LearnOBA Manual

for the

SIUE Department of Computer Science
CS425 / CS499 Senior Project
Software Design and Implementation Courses

by

Zach Benchley, Matt Lievens, Logan Maughan, Brian Olsen

of

Learning Outcomes-Based Assessment Database Team

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Reviewed and Approved By:

Name	Signature	Date
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1 Installation

1.1 Requirements

For all operating systems you will need to have the Java Runtime Environment installed. It is only required to have version 7 update 51, however it is recommended to have the latest update of Java to ensure you have the latest security patches when running Java. This can be downloaded at http://www.java.com/en/download/. Make sure to download the installation file that is specific to your operating system. Instruction for installing java will be included with the installation or can be found on the website at http://www.java.com/en/download/help/index_installing.xml.

1.2 OS X

When installing for an OS X machine you will want to follow the following steps:

1. Locate the LearnOBA.dmg installation file and double-click it. The application will load and you will see an installation action to install the file.

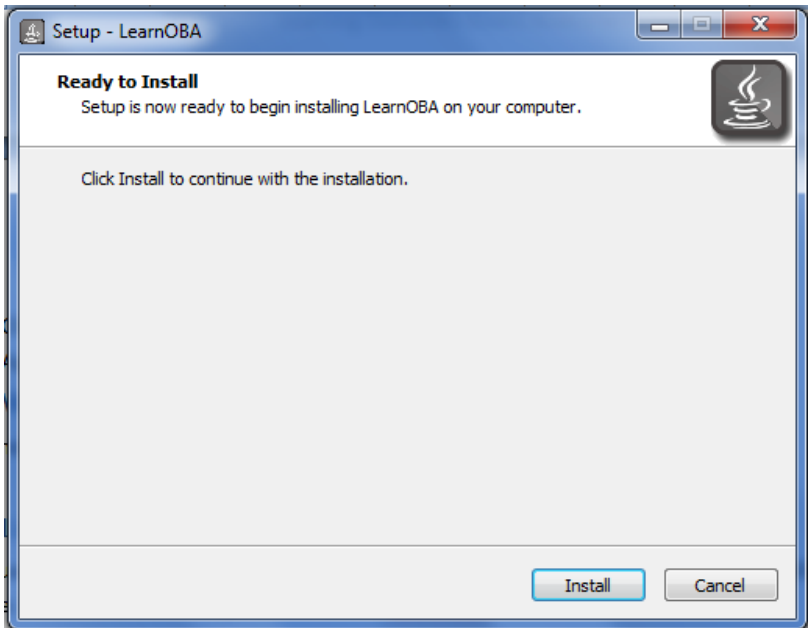
2. Slide the application towards the applications folder to install the LearnOBA software.
    a. Note: This applications was developed in an academic environment and the team does not have an Apple Developer ID. As such you will see a message like this depending on your security settings. If this happens refer to section 1.5 titled, “Install Programs from Unidentified Developers.”

3. Once you finish that the installation is complete you can now navigate from Applications>LearnOBA to run the program.

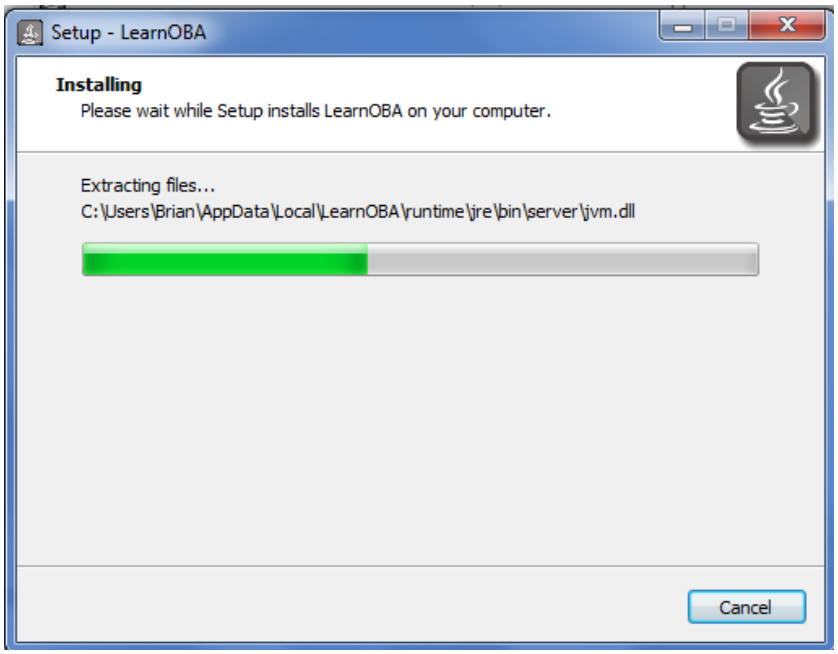
1.3 Windows

When installing for a Windows machine you will want to follow the following steps:

1. Locate the LearnOBA.exe Installation file and double-click it.



2. Then wait as the program installs. Once completed it will run the application.



1.4 Linux

The Linux application files are contained inside a .tar file that contains the entire installation package. Follow the list of steps below to run LearnOBA.

1. Locate and move the LearnOBA.tar to the desired directory you want to have it installed.
2. In the console execute the command: $ tar xvf LearnOBA.tar
3. Move to the directory under LearnOBA: $ cd LearnOBA/app
4. To run the application you will execute: $ java –noverify –jar LearnOBA.jar

1.5 OS X - Install Programs from Unidentified Developers

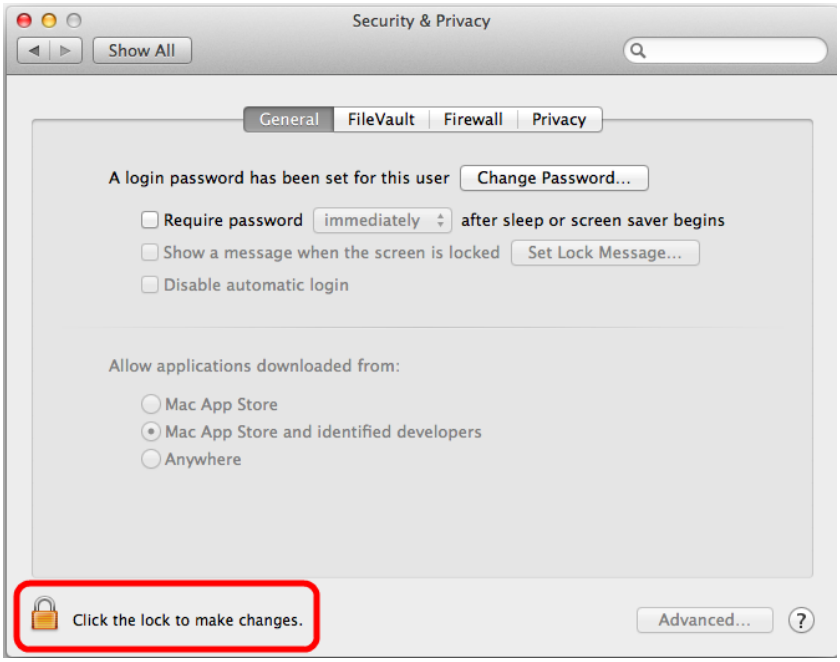
This document describes how to enable installation of applications from sources other than the Mac App Store. By default, Mac OS 10.8 only allows users to install applications from 'verified sources.' In effect, this means that users are unable to install most applications downloaded from the internet or stored on physical media without receiving the error message below:

Users can follow the directions below to prevent this error message from appearing in one of two ways:

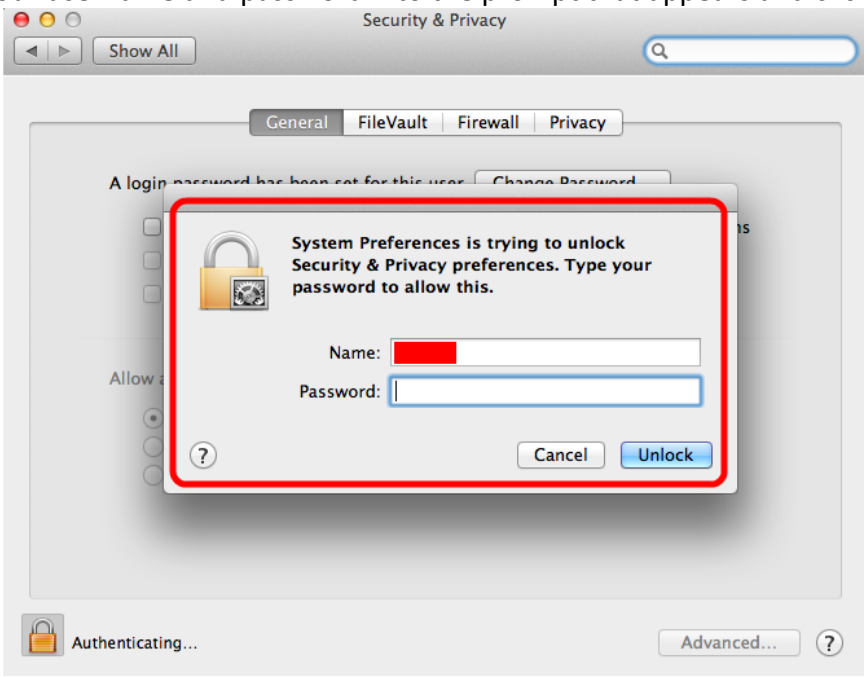
- Changing Gatekeeper's settings—this is useful for users who download a lot of programs that are not from 'verified sources.'
- Manually allowing individual applications to launch—this is the best method for users who do not want to change the global setting to allow all applications to run.

Change Gatekeeper Settings:

1. Open the System Preferences. This can be done by either clicking on the System Preferences icon in the Dock or by going to Apple Menu > System Preferences.
2. Open the Security & Privacy pane by clicking Security & Privacy.
3. Make sure that the General tab is selected. Click the icon labeled Click the lock to make changes.



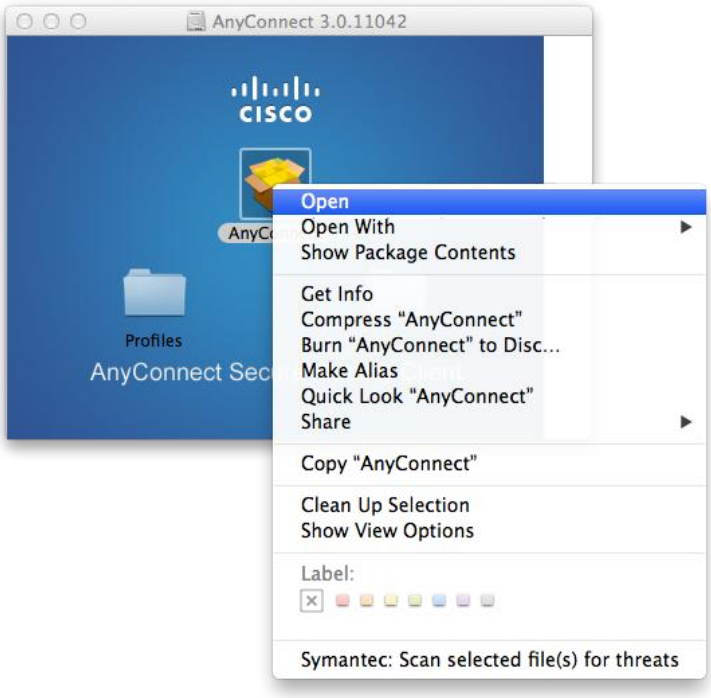
4. Enter your username and password into the prompt that appears and click Unlock.



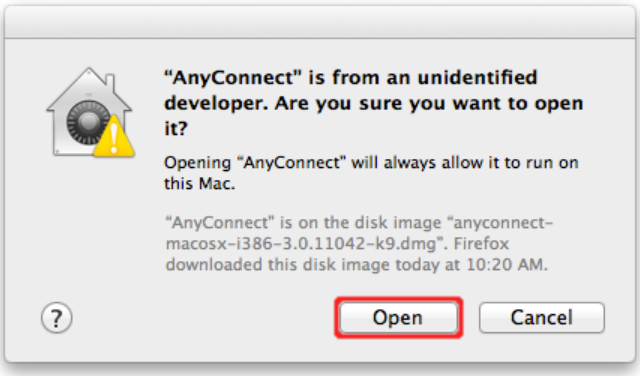
5. Under the section labeled Allow applications downloaded from:, select Anywhere. On the prompt that appears, click Allow From Anywhere. Exit System Preferences by clicking the red button in the upper left of the window. You should now be able to install applications downloaded from the internet.

To Manually Launch Application:

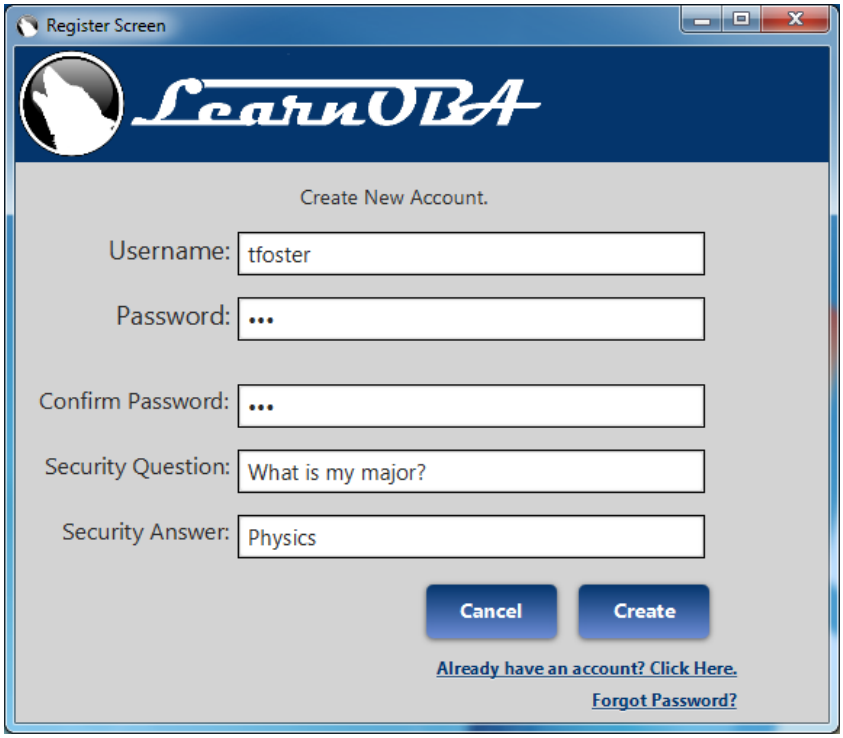
While holding down the control key on your keyboard, click the application's icon once to make a dropdown menu appear.



Select Open from the menu. A new window will appear. Click Open in that window to launch the application. You should only need to do this once per application, on the first launch. After that, you'll be able to launch the application any way you like.

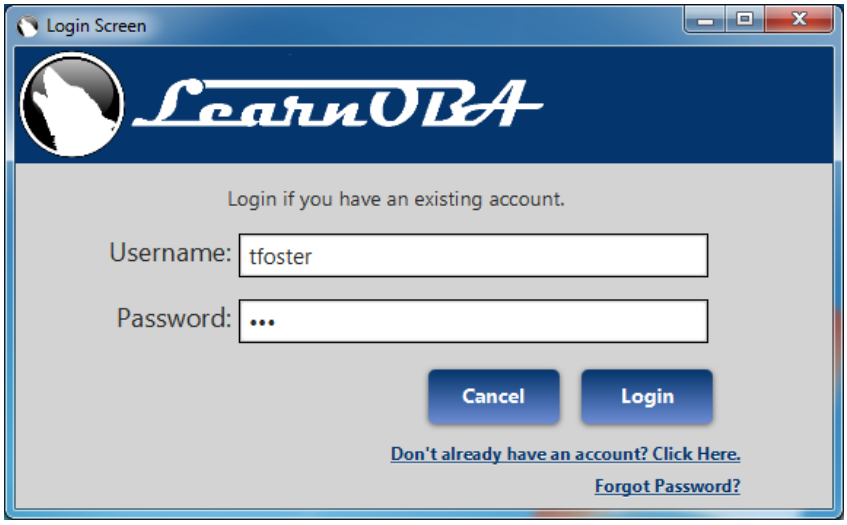


2 Login Screen



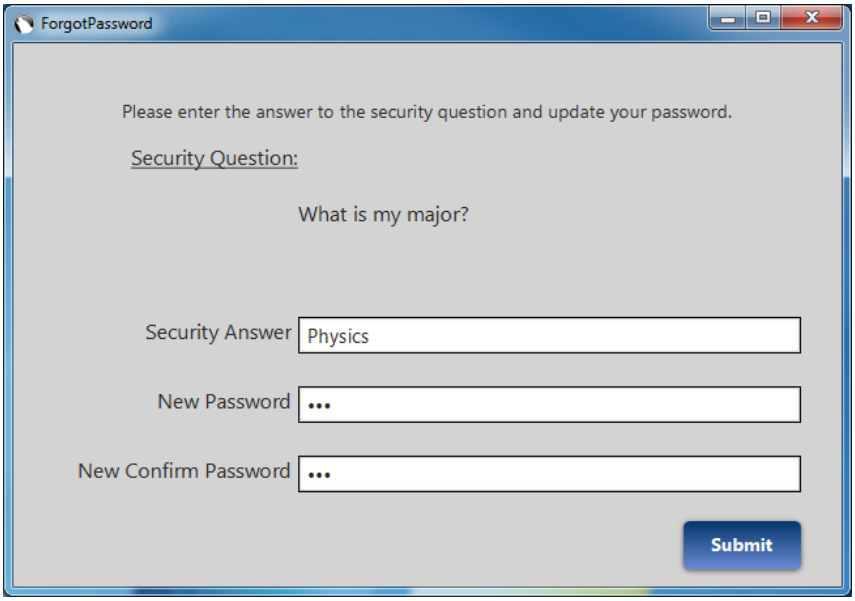
2.1 Register Screen

Before you can log in we require you to set up an account. You can find this by clicking the link below that says, “Don’t have an account? Click Here.” Username will be your identification as a user of our system. We ask you to enter you password twice to verify you haven’t made any mistakes since we hide the key values as you’re typing. Finally we ask you to set up a security question and answer to provide in the case you forget your password. Once you have filled out all of these fields and have verified everything is correct click the “Create” button. You will automatically be brought back to the Login screen.



2.2 Login Screen

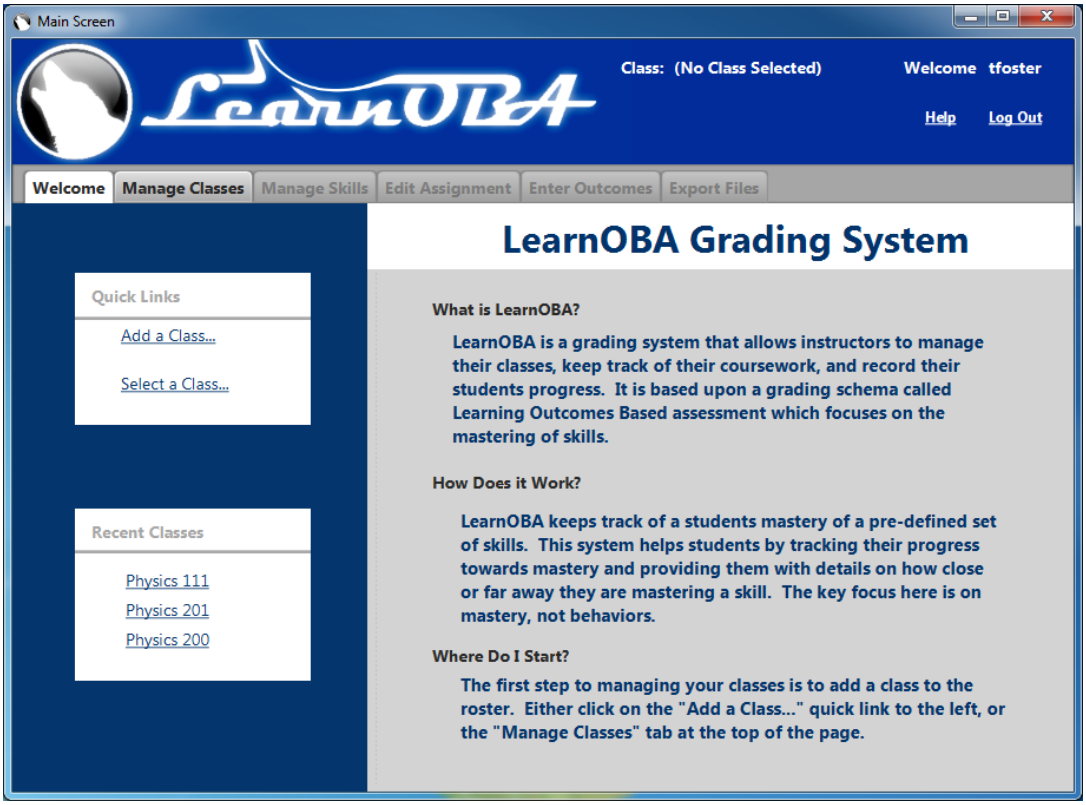
Enter the username and Password and click on “Login”. This is the first item to come up in the software and is the entry point into our system.



2.3 Forgot Password

If you forget your password no worries, just simply click the link on the login screen labeled, “Forgot password?” and follow the prompts shown above. You will be asked the question you used during registration. You must answer the question exactly as you typed it before. Enter a new password twice to verify you entered it correctly and press the “Submit” button. After this your password will be changed and you will be returned to the Login screen. Now you can use your new password to log into the system.

3 Welcome Screen



3.1 Purpose

The purpose of the Welcome Screen is to get new users accustomed to our software. It explains what the LearnOBA software system is, how it works, and how to begin using it.

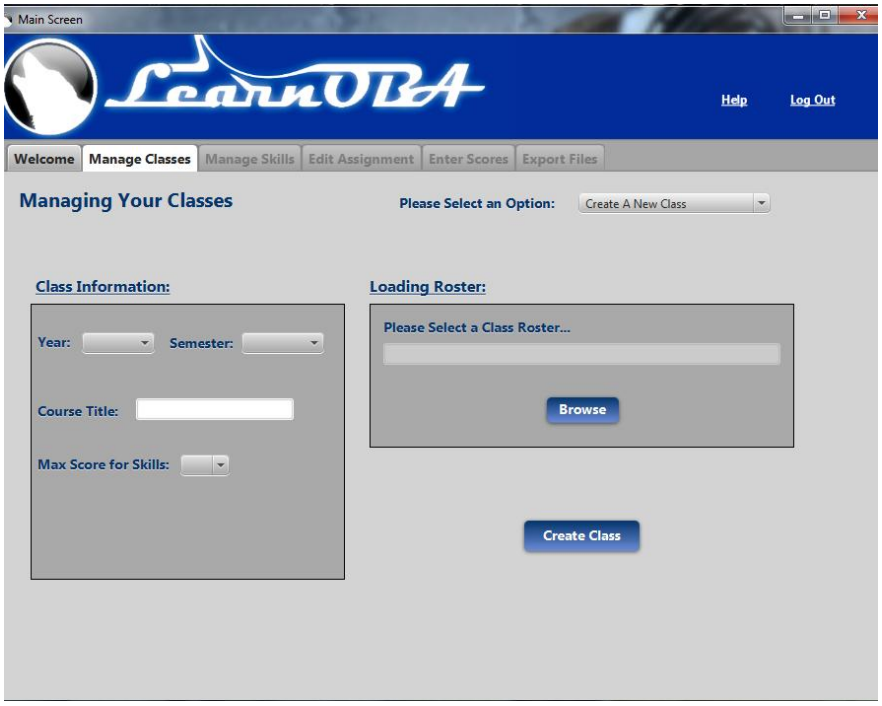
3.2 Quick Links

The quick links section provides an alternative way to go about creating a new class and selecting a class. Instead of using the Manage Class tab you can just go ahead and select the corresponding link to get to the desired section of the program.

3.3 Recent Classes

Before any classes have been created the recent classes section will be empty. As classes are created and selected they then begin to populate the recent classes section upon the next time the user logs in. It will keep the top 3 most viewed classes within the box and as a teacher clicks on one of the classes it will select that class enabling all other tabs.

4 Managing Classes



4.1 Creating a Class

Purpose:

The purpose of this page is to create a class that the instructor is to teach. This page allows you to fill in the relevant class information and load in a roster of students who are to be in the class that is to be created**.**

Filling in Class Information:

To add a class all of the fields pertaining to that class must be filled in or selected. This includes the class name, the year, the semester, and the max score for the class. The max score represents the scale on which each skill is to be evaluated. This will be the value that pre-fills all of the skills' score.

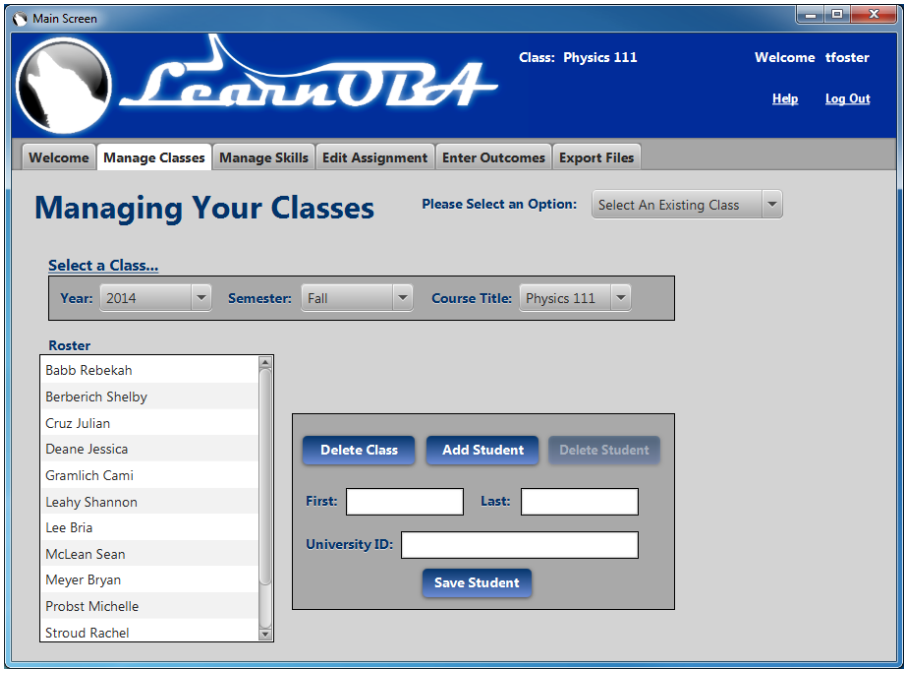
Selecting a Roster:

To select a roster you will need to select the "Browse" button. A file selection window will pop-up. You may now select a roster list that is stored on your local machine or on a repository. Make sure the roster list is saved as a .txt file and in the format listed below:

LastName FirstName Username StudentID

Make sure that each field(last name, first name, etc.) are separated by a tab. The username and student ID may be the same value but that is ok. However, you do need to have both of those fields in there. The roster should be able to be directly downloaded from Blackboard but if not the roster file can also be manually created if the instructor choses to do so. A class may be created if a roster is not selected. The instructor may be able to manually add students in the select class option.

4.2 Selecting a Class



Purpose:

The purpose of this page is to allow a professor to select a class that can be edited. Once a class is selected a user will now be able to manage the roster, manage skills for that class, manage the assignments, and enter outcomes for each assignment. The corresponding tabs will become enabled allowing the user to manage classes in the ways stated above.

How to select a class:

To select a class you must first select the year in which the class was conducted. Once a year is selected the user must select the correct semester. Once a semester is selected the user can then select the correct course title. Once the course title is selected, the class becomes selected, the roster is loaded onto the screen, and all the corresponding tabs/buttons become enabled. This class will remain selected until another class is chosen.

4.3 Deleting a Class

Purpose:

The purpose of the delete class functionality is to allow a user to delete a class if the class is no longer relevant or if they user has made a mistake within the class and wants to delete it from the system.

How to delete a class:

The user must first select a class by following the instructions in Section 4.2. Once a class is selected the Delete Class button becomes enabled and allows users to click it. The user must click the Delete Class button. A pop-up asking the user if they would like to delete the class will appear. The user should click yes. The selected class will now be deleted.

4.4 Adding a new Student to a Class

Purpose:

The purpose of this functionality is to allow instructors to manually add students to a class. To do this a class must first be selected by following the instructions in Section 4.2. Once a class is selected, the user can select the Add Student button. The user then should enter the student's first name, last name, and university ID. Once all the information is entered the user should then click the "Save Student" button. A pop-up will appear saying that the user has successfully added a student. Click "Ok." You will now be able to see the student that was just added in the roster list on screen.

Requirements:

The user must enter in the student's first name, last name, and university ID for the student to be added to the particular class

4.5 Deleting a Student from a Class

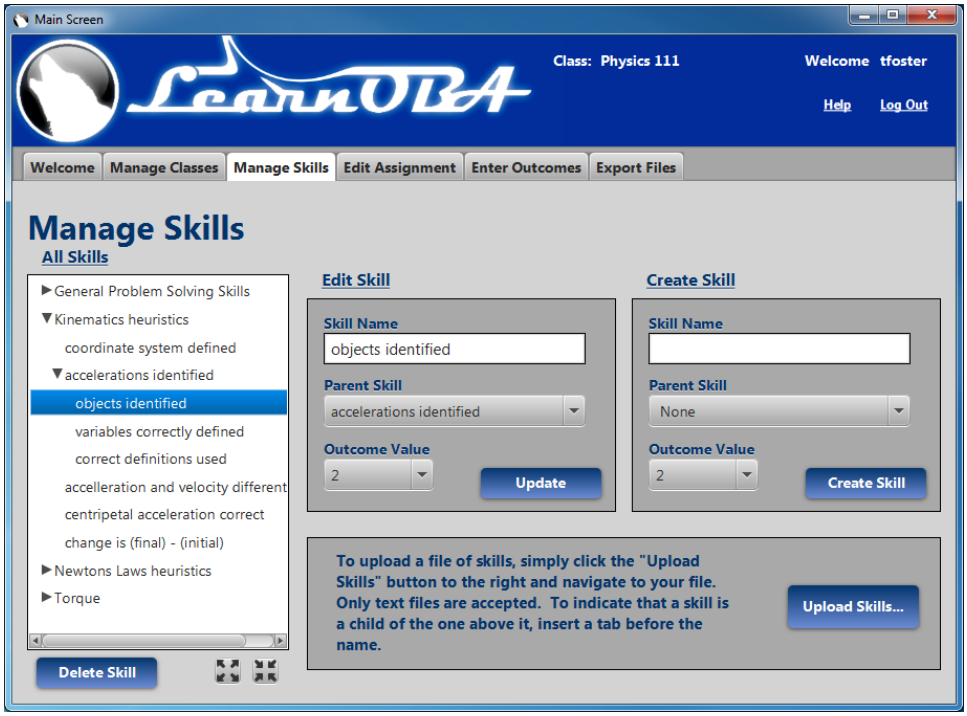
Purpose:

The purpose of this functionality is to allow the user to delete a student from the particular selected class.

How to Delete a Student:

To delete a student a class must be selected by following the instructions in Section 4.2. Once a class is selected the roster is loaded and displayed on screen. The user should then select the desired student that they wish to delete. The "Delete Student" button will be enabled. The user should click the "Delete Student" button and a pop-up confirming that the user wants to delete the student will appear. The user should click "Yes" and the student will then be deleted from the class. The user will notice the student is not listed in the roster list appearing on screen anymore.

5 Managing Skills



4.1 Adding Skills

Purpose:

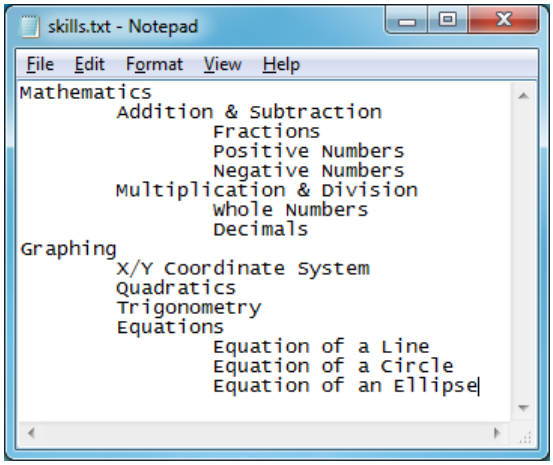
The purpose of this functionality is so that the user can add skills to the currently selected class. Skills are what the students are tested on; whether or not they master the classes' skills determines their overall grade for the class. Skills are organized in a parent-child format. This means that a single skill can have multiple skills below it. There is no limit to how many children a skill can have, or how many levels down the skills can go.

Adding a Single Skill:

The box under the label that says "Create Skill" is for adding a single skill. To add a skill, type in the desired skill name into the empty textbox. Now, select a parent skill. The default skill is "None" which means that the new skill will not have a parent skill. If there are no other skills for the current class, then "None" will be the only option. Below the parent skill, there is a dropdown menu for selecting an outcome value. When the class itself was created, this value was decided upon for the entire class, but it can also be changed on a per-skill basis. The default value for new skills will be what was selected for the class, but this can be changed to anything from 0-100. When all three of these options have been selected, simply click on the "Create Skill" button, and the new skill should automatically be added to the list on the left.

Adding Multiple Skills:

Multiple skills can be added in the form of a tab delimited text file. To designate a child skill of the one before it, simply add a tab to the front of the skill name. A simple example can be seen below.



If a large number of skills are being added, this process can take a while. To upload a file, click on the "Upload Skills…" button to the bottom right of the screen. This will open up a window that can be used to browse to the file of skills. If there is an error within the file, then a notification window will pop up on the screen. Possible errors include: Two or more skills of the same name within the file, a skill within the file already exists, there is a formatting problem within the file.

5.2 Editing Skills

Purpose:

The purpose of this functionality is so that skills can change as the class progresses. This allows the instructor to change a skills name, its parent skill, and its outcome value.

How to Edit Skills:

The box under the label that reads "Edit Skill" is used for editing a skill's name, parent, and outcome value. When a skill is clicked on, this box will automatically be populated with the selected skill's information. It can then be changed as desired. Once all properties of the selected skill have been correctly updated, click on the "Update" button to save the skill.

If the parent skill is the only thing that needs to be updated, then it is suggested to use the drag-and-drop functionality, as this is much simpler and faster. To change a skill's parent, simply click and hold the mouse over the desired skill, and drag it to a new parent. As the skill is dragged

over other skills, all children for those skills will be shown. When the new parent skill is reached, let go of the mouse button and the parent for the selected skill will be updated.

5.3 Deleting Skills

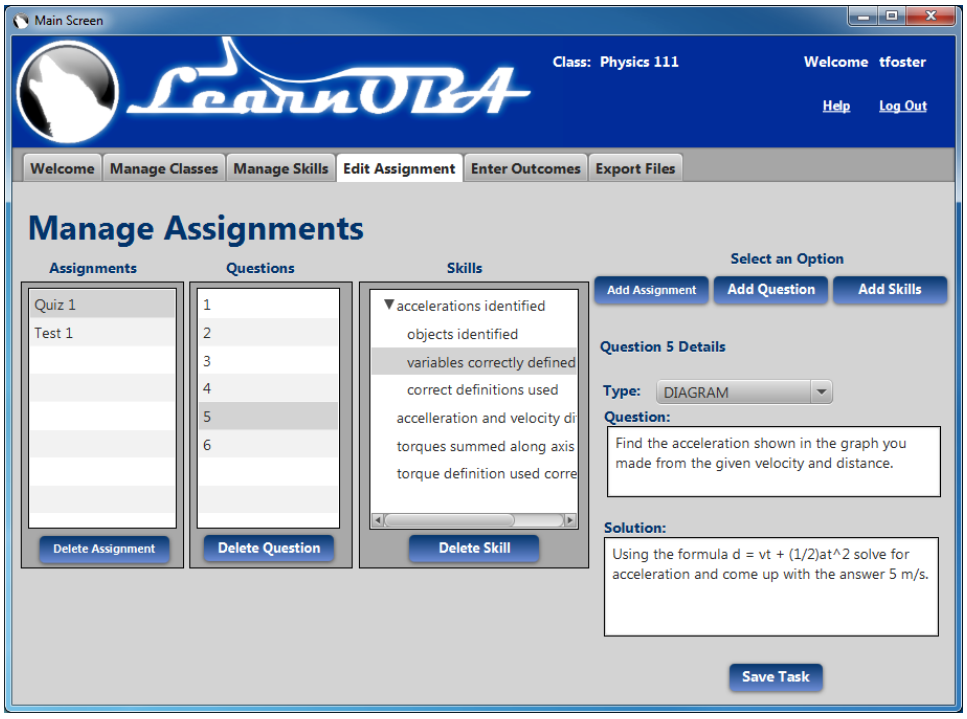
Purpose:

The purpose of this functionality is so that the instructor can delete skills if they were added in error, or if the students no longer need to be tested over them.

How to Delete Skills:

To delete a skill, start by selecting the skill in the list to the left. This will enable the delete button at the bottom of the page, below the list of skills. Please be aware that deleting a skill will also delete all children for the selected skill. If the children of the selected skill need to be kept, then change their parent skills before clicking the delete button. Once the delete button has been clicked, a confirmation dialog will appear on the screen. Click yes, and the selected skill and all of its children will be deleted.

6 Managing Assignments



6.1 Adding Assignments

Purpose:

The purpose of this functionality is to allow the user to add an assignment to a specific class.

How to Add an Assignment:

The user needs to select the “Add Assignment” button. A name must be entered for the assignment and then user can select “Create.” The assignment will then be added to the class and its name will appear in the Assignment section.

6.2 Deleting Assignments

Purpose:

The purpose of this functionality is to allow the user to delete an assignment from a particular class.

How to Delete an Assignment:

To delete an assignment a user must first have assignments for a particular class. If the user is confused on how to add assignments to a particular class they should follow the instructions listed in Section 6.1. To delete a particular assignment the user must first select an assignment from the Assignment section. Once an assignment is selected the "Delete Assignment" button becomes enabled. The user can then click the "Delete Assignment" button and the assignment is now deleted from that particular class. The user will notice the assignment is no longer listed.

6.3 Adding Tasks

Purpose:

The purpose of this functionality is to add a task to a specific assignment.

How to Add a Task:

To add a task to a particular assignment the user must first add an assignment to a class. This can be done by following the instructions listed in Section 6.1. The user must then select an assignment. Once an assignment is selected the Add Question becomes enabled. The user can then fill in the question type, the question, and its answer. The user can then select "Save Task." The task is now saved for that particular assignment and will appear in the Task section on screen.

6.4 Deleting Tasks

Purpose:

The purpose of this functionality is to delete a task from a specific assignment.

How to Delete a Task:

To delete a task the user must first have added assignments to a class and also have added tasks to these assignments. This is done by following the instructions in Sections 6.1 and 6.3. To delete a task the user must first select an assignment. The Task section then becomes populated. The user must then select the task that is to be deleted from the Task section of the screen. Once a task is selected the "Delete Task" button becomes enabled. The user can select the "Delete Task" button and the task will be deleted from the selected assignment. The user will notice the task is no longer listed in the Task section.

6.6 Editing Tasks

Purpose:

The purpose of this functionality is to be able to edit a task that was previously created. The user can edit the type, question, and answer.

How to Edit a Task:

To edit a task the user must first have added assignments to a class and also have added tasks to these assignments. This is done by following the instructions in Sections 6.1 and 6.3. To edit a task the user must first select an assignment. The Task section then becomes populated. The user must then select the task that is to be edited from the Task section on screen. Once a task is selected the details of the Task will appear at the right side of the screen. The user can than go ahead and alter any part of the task. The user can change the type, question, and answer. Once the user is finished with their changes they need to click “Save.” This will then update the task to the new values entered by the user.

6.7 Adding Skills

Purpose:

The purpose of this functionality is to add skills to a specific task for a student to be assessed.

How to Add a Skill:

In order to add a skill to a task the user must first add an assignment and have added a task to the selected assignment. This can be done by following the instructions in Sections 6.1 and 6.3. To add a skill the user must first select an assignment. The Task section then becomes populated. The user then must select the task they wish to add skills to. Once a task is selected the “Add Skills” button becomes enabled. The user then should select the “Add Skills” button. A list of all of the skills appears on screen. The user can select to expand and collapse the list of skills. To add a skill to the task, the user can select a skill to in the list of all the skills. The user can then select the “Add” button and the skill will then be added to the task. The skill will now appear on screen in the Skill section.

6.8 Deleting Skills

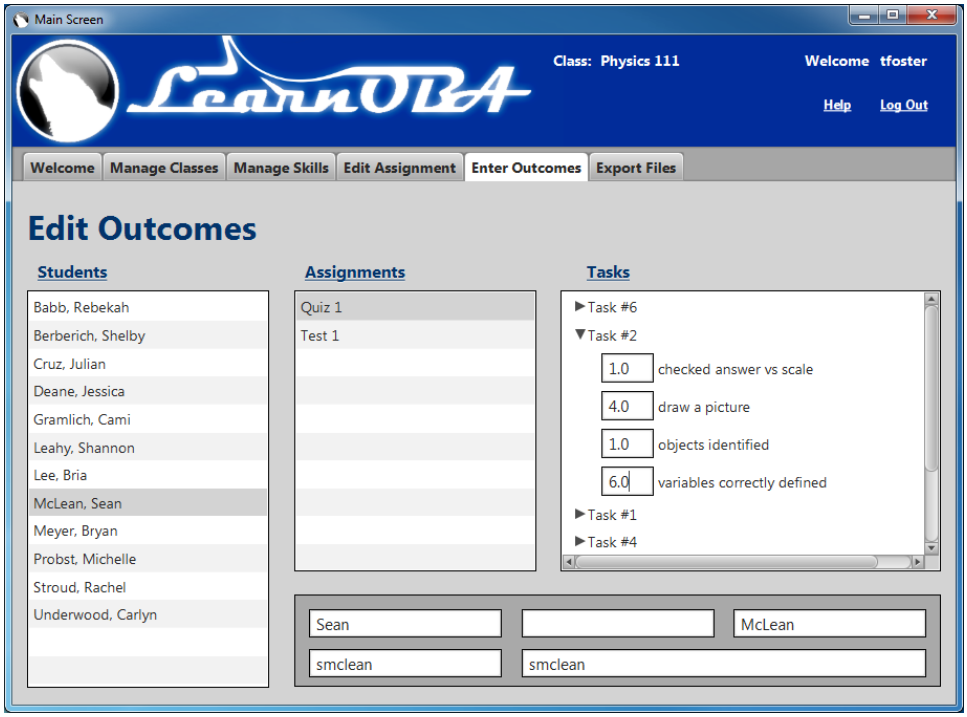
Purpose:

The purpose of this functionality is to delete skills from a specific task.

How to Delete a Skill:

In order to delete a skill from a task the user must first add an assignment and have added a task to the selected assignment. This can be done by following the instructions in Sections 6.1 and 6.3. To delete a skill the user must first select an assignment. The Task section then becomes populated. The user then must select the task they wish to delete skills from. Once a task is selected the skills become populated in the Skills section on screen. The user can then select the skill they wish to delete. Once the skill is selected the "Delete Skill" button becomes enabled. The user can click the "Delete Skill" button and the skill is now deleted from the selected task. The user will notice the skill is no longer listed in the Skills section.

7 Entering Outcomes



7.1 Editing Student Outcomes

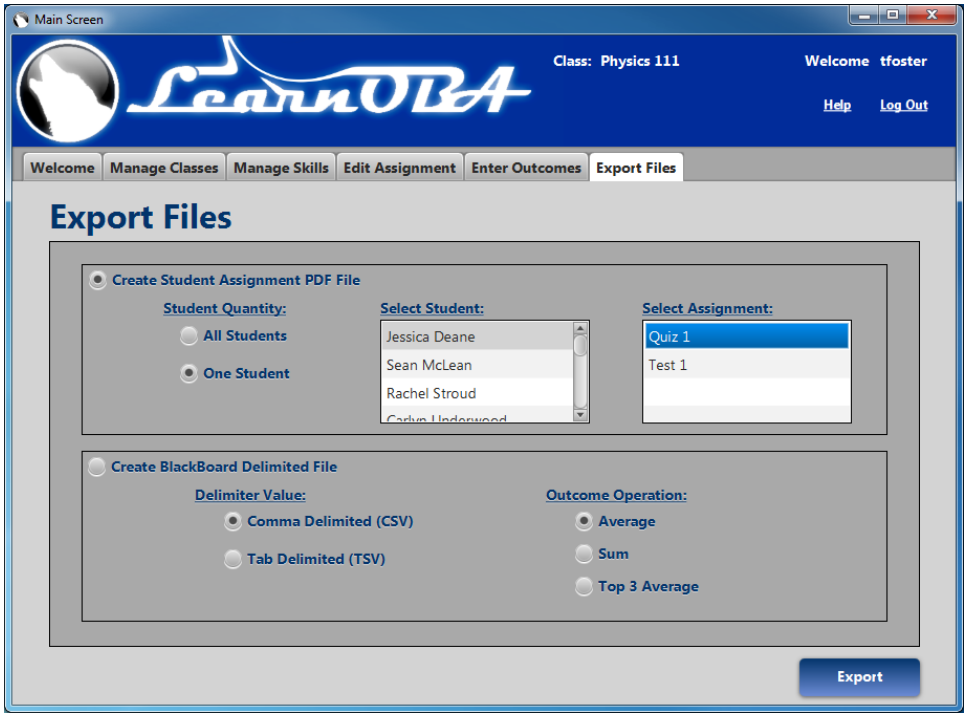
Purpose:

The purpose of this functionality is to allow a teacher to update his student's scores for each skill associated with each task per assignment. When a class is created, an outcome value is defined for the class. Each score for the student will be set to this value unless the outcome value has been changed for that specific skill in the Skills Tab.

How to Update a Students Score:

First, select a student and an assignment from the associated lists. This will populate the list under "Tasks". Each task can be expanded to show all of the skills associated with the task. There is a textbox next to each of these skills. This textbox holds the skill's outcome value for the currently selected student, assignment, and task. This is prefilled to the predefined value for this skill or class. If the student did something wrong, then points can be taken off here.

8 Exporting Scores



8.1 Exporting Student Assignment PDF Files

Purpose:

The purpose of this functionality is to allow a teacher to export feedback for one or many student(s) on an individual assignment. This will break everything down by skill per question.

How to export just one or many student(s):

First, you want to verify that the “Create student Assignment PDF File” radio button is selected. Then select either the radio button labeled “One student” to make an assignment for just one student or select the radio button labeled “All students” to make an assignment for all the student. If you are printing feedback for just one student, select the student for which you want to print feedback. Then click on the assignment you wish to print out for said student(s). Finally, click the “Export” button and choose the directory where you would like to save these assignment feedback files.

8.2 Exporting Blackboard Delimited Files

Purpose:

The purpose of this functionality is to allow a teacher to export aggregated information about the class as a whole. Although the data is for a class there is broken down by students and skill. These values are output in such a way that they can be uploaded straight to blackboard.

How to export with different Delimiter values:

First, you want to verify that the “Create Blackboard Delimited File” radio button is selected. Then select either the radio button labeled “Comma Delimited (CSV)” to make the output separated by a comma (very common for excel files) or select the radio button labeled “Tab delimited (TSV)” to make the output separated by a tab.

How to export with different Aggregate operations:

To get the average of each student and skill pair select the “Average” radio button. Remember, this will not do an average of the score, it will calculate and display the values by skills. Likewise you can calculate the sum of all student and skill pairs by selecting the “Sum” radio button. The last operation will calculate the average of the top 3 scores of each student in that specific skill. You can choose this option by selecting the “Top 3 Average” radio button. Finally, click the “Export” button and choose the directory where you would like to save the Blackboard file.