Name", "Last Name", "Username", and "Email", each with a corresponding text input box.
- Role selection: "Check all that apply:" followed by checkboxes for "Student", "Instructor", and "Admin".
- File upload: "AND/OR" followed by "Please specify a file to add users:" and a "Choose File" button with the text "No file chosen" next to it.
- Submit button: A blue "Submit" button at the bottom left of the form area.

2. To create users on the site:
 - a. Option 1: Create individual user
 - i. Fill out all the fields and indicate what type(s) of user they are.
 - ii. User must have a unique email and username.
 - b. Option 2: Add users using a CSV file

- i. Click Choose File.
- ii. Select a CSV file containing the students to add.
 1. The CSV file must be in the following format with the corresponding headers:

First Name	Last Name	Username	Email	Student	Instructor	Admin
Entry 1 first name	Entry 1 last name	Entry 1 username	Entry 1 email address	Entry 1 Y or N	Entry 1 Y or N	Entry 1 Y or N

3. Click Submit to create user. A summary of all changes will show.

NOTE: The username and email must be unique from all other users. The user also must be at least one of the following: student, instructor, or admin. All fields must remain filled out. Failure to do so will result in an error message on submit and the process will have to be started over. Users in the CSV file that do not have a unique email and username will be displayed as not added.

2.3.4 Edit User

1. Click on the Edit User tab.

2. Type in the username of the user to be edited.

NOTE: If the searched user is not found, an error message will show and the process will have to be started over.

3. Click Submit. The following page will open with the user's information:

Edit User

First Name
lim

Last Name
admin

Username
limadmin

Email
fdg@jffd.com

Check all that apply:
 Student Instructor Admin

Submit

Delete

4. Change the desired fields. Click Submit.
5. To delete user from system, click Delete.

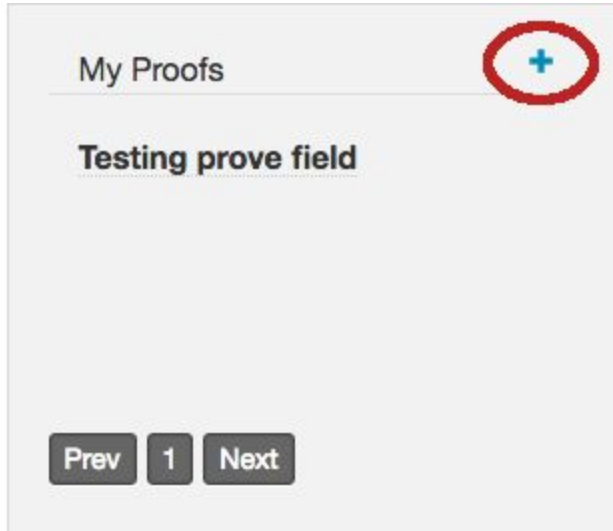
NOTE: The username and email must be unique from all other users. The user also must be at least one of the following: student, instructor, or admin. All fields must remain filled out. Failure to do so will result in an error message on submit and the process will have to be started over.

2.4 Instructor Processes

NOTE: User must have instructor privileges in order to do any instructor process and must be on the instructor dashboard.

2.4.1 Create Proof

1. To create a 2-column proof question, click the Add Proof Link on the instructor dashboard under 'My Proofs'



2. Fill out the forms on the page that opens up. Choose the course this Proof will be associated with in the Course Dropdown.

Create a Proof

Proof Name:

Course Title:

Description:

[Add What is Given](#)
[Add What to Prove](#)
[Add Card](#)

3. Click 'Add What is Given' to add the 'Given' portion of the proof

Create a Proof

Proof Name:

Course Title:

stuffed ▾

Description:

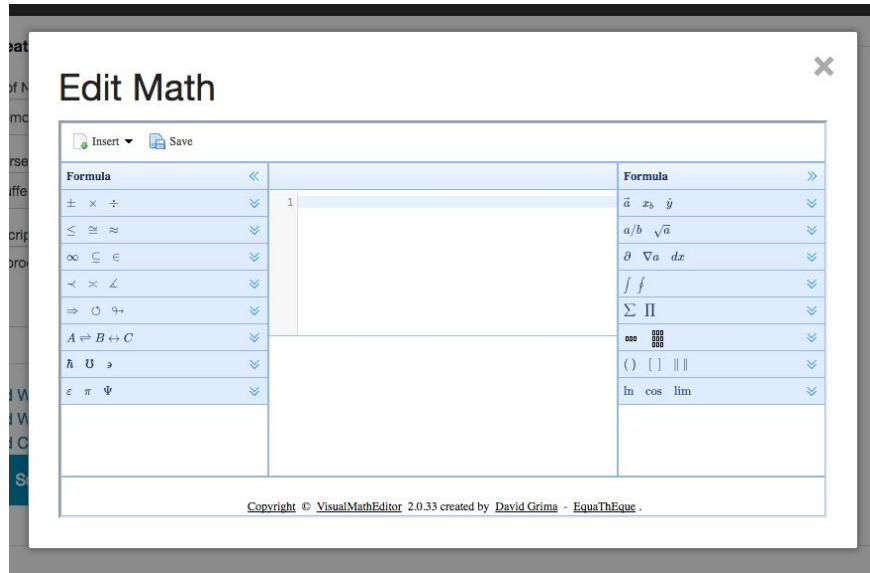
Add What is Given

Add What to Prove

Add Card

Submit

4. The math editor popup will appear

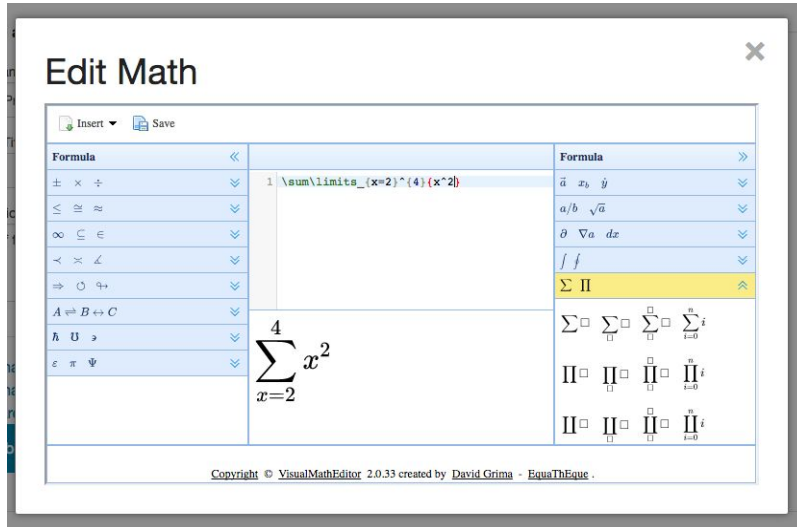


(Math editor based on work by David Grima)

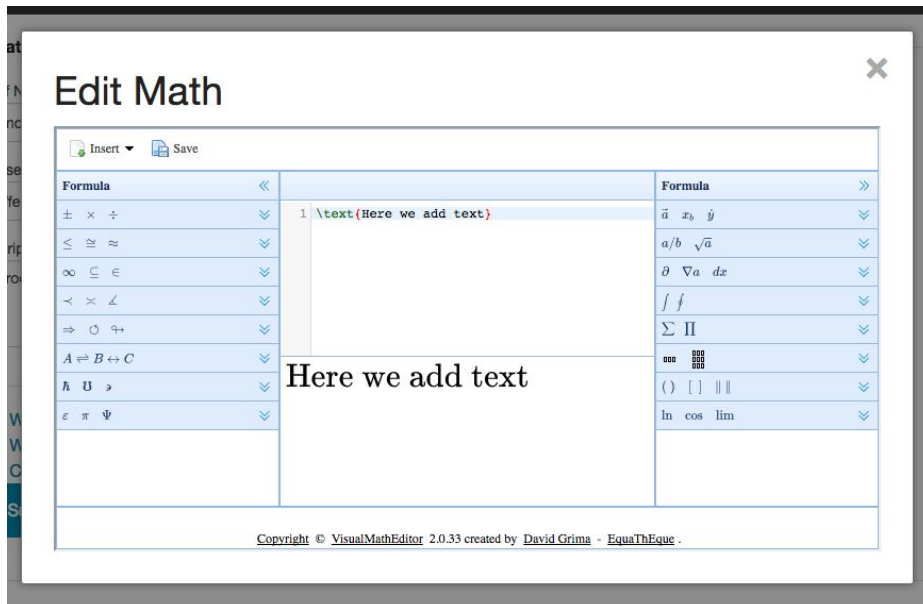
<http://visualmatheditor.equatheque.net/site/copyright.html>

5. Use Latex (<https://en.wikibooks.org/wiki/LaTeX/Mathematics#Symbols>) To input math in the upper editor. A real-time rendering of your input will be shown in the lower window. Many symbols can be inserted by clicking the

menus on either side of the editor windows.



- It may be important to add text content to the math output. To do this use `\text{YOUR TEXT HERE}`



- Click Save in the upper section of the math editor to Save your input. The 'Given' Section will appear

[Add What to Prove](#)
[Add Card](#)

Given

$$\sum_{x=2}^4 x^2$$

[Edit](#)

[Submit](#)

- Click 'Add What to Prove' to add the statements the students are to prove. Use the same steps as before to operate the math editor.
- Click Add a Card to add the actual steps the students will order to create the quiz. Use the Math Editor to add a mathematical statement to the card. A card form will appear after clicking save. All cards must have math and a justification

Card 1

$x \times 4$

Justification:

Comes Before Card:

Comes After Card:

[Remove](#) [Edit](#)

- The rendered math in the gray box will be shown on the left side of the two column proof. Anything added in the Justification field will be displayed on the right hand side of the proof for students to match with the correct mathematical statement. **If you have multiple cards with the same**

justification (ie. 'By Algebra') that these justifications have the exact same text. The system will not be able to differentiate ambiguous justifications.

11. Use the 'Comes Before Card' and 'Comes After Card' dropdowns to set the hierarchy for the cards. Sometimes a logical flow for a proof can take more than one correct path. These dropdowns define a relationship to another card if the statement depends on being either before or after. Only one of these dropdowns needs to be set per card.
12. When all cards have been added and set up, click submit to save your new proof

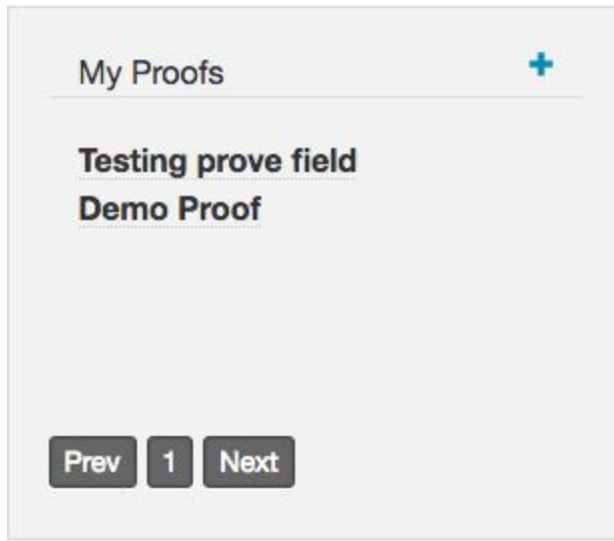
Comes Before Card: None ▾

Comes After Card: None ▾

Remove Edit

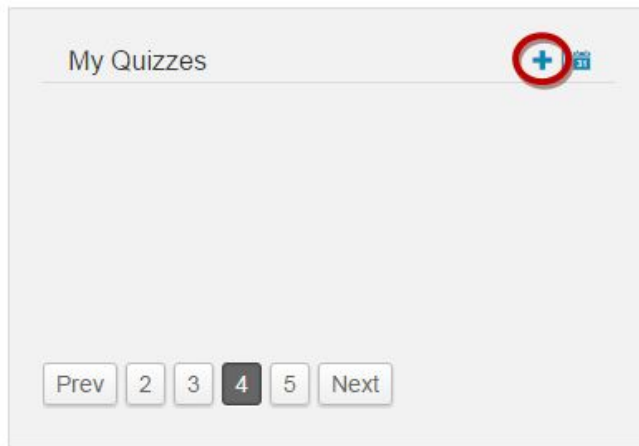
Submit

13. Your new proof will now appear in the 'My Proofs' section on the instructor dashboard, and will be available to be included in quizzes



2.4.2 Create Quiz

14. Click the Add Quiz link on the instructor dashboard.



15. The following page will be displayed (prefilled Course Title will vary based on instructor):

Create Quiz

Quiz Name:

Course Title:

Add a Proof:

- [My Proofs](#)
- [Course Proofs](#)
- [Global Proofs](#)

Proof List:

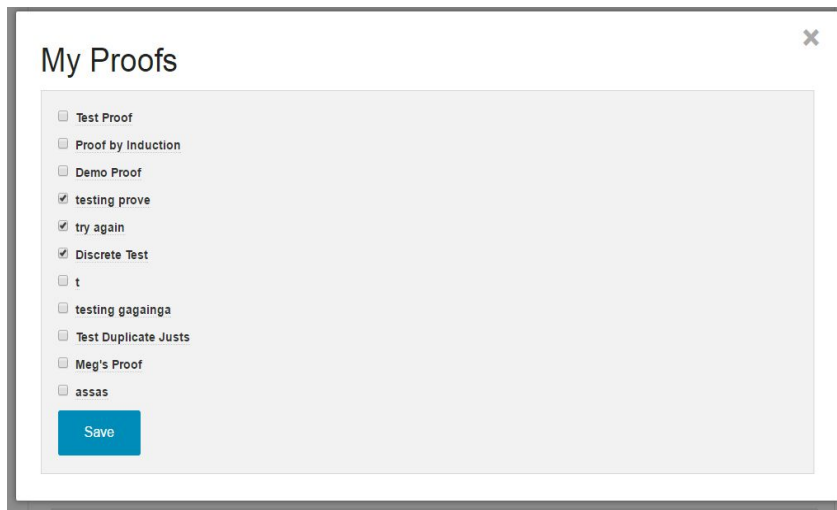
16. Type in a quiz name.

17. Select the desired course from the Course Title drop down box.

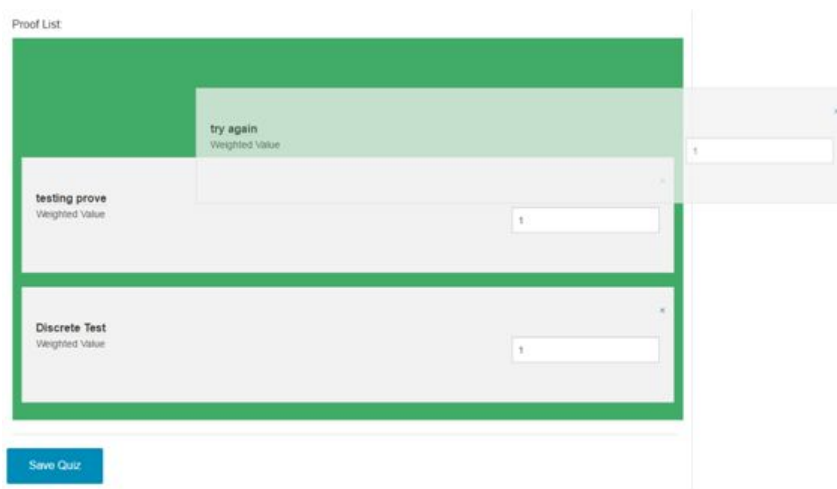
18. Choose proofs from the any of the following options:

- a. My Proofs - all proofs created by the active instructor.
- b. Course Proofs - all proofs created for the selected course.
- c. Global Proofs - all proofs that exist across all courses.

19. Check all proofs that you would like added to the quiz. Click Save.



20. Order the proofs by dragging and dropping them.

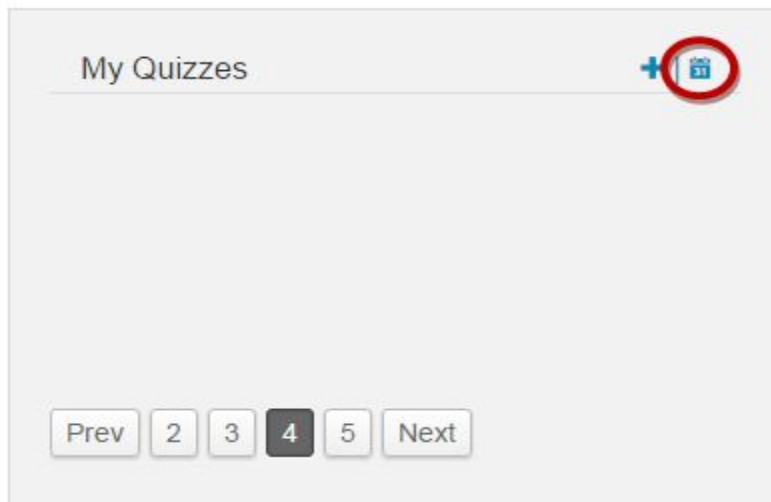


21. Assign a point value between 1-100 to each proof.

22. Click Save Quiz to save the quiz to the database.

2.4.3 Assign Quiz

1. Click the Assign Quiz link on the instructor dashboard.



2. The following page will be displayed (prefilled Course Title and Quiz Name will vary based on instructor):

Assign Quiz

Course Title:
SEII

Quiz Name:
Test Quiz

Assignment Type:
 Homework
 Test
 Quiz

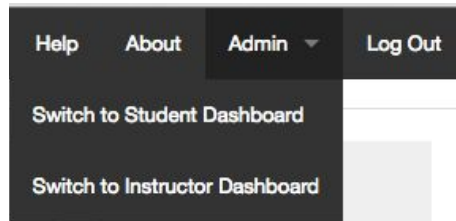
Due Date:
Hour: 1 Minute: 0 AM/PM: AM Month: 1 Day: 1 Year: 2016

Assign Quiz

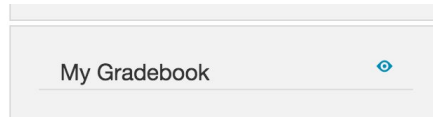
3. Select the desired course this assignment will be created for from the Course Title drop down box. This will update the Quiz Name dropdown box.
4. Select a Quiz from the Quiz Name drop down box.
5. Choose an assignment type.
6. Enter a due date using the displayed drop down boxes.
7. Click Assign Quiz to save and assign the quiz to all students registered for the selected course.

2.4.4 View/Edit Gradebook

1. Switch to Instructor Dashboard.



2. To show the Gradebooks, click the eye icon next to “My Gradebook”.



3. Click the vertical tabs to show the course’s respective gradebook.

Hemraj Course

Students	aaaa	bbbb	hTestC3Quiz	hTestQuiz	Average
Andrew Ashline	50	100	77	100	50
Hemraj Persaud	0	0	90	50	0
stud test	0	0	100	50	0

Hemraj Course 2

Hemraj Course 3

4. Click on a grade to change it.
5. The Assignment modal will open. Type the new grade in and hit submit.

This is a assignment modal. ✕

Student's First Name

Student's Last Name

Assignment Name

New Grade

Course

- To see more options of how to edit the assignments, click the edit button.

My Gradebook



- The first option lets you change all the student grades for an assignment to the same value.

This is a assignment modal. ✕

Assignment Name

New Grade

Course

- The second option works the same way as steps 4 and 5, but the user will have to type all the data in.
- The third option will let the user change the weights of each assignment type. Assignments can be classified as Homework, Quiz or Test. The weights should add up to 100.

This is a weight modal. ✕

Quiz Weight

Homework Weight

Test Weight

Course

Hemraj Course

Submit

- The user will be able to see the changes in the weights box at the top right of the screen.

Type	Weight
Quiz	20
Homework	50
Test	30

11. The weights will affect the average grade of each student.

Average
80.75
47.5
50

2.5 Student Processes

NOTE: User must have student privileges in order to do any student process and must be on the student dashboard.

2.5.1 Complete Assignments

1. The first step is to log in as a student.
2. After being logged in as a student, the user will see the student dashboard.

Courses	Assignments
SEII	1234512452436
Discrete math	1234512452436
andrewcourse	1234512452436
Ashline	Spring 4 Demo Quiz
Hemraj Course	Spring 4 Demo Quiz
elitecourse	Spring 4 Demo Quiz
CSIS 415	aaaa
Hemraj Course 2	bbbb
Hemraj Course 3	

3. To open an assignments, the user should click the assignment's name. This will open the "take quiz" page.

Test Proof

Given:

Prove that $\sqrt{9} = 3$

Prove:

Steps:

*Click and drag to move proof steps and justifications to the correct order.
Your progress will be saved as you move the statements.*

Trivial Q.E.D. It is equivalent

1 / 2

4. After completing the quiz, the user will have a feedback on it.

ProofWizard ▲ Late ■ Open

Quiz Results

Proof Name	Correct
Test Proof	✓
Proof by Induction	✗
Total:	1/2

2.5.2 View Grades

1. The first step is to log in as a student.

- After being logged in as a student, the user will see the student dashboard.

Courses	Assignments
SEII	1234512452436
Discrete math	1234512452436
andrewcourse	1234512452436
Ashline	Sprint 4 Demo Quiz
Hemraj Course	Sprint 4 Demo Quiz
elitcourse	Sprint 4 Demo Quiz
CSIS 415	aaaa
Hemraj Course 2	bbbb
Hemraj Course 3	

- Click the desired course name to be redirected to the page that contains the grades and assignments for the respective course.

ProofWizard ▲ Late ▼ ▲ Open ▼ ★ Due Soon ▼ Help About Student ▼ Log Out			
Assignment	Grade	Assignments	Due Date
hTestQuiz	100	hTestQuiz	2016-03-28 12:00:00.000000
hTestC3Quiz	90	hTestC3Quiz	2016-03-28 12:00:00.000000
aaaa	0	hTestC3Quiz	2016-03-28 12:00:00.000000
bbbb	0	aaaa	2016-09-01 01:00:00.000000
Average	47.5	bbbb	2016-10-01 01:00:00.000000

- If the user clicks the assignment's name, they can take the assignment(steps 3 and 4 of the previous section).