

Test Plan

Version 1.0

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Automated Excel Grading System

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Test Plan

I. System Test

1. Testing Plan Identifier

The Test Plan document for this software project is a collection of all necessary testing requirements that must be met in order for the Automated Excel Grading System to be considered complete and functional. As the Automated Excel Grading System is physically engineered, this document will keep track of any and all changes that are made to the requirements as well as inform of requirement criteria that has not been met. Updates will be necessary as the project matures in order to ensure that our Acceptance Test, due out on May 1st, 2007, will test the system efficiently.

2. Introduction

This is a document that contains the overview of the Test Plan and has been labeled Test Plan Version 1.0. This version of the document will attempt to outline and review the previously documented requirements along with a plan for testing these requirements in a way that will ensure that each requirement is fully met and that the system as a whole is working in the desired way. The testing in this document will encompass all internal software components.

3. Test Items & Functional Requirements Inventory

This section of the document contains a list of requirements that will need to be tested to ensure that they are adequately met. This list of requirement items will need to be kept in mind during all testing to ensure that all requirements are understood and tested properly. It is composed first of general requirements for the system in terms of what external systems and software should be supported by the Automated Excel Grading System along with all security issues. It is then broken up into our four different user types and their functionality requirements.

The list below contains the Functional Requirements that must be met and tested fully:

External Systems/Software and Safety

- The Automated Excel Grading System is to be web based and must be viewable from any computer with internet access.

Yes No

- The system must work on the most popular platforms, which include Windows, Macintosh, and Linux and the default Operating Systems for Windows and Macintosh: Windows XP, Windows Vista, Mac OSX.

Yes No

- The system must work on the most widely used and popular web browsers and will be tested on the following web browsing programs:
 - Microsoft Internet Explorer 7.0
 - Mozilla Firefox 1.0.7
 - Safari 2.0.1

Yes No

- Ability to log into system securely from any computer.

Yes No

Course Administrator

- Login
 - The first time the Administrator logs into the system they will use the username and password given to them by the developers.

Yes No

- Create Accounts

- The Administrator will create the Lab Instructor and Lecture instructor accounts. When they create these accounts they will specify what user account is being created.

Yes No

- They will have the option to create student accounts if needed.

Yes No

- Edit Accounts

- If any account needs to be changed for any reason the Course Administrator can do so, including changing a students lab section or lecture section.

Yes No

- Create Password for Student User

- The Administrator creates the initial password so the Student user can log into the system for the first time.

Yes No

- Delete Accounts

- The Administrator can delete accounts from semester to semester with Student Users leaving the course and Lab and Lecture Instructors not teaching the course.

Yes No

- Upload Grading Key and Sample Files

- The Administrator will upload one grading key per lab and pre-lab along with multiple sample files per lab and pre-lab.

Yes No

- The grading key specifies what sections of the lab files to grade.

Yes No

- View Reports

- Course Instructor can view students lab grades based on lab or lecture section.

Yes No

- Change Password
At any time the Course Administrator can change their password.

Yes No

Student User

- Login
 - The first time the student logs into the system, he or she will create a username and use the specific password given to them in class by the lecture instructor.

Yes No

- Upload Labs and Pre-labs
 - When the student wants to submit a file they will be able to in their student view after they log into the system. The submit button will bring them to a new screen where they will upload each individual file with a browse button that searches the directories on the computer their on.

Yes No

- Viewing Pre-Lab Error Reports
 - The student will click on the view Pre-Lab Button on the student view page to view the report

Yes No

- Viewing Lab Grades, Files and Report
 - The student can view their graded labs and see what sections they got wrong by clicking on the view Lab Button on the student view page.

Yes No

- They can only view these documents once the grades are approved and released by the Lab Instructor

Yes No

- Change Password
 - At any time the Student User can change their password.

Yes No

Lab Instructor

- Login
 - The first time the Lab Instructor logs into the system they will use the username and password created by the Course Administrator.

Yes No

- Review Lab Grades from System
 - Override any mistakes that the system made after viewing the report generated by the system showing what the student got wrong.

Yes No

- Approve Grades For Student User's View

Yes No

- Viewing Student Grades
 - They will be able to view the lab grades based on what lab section they want including all their lab sections.

Yes No

- They can also view the grades based on lab number, including all labs.

Yes No

- Change Password
 - At any time the Lab Instructor can change their password.

Lecture Instructor

- Login
 - The first time the Lecture Instructor logs into the system they will use the username and password created by the Course Administrator.

Yes No

- Viewing Lab Grades
 - Once the Lab Instructor has checked to make sure the lab was graded correctly by the system the Lecture Instructor can view the lab grades.

Yes No

- They will be able to view the lab grades based on what lecture section they want including all their lecture sections.

Yes No

- They can also view the grades based on lab number, including all labs.

Yes No

- Change Password
 - At any time the Lecture Instructor can change their password.

Yes No

4. Non-Functional Requirements Inventory Testing

In addition to the Functional Requirements, we must also ensure that the Non-Functional Requirements are tested to the best of our ability. These requirements are not easily tested as they are qualitative in nature, unlike the Functional Requirements which are for the most part quantitative. The following is a list of issues that must be kept in mind during testing in order to ensure that the Non-Functional Requirements are met to the best of our ability.

As stated in the Functional Requirements, the Automated Excel Grading System should be supported by platforms Windows, Macintosh, and Linux on the operating systems Windows XP, Windows Vista, and Mac OSX on the internet browsers Microsoft Internet Explorer 7.0, Mozilla Firefox 10.4.7, and Safari 2.0.4. But these various platforms, operating systems, and internet browsers have a tendency to display the same software and programs in different ways. The Automated Excel Grading System should attempt to maintain consistency in design through these different platforms, operating systems, and especially internet browsers. If our users use different computers to use our system, they should not be confronted with a difficult time adapting to any differences between how the system is displayed on any computer. Differences in designs due to using different computers should be minimized as much as possible.

There should be a quick turn around time for Pre-Lab grades. Students should receive their graded Pre-Lab as close to immediately after submission as possible.

The system should be secure. Student's grade information should be viewable only by their Lab Instructor, Lecture Instructor, and the Course Administrator. All information provided by any user should not be displayed publicly and only accessible by the Course Administrator and the user themselves.

Because the Automated Excel Grading System is web based, it must be easily navigatable by all users. Confusion about using any and all aspects of the system should be minimized as much as possible by creating a good user interface.

5. Exception Handling To Test

There are certain areas in the Automated Excel Grading system where errors will occur that is not the fault of our system. The system must be able to handle these exceptions.

If a user forgets their password, there needs to be a method of handling it without having to create a new account every time. If the user forgets his or her password, they need only click on the “Forgot Password” link found on the login screen which will send them to another page that will ask them to submit their email. The system should verify that the email entered is an email address of a username in the system. The system will then send an email to this address containing their username and password.

There are various page in the web based system where users will have to fill out a form. If a user fails to enter all necessary fields in a submission form, the page should reload with a message informing the user that all necessary fields must contain information and a red asterisk next to the fields that have been left empty but must be filled out.

5. Testing Approach

The method our team will use to test the Automated Excel Grading System will be first and foremost to keep in mind the Functional and Non-Functional Requirements as defined in this and other documents. The first formal test will be an exhaustive Unit Test (defined later in this document). The Unit Test will test every aspect of every web page in the system with detailed descriptions of each test. The tester(s) will go through each web page in the system checking each unit requirement off as passing or failing. The tester(s) will repeat this test on the various web browsers that have been stated should be supported in the Functional Requirements. Then a Regression Test (also defined later in this document) will be implemented to ensure that while each unit in the Unit Test is passed, it does not interfere with other units in the Unit Test. Our hope is that this will help to ensure that no errors are missed and can be fixed or at the very least reported on.

When errors occur or Unit Tests are failed, the team will coordinate to come up with a solution to the problem and then the Unit Test will be performed again, completely, to ensure that nothing else was changed in fixing the previous problem. The Regression Test will be implemented once we are satisfied that the Unit Test has been passed acceptably, with all failed units either fixed or reported on. If the Regression Test determines that there are issues of one feature breaking another feature, the team will again coordinate to fix the problem and implementing a fix. The Unit Test should then be re-implemented to ensure that while fixing the problem another problem was not caused and then re-implementing the Regression Test.

In order to test the Non-Functional Requirements, the tester(s) will have to use the system keeping in mind each specific Non-Functional Requirement and deciding on whether the system passes each one acceptably.

6. Deliverables

This document will be delivered and it contains our Unit Test and Regression Test.

After any and all changes that are made to this document during the upcoming months, it will be delivered again as part of the Acceptance Test, due out on May 1st, 2007.

II. Unit Test

0. Unit Test Contents

Pass/ Fail	Screen Number	Internal Tests	Name
	1.0		Login Screen
		1.0.1	Load Page
		1.0.2	Indadequate Login Attempt
		1.0.3	Incorrect Login Attempt - Unregistered Account
		1.0.4	Incorrect Login Attempt - Incorrect Password
		1.0.5	Correct Student Login
		1.0.6	Correct Lab Instructor Login
		1.0.7	Correct Lecture Instructor Login
		1.0.8	Correct Lab/Lecture Instructor Login
		1.0.9	Correct Course Administrator Login
		1.0.10	Forgot Password
		1.0.11	Register
	1.1		Create Account
		1.1.1	Load Page
		1.1.2	Ensure All Fields Are entered and correct
		1.1.3	Register
	1.2		Forgot Password
		1.2.1	Load Page
		1.2.2	Ensure All Fields Are entered and correct
		1.2.3	Submit Information - E-Mail Sent to Student
		1.2.4	Correct Student Login
	2.0		Student Homepage
		2.0.1	Load Page
		2.0.2	Generate Lab Grades Table
		2.0.2.1	- Correct Labs Displayed in Table
		2.0.2.1	- Correct Unsubmitted Labs Information in Table
		2.0.2.1	- Correct Submitted Pre-Labs Information in Table
		2.0.2.4	- Correct Submitted, Ungraded Labs Information in Table
		2.0.2.5	- Correct Graded Labs Information in Table
		2.0.3	Submit Lab
		2.0.4	View Error Report

Pass/ Fail	Screen Number	Internal Tests	Name
	2.1		Student Upload Pre-Labs
		2.1.1	Load Page
		2.1.2	Correct pre-lab number is displayed
		2.1.3	Browse
		2.1.4	Submit
	2.2		Student Upload Labs
		2.2.1	Load Page
		2.2.2	Correct pre-lab number is displayed
		2.2.3	Browse
		2.2.4	Submit
	2.3		Student View Error Report
		2.3.1	Load Report
		2.3.2	Correct Name
		2.3.3	Correct Lab Number
		2.3.4	Incorrect Messages in Red
		2.3.5	Correct Messages in Black
	3.0		Lab Instructor Homepage
		3.0.1	Load Page
		3.0.2	Lab Section Dropdown
		3.0.3	Lab Number Dropdown
		3.0.4	View
	3.1		Lab Instructor View Grades
		3.1.1	Load Page
		3.1.2	Generate Lab Grades Table
		3.1.3	Correct Labs Displayed in Table
		3.1.4	View Submitted Lab
		3.1.5	View Errors
	3.2		Lab Instructor View Errors
		3.2.1	Load Report
		3.2.2	Accurate Error Information
	4.0		Lecture Instructor Homepage
		4.0.1	Load Page
		4.0.2	Lecture Section Dropdown
		4.0.3	Lab Number Dropdown
		4.0.4	View
	4.1		Lecture Instructor View Grades
		4.1.1	Load Page
		4.1.2	Generate Lab Grades Table
		4.1.3	Correct Labs Displayed in Table

Pass/ Fail	Screen Number	Internal Tests	Name
	5.0		Course Administrator Homepage
		5.0.1	Load Page
		5.0.2	Lab or Lecture Section Dropdown
		5.0.3	Lab Number Dropdown
		5.0.4	View
		5.0.5	Create New Instructor Account
		5.0.6	View All Instructors
		5.0.7	View All Students
		5.0.8	Upload Answer Keys
		5.0.9	Search
	5.1		Course Administrator Homepage
		5.1.1	Load Page
		5.1.2	Register - complete information
		5.1.3	Register - incomplete information
	5.2		View All Instructors Page
		5.2.1	Load Page
		5.2.2	Edit
		5.2.3	Delete
	5.3		View All Students Page
		5.3.1	Load Page
		5.3.2	Edit
		5.3.3	Delete
	5.4		Upload Answer Keys Page
		5.4.1	Load Page
		5.4.2	Browse
		5.4.3	Submit - incorrect
		5.4.4	Submit - correct
	5.5		Course Administrator View Grades
		5.5.1	Load Page
		5.5.2	Generate Lab Grades Table
		5.5.3	Correct Labs Displayed in Table
		5.5.4	View Submitted Lab
		5.5.6	View Errors

1.0 Login Screen

Num	Name	Description	State Before Test	State After Test	Input	Steps to be Executed	Expected Output	Comments	Pass/Fail
1.0.1	Load Page	Page loads properly	Any other webpage	Index.php	None	Load login screen.	Login screen displays all information properly in web browser		
1.0.2	Inadequate Login Attempt	Login button is clicked w/o all required login information	Index.php	Error1.php	None	Redirect to error page.	Error page loads telling user they did not supply adequate login information		
1.0.3	Incorrect Login Attempt - Unregistered Account	Login button is clicked with incorrect username	Index.php	Error2.php	Username: unregistered Password: anything	Determine username is not registered. Redirect to error page	Error page loads telling user they did not supply a valid username or password.		
1.0.4	Incorrect Login Attempt - Incorrect Password	Login button is clicked with incorrect password	Index.php	Error2.php	Username: student_test Password incorrect_pword	Determine that password is incorrect for this user. Redirect to error page.	Error page loads telling user they did not supply a valid username or password.		
1.0.5	Correct Student Login	Login button is clicked with correct Student Username and password	Index.php	home.php	Username: student_test Password: oasis_s	Determine login is for Student User Generate Student homepage	Student User homepage is generated.		
1.0.6	Correct Lab Instructor Login	Login button is clicked with correct Lab Instructor username and password	Index.php	home.php	Username: lab_instructor_test Password: oasis_lab	Determine login is for Lab Instructor User Generate Lab Instructor homepage	Lab Instructor homepage is generated		

Num	Name	Description	State Before Test	State After Test	Input	Steps to be Executed	Expected Output	Comments	Pass/Fail
1.0.7	Correct Lecture Instructor Login	Login button is clicked with correct Lecture Instructor username and password	Index.php	home.php	Username: lecture_instructor_test Password: oasis_lec	Determine login is for Lecture Instructor User Generate Lecture Instructor homepage	Lecture Instructor homepage is generated		
1.0.8	Correct Lab/Lecture Instructor Login	Login button is clicked with correct Lab/Lecture Instructor username and password	Index.php	home.php	Username: lab_lecture_test Password: oasis_lablec	Determine login is for Lab/Lecture Instructor User Generate Lab/Lecture Instructor homepage	Lab/Lecture homepage is generated.		
1.0.9	Correct Course Administrator Login	Login button is clicked with correct Course Administrator username and password.	Index.php	home.php	Username: course_admin_test Password: oasis_ca	Determine login is for Course Administrator User Generate Course Administrator homepage	Course Administrator homepage is generated		
1.0.10	Forgot Password	Forgot Password link is clicked	Index.php	forgot_pword.html	None	Load Forgot Password webpage	Forgot Password screen is displayed.		
1.0.11	Register	Register link is clicked	Index.php	register.php	None	Load Registration webpage	Registration screen is displayed		

1.1 Create Account

Num	Name	Description	State Before Test	State After Test	Input	Steps to be Executed	Expected Output	Comments	Pass/Fail
1.1.1	Load Page	Page loads properly	Any other webpage	Index.php	None	Load Creat Account screen.	Create Account screen displays all information properly in web browser		
1.1.2	Ensure All Fields Are entered and correct	Submit button is clicked with all required Account information	Index.php	Error1.php	None	Redirect to error page.	Error page loads telling user they did not supply adequate login information or information was correct and they receive an e-mail		
1.1.3	Register	Register link is clicked	Index.php	register.php	None	Load Registration webpage	Registration screen is displayed		

1.2 Forgot Password

Num	Name	Description	State Before Test	State After Test	Input	Steps to be Executed	Expected Output	Comments	Pass/Fail
1.2.1	Load Page	Page loads properly	Any other webpage	Index.php	None	Load login screen.	Login screen displays all information properly in web browser		
1.2.2	Ensure All Fields Are entered and correct	Submit button is clicked with all required Account information	Index.php	Error1.php	None	Redirect to error page.	Error page loads telling user they did not supply adequate login information or information was correct and they receive an e-mail		
1.2.3	Submit Information - E-Mail Sent to Student	Submit button is clicked with correct information	Index.php	Error2.php	Username: registered Password: correct	Determine that the username is registered. Submit E-mail to oraserv	email is sent to the provided address with their password		
1.2.4	Correct Student Login	Login button is clicked with incorrect password	Index.php	Error2.php	Username: student_test Password incorrect_pword	Determine that password is incorrect for this user. Redirect to error page.	Error page loads telling user they did not supply a valid username or password.		

2.0 Student Homepage

Num	Name	Description	State Before Test	State After Test	Input	Steps to be Executed	Expected Output	Comments	Pass/Fail
2.0.1	Load Page	Page loads properly	index.php	home.php	username: student_test Password: oasis_s	Determine that usernamee is a student User Generate the student homepage	Homepage screen displays student homepage		
2.0.2	Generate Lab Grades Table	Table containing this students Lab grades is generated when page is displayed	index.php	home.php	usernamee: student_test Password: oasis_s	Determine that usernamee is a student User Generate a table of this students Lab grades from the database	Table of students Lab grades displayed in correct format with all grades and information displayed Requires tests 2.2.1-2.2.5 To pass completely		
2.0.2.1	Correct Labs Displayed in Table	Table contains correct Labs	index.php	home.php	usernamee: student_test Password: oasis_s	Determine what Labs need to be displayed Display these Labs and their information in table	Lab's with key associated for both Lab and Pre-Lab are displayed		
2.0.2.2	Correct Unsubmitted Labs Information in Table	Table contains correct information about unsubmitted Labs	index.php	home.php	usernamee: student_test Password: oasis_s	Determine which Labs and Pre-Labs are ready for submission but have not yet been submitted Display these Labs and Pre-Labs correctly in table	Unsubmitted Labs and Pre-Labs with key associated display empty rows and Submit link for both Lab and Pre-Lab		

Num	Name	Description	State Before Test	State After Test	Input	Steps to be Executed	Expected Output	Comments	Pass/Fail
2.0.2.3	Correct Submitted Pre-Labs Information in Table	Table contains correct information about submitted Pre-Labs	index.php	home.php	usernamee: student_test Password: oasis_s	Determine which Pre-Labs have been submitted Display these Pre-Labs correctly in table	Pre-Labs that have been submitted display Submission Date Display View Error Report link		
2.0.2.4	Correct Submitted, Ungraded Labs Information in Table	Table contains correct information about Submitted, Ungraded Labs	index.php	home.php	usernamee: student_test Password: oasis_s	Determine which Labs have been submitted, but not yet graded Display correct information about these Labs	Submitted Labs displayed with Submission Date Submit Lab link is now gone		
2.0.2.5	Correct Graded Labs Information in Table	Table contains correct information about Graded Labs	index.php	home.php	usernamee: student_test Password: oasis_s	Determine which Labs have been graded Display coorrect information about these Labs	Graded Labs displayed with Lab Grades and View Error Report link Labs that were not submitted, but graded, will receive a 0 grade		
2.0.3	Submit Lab	Submit Lab link is clicked	home.php	submit_Lab.php	None	Determine which Lab is to be submitted Generate Submit Lab page based on this Lab's criteria	Submit Lab page generated		

Num	Name	Description	State Before Test	State After Test	Input	Steps to be Executed	Expected Output	Comments	Pass/Fail
2.0.4	View Error Report	View Error Report link is clicked	home.php	Lab*_report.csv OR preLab*_report.csv * - Fill in number	None	Determine which Lab or Pre-Lab Error Report is to be viewed Displays error report for this Lab or Pre-Lab	Error Report page displayed		

2.1 Student Upload Pre-Labs

Num	Name	Description	State Before Test	State After Test	Input	Steps to be Executed	Expected Output	Comments	Pass/Fail
2.1.1	Load page.	Submit pre-lab page is loaded correctly when link is clicked	home.php	home.php	none	loads page correctly	page is loaded correctly		
2.1.2	Correct pre-lab number is displayed	The Correct pre-lab number is displayed	home.php	home.php	none	Determines the pre-lab number that is being submitted	The correct pre-lab number is displayed		
2.1.3	Browse	Browse button is clicked	home.php	home.php	The correct pre-lab file that is chosen by the user	File Directory is opened	A file is placed in the text box		
2.1.4	Submit	Submit button is clicked.	home.php	home.php	An excel file	File is submitted to web server	An output box is displayed telling that the file was submitted correctly		

2.2 Student Upload Labs

Num	Name	Description	State Before Test	State After Test	Input	Steps to be Executed	Expected Output	Comments	Pass/Fail
2.2.1	Submit lab page	Submit page is loaded correctly when link is clicked	home.php	home.php	none	loads page correctly	page is loaded correctly		
2.2.2	Correct lab number is displayed	The Correct lab number is displayed	home.php	home.php	none	Determines the lab number that is being submitted	The correct lab number is displayed		
2.2.3	Browse	Browse button is clicked.	home.php	home.php	The correct ab file that is chosen by the user	File Directory is opened	A file is placed in the text box		
2.2.4	Submit	Submit button is clicked.	home.php	home.php	An excel file	File is submitted to web server	An output box is displayed telling that the file was submitted correctly		

2.3 Student View Error Report

Num	Name	Description	State Before Test	State After Test	Input	Steps to be Executed	Expected Output	Comments	Pass/Fail
2.3.1	Error report loads correctly	Error report loads correctly	home.php	error_report.php	none	Displays correct error report	the correct error report is displayed		
2.3.2	Correct Name	The correct name of the student is displayed	home.php	error_report.php	none	Displays correct name from the database	the correct name is of the student is displayed		
2.3.3	Correct Lab Number	The correct number of the lab is displayed	home.php	error_report.php	none	Displays the correct name of the lab from the database	the correct lab number is displayed		
2.3.4	Incorrect Messages in Red	The font text is red for the incorrect messages	home.php	error_report.php	none	Displays error messages in red.	The text of incorrect messages are in red.		
2.3.5	Correct Messages in Black	The font text is black for correct messages	home.php	error_report.php	none	Displays correct messages in black	The text of correct messages are in black.		

3.0 Lab Instructor Homepage

Num	Name	Description	State Before Test	State After Test	Input	Steps to be Executed	Expected Output	Comments	Pass/Fail
3.0.1	Load Page	Page loads properly	index.php	home.php	Username: lab_instructor_test Password: oasis_lab	Determine that Username is a Lab Instructor User Generate the Lab Instructor homepage	Homepage screen displays Lab instructor homepage		
3.0.2	Lab Section Dropdown	Choose Lab Section dropdown menu displays	index.php	home.php	Username: lab_instructor_test Password: oasis_lab	Determine that Username is a Lab Instructor User Generate a dropdown menu for choosing from all current Lab Sections	A dropdown menu with all current Lab Sections along with an "All Lab Sections" item is displayed for choosing Lab Section to view		
3.0.3	Lab Number Dropdown	Choose Lab Number dropdown menu displays	index.php	home.php	Username: lab_instructor_test Password: oasis_lab	Determine that Username is a Lab Instructor User Generate a dropdown menu for choosing all eligible Labs for viewing	A dropdown menu with all viewable Lab Numbers along with an "All Labs" item is displayed for choosing Lab Number to view		
3.0.4	View	View Button is clicked	home.php	lab_view.php	Item in Lab Section dropdown is selected and Item in Lab Number dropdown is selected	Determine the Lab Section and Lab Number criteria Generate Lab Instructor View Labs page	Lab Instructor View Labs page is displayed		

3.1 Lab Instructor View Grades

Num	Name	Description	State Before Test	State After Test	Input	Steps to be Executed	Expected Output	Comments	Pass/Fail
3.1.1	Load Page	Page loads properly	home.php	lab_view.php	Lab Number and Lab Section	Generate page based on desired Lab Number and Section.	View Grades lab is displayed with table containing grade information		
3.1.2	Generate Lab Grades Table	Table containing this students Lab grades is generated when page is displayed	home.php	lab_view.php	Lab Number and Lab Section	Generate a table of the students in the specified lab section with the grades from the specified lab number.	Table of students Lab grades displayed in correct format with all grades and information displayed		
3.1.3	Correct Labs Displayed in Table	Table contains correct Labs	home.php	lab_view.php	Lab Number and Lab Section	Determine what Labs need to be displayed Display these Labs and their information in table	Lab number specified is lab displayed in table. Lab section specified is lab displayed in table		

Num	Name	Description	State Before Test	State After Test	Input	Steps to be Executed	Expected Output	Comments	Pass/Fail
3.1.4	View Submitted Lab	View Submitted Lab link is clicked	home.php	student*_lab*.xls	None	Determine if the lab was graded correctly	The specified students lab is loaded.		
3.1.5	View Errors	View Errors link is clicked	home.php	Lab*_report.csv OR preLab*_report.csv * - Fill in number	None	Determine which Lab or Pre-Lab Error Report is to be viewed Displays error report for this Lab or Pre-Lab. Make sure the labs were graded correctly	Error Report page displayed		

3.2 Lab Instructor View Errors

Num	Name	Description	State Before Test	State After Test	Input	Steps to be Executed	Expected Output	Comments	Pass/Fail
3.2.1	Load Report	Error report is loaded	lab_view.php	Lab*_report.csv OR preLab*_report.csv * - Fill in number	None	Load specified report on screen	Report is displayed on screen.		
3.2.2	Accurate Error Information	Errors in report are accurate.	Lab*_report.csv OR preLab*_report.csv * - Fill in number	Lab*_report.csv OR preLab*_report.csv * - Fill in number	None	Check each error in error report and verify that submitted lab actually has those errors.	None.		

4.0 Lecture Instructor Homepage

Num	Name	Description	State Before Test	State After Test	Input	Steps to be Executed	Expected Output	Comments	Pass/Fail
4.0.1	Load Page	Page loads properly	index.php	home.php	Username: lecture_instructor_test Password: oasis_Lab	Determine that username is a Lecture Instructor User Generate the Lecture Instructor homepage	Homepage screen displays Lecture Instructor homepage		
4.0.2	Lecture Section Dropdown	Choose Lecture Section dropdown menu displays	index.php	home.php	Username: lecture_instructor_test Password: oasis_Lab	Determine that username is a Lecture Instructor User Generate a dropdown menu for choosing from all current Lab Sections	A dropdown menu with all current Lecture Sections along with an "All Lecture Sections" item is displayed for choosing Lab Section to view		
4.0.3	Lab Number Dropdown	Choose Lab Number dropdown menu displays	index.php	home.php	Username: Lecture_Instructor_test Password: oasis_Lab	Determine that username is a Lecture Instructor User Generate a dropdown menu for choosing all eligible Labs for viewing	A dropdown menu with all viewable Lab Numbers along with an "All Labs" item is displayed for choosing Lab Number to view		
4.0.4	View	View Button is clicked	home.php	lec_view.php	Item in Lecture Section dropdown is selected and Item in Lab Number dropdown is selected	Determine the Lecture Section and Lab Number criteria Generate Lecture Instructor View Labs page	Lecture Instructor View Labs page is displayed		

4.1 Lecture Instructor View Grades

Num	Name	Description	State Before Test	State After Test	Input	Steps to be Executed	Expected Output	Comments	Pass/Fail
4.1.1	Load Page	Page loads properly	home.php	grades_view.php	Lab Number and Lab Section	Generate page based on desired Lab Number and Section.	View Grades lab is displayed with table containing grade information		
4.1.2	Generate Lab Grades Table	Table containing this students Lab grades is generated when page is displayed	home.php	grades_view.php	Lab Number and Lab Section	Generate a table of the students in the specified lab section with the grades from the specified lab number.	Table of students Lab grades displayed in correct format with all grades and information displayed		
4.1.3	Correct Labs Displayed in Table	Table contains correct Labs	home.php	grades_view.php	Lab Number and Lab Section	Determine what Labs need to be displayed Display these Labs and their information in table	Lab number specified is lab displayed in table. Lab section specified is lab displayed in table		

5.0 Course Administrator Homepage

Num	Name	Description	State Before Test	State After Test	Input	Steps to be Executed	Expected Output	Comments	Pass/Fail
5.0.1	Load Page	Page loads properly	index.php	home.php	Username: course_admin_test Password: oasis_ca	Determine that Username is Course Administrator User Generate the Course Administrator homepage	Homepage screen displays Course Administrator homepage		
5.0.2	Lab or Lecture Section Dropdown	Choose Lab or Lecture Section dropdown menu displays	index.php	home.php	Username: course_admin_test Password: oasis_ca	Determine that username is a Course Administrator User Generate a dropdown menu for choosing from all current Lab or Lecture Sections.	A dropdown menu with all current Lab and Lecture Sections along with an "All Lecture Sections" and "All Lab Sections" items are displayed for choosing Lab Section to view		
5.0.3	Lab Number Dropdown	Choose Lab Number dropdown menu displays	index.php	home.php	Username: course_admin_test Password: oasis_ca	Determine that Username is a Course Administrator User Generate a dropdown menu for choosing all eligible Labs for viewing	A dropdown menu with all viewable Lab Numbers along with an "All Labs" item is displayed for choosing Lab Number to view		

Num	Name	Description	State Before Test	State After Test	Input	Steps to be Executed	Expected Output	Comments	Pass/Fail
5.0.4	View	View button is clicked	home.php	ca_view.php	Item in Lecture Section OR Lab Section dropdown is selected and Item in Lab Number dropdown is selected	Determine the Lecture or Lab Section and Lab Number criteria Generate Course Administrator View Labs page	Course Administrator View Labs page is displayed		
5.0.5	Create New Instructor Account	Create New Instructor Account button is clicked	home.php	create_account.php	None.	Generate Create New Instructor Account page	Create New Instructor Account page is displayed		
5.0.6	View All Instructors	View All Instructors button is clicked	home.php	view_instructors.php	None.	Generate View All Instructors page	View All Instructors page is displayed		
5.0.7	View All Students	View All Students button is clicked	home.php	view_students.php	None.	Generate View All Students page	View All Students page is displayed		
5.0.8	Upload Answer Keys	Upload Answer Keys button is clicked	home.php	upload_key.php	None.	Generate Upload Answer Keys page	Upload Answer Keys page is displayed		

Num	Name	Description	State Before Test	State After Test	Input	Steps to be Executed	Expected Output	Comments	Pass/Fail
5.0.9	Search	Search button is clicked	home.php	find_student.php	None.	<p>Determine that there is a valid name in the "Search for Student" textbox.</p> <p>If name exists in database more than once, generate list of all students with common name.</p> <p>If name exists only once in databse, generate page containing that students information.</p>	Display either list of students with entered name or single student with that name's information on the Find Student page.		

5.1 Create Instructor Account Page

Num	Name	Description	State Before Test	State After Test	Input	Steps to be Executed	Expected Output	Comments	Pass/Fail
5.1.1	Load Page	Page loads properly	home.php	create_account.php	None.	Generate text boxes for all information required to create an Instructor account.	Display Create Instructor Account Page with all fields and text.		
5.1.2	Register - complete information	Register button is clicked	create_account.php	home.php	All text box entrys.	Determine that all required text boxes have text in them and that a Instructor Type has been selected from the drop down menu. Build an instructor account in database with entered information Generate Course Instructor's homepage.	Display Course Instructors homepage.		
5.1.3	Register - incomplete information	Register button is clicked	create_account.php	home.php	All text box entrys.	Determine that not all required text boxes have text in them. Reload page with entered information still entered and an error message.	Display current screen exactly as is, except with messeage telling user to fill in all required fields.		

5.2 View All Instructors Page

Num	Name	Description	State Before Test	State After Test	Input	Steps to be Executed	Expected Output	Comments	Pass/Fail
5.2.1	Load Page	Page loads properly	home.php	view_instructors.php	None.	Generate View All Instructors Page as table of all Instructors along with their Instructor Type and Edit and Delete buttons for each.	Display View All Instructors Homepage		
5.2.2	Edit	Any of the Edit buttons are clicked	view_instructors.php	edit_instructor.php	Instructor in same row as button clicked.	Generate Edit Instructor page based on which Edit button was clicked containing the specified instructors information.	Display Edit Instructor page for the selected instructor.		
5.2.3	Delete	Any of the Delete buttons are clicked	view_instructors.php	view_instructors.php	Instructor in same row as button clicked.	Delete specified instructor account from database. Re-generate the current page without deleted Instructor	Display View All instructors page..		

5.3 View All Students Page

Num	Name	Description	State Before Test	State After Test	Input	Steps to be Executed	Expected Output	Comments	Pass/Fail
5.3.1	Load Page	Page loads properly	home.php	view_students.php	None.	Generate View All Students Page as table of all Students along with their Lab Section, Lecture Section, and Edit and Delete buttons for each.	Display View All Students Homepage		
5.3.2	Edit	Any of the Edit buttons are clicked	view_students.php	edit_student.php	Student in same row as button clicked.	Generate Edit Students page based on which Edit button was clicked containing the specified students information.	Display Edit Students page for the selected instructor.		
5.3.3	Delete	Any of the Delete buttons are clicked	view_students.php	view_students.php	Student in same row as button clicked.	Delete specified Student account from database. Re-generate the current page without deleted Student.	Display View All Students page.		

5.4 Upload Answer Keys Page

Num	Name	Description	State Before Test	State After Test	Input	Steps to be Executed	Expected Output	Comments	Pass/Fail
5.4.1	Load Page	Page loads properly	home.php	upload_key.php	None.	Generate Upload Answer Keys page consisting of text boxes for Lab Number, Sample Files, and Grading Key.	Display Upload Answer Keys Page.		
5.4.2	Browse	Any of the Browse buttons clicked	upload_key.php	home.php	None.	Open "File Upload" window for user to browse and select file for appropriate field. Insert absolute path to selected file in textbox next to button clicked.	Absolute path to selected file is displayed in textbox next to button that was clicked.		
5.4.3	Submit - incorrect	Submit Button is clicked with not enough information in text boxes	upload_key.php	home.php	Lab Number in text box, absolute paths to Sample Files and absolute path to Answer Key.	Check if Lab Number and Answer Key textboxes are empty. If they are, reload page with error message.	Upload Answer Key Page is displayed with error message telling user to enter information for Lab Number and Answer Key.		

Num	Name	Description	State Before Test	State After Test	Input	Steps to be Executed	Expected Output	Comments	Pass/Fail
5.4.4	Submit - correct	Submit Button is clicked with valid information in text boxes	upload_key.php	home.php	Lab Number in text box, absolute paths to Sample Files and absolute path to Answer Key.	<p>Create lab information for desired Lab Number.</p> <p>Upload Sample Files and Answer Key associated for desired Lab Number.</p> <p>Load Course Administrator Homepage.</p>	Course Administrator Homepage is displayed.		

5.5 Course Administrator View Grades

Num	Name	Description	State Before Test	State After Test	Input	Steps to be Executed	Expected Output	Comments	Pass/Fail
5.5.1	Load Page	Page loads properly	home.php	lab_view.php	Lab Number and Lab Section	Generate page based on desired Lab Number and Section.	View Grades lab is displayed with table containing grade information		
5.5.2	Generate Lab Grades Table	Table containing this students Lab grades is generated when page is displayed	home.php	lab_view.php	Lab Number and Lab Section	Generate a table of the students in the specified lab section with the grades from the specified lab number.	Table of students Lab grades displayed in correct format with all grades and information displayed		
5.5.3	Correct Labs Displayed in Table	Table contains correct Labs	home.php	lab_view.php	Lab Number and Lab Section	Determine what Labs need to be displayed Display these Labs and their information in table	Lab number specified is lab displayed in table. Lab section specified is lab displayed in table		

Num	Name	Description	State Before Test	State After Test	Input	Steps to be Executed	Expected Output	Comments	Pass/Fail
5.5.4	View Submitted Lab	View Submitted Lab link is clicked	home.php	student*_lab*.xls	None	Determine if the lab was graded correctly	The specified students lab is loaded.		
5.5.5	View Errors	View Errors link is clicked	home.php	Lab*_report.csv OR preLab*_report.csv * - Fill in number	None	Determine which Lab or Pre-Lab Error Report is to be viewed Displays error report for this Lab or Pre-Lab. Make sure the labs were graded correctly	Error Report page displayed		

III. Integration Test

NUMBER: 1.0.2		NAME: Inadequate Login Attempt
<i>Test Number Possibly Effected</i>	<i>Test Name Possibly Effected</i>	<i>Pass/Fail</i>
1.0.3	Incorrect Login Attempt - Unregistered account	
1.0.4	Incorrect Login Attempt - Incorrect Password	

NUMBER: 1.0.2		NAME: Corret Student Login
<i>Test Number Possibly Effected</i>	<i>Test Name Possibly Effected</i>	<i>Pass/Fail</i>
2.0.1	Load Student Page	

NUMBER: 1.0.6		NAME: Correct Lab Instructor Login Page
<i>Test Number Possibly Effected</i>	<i>Test Name Possibly Effected</i>	<i>Pass/Fail</i>
3.0.1	Load Lab Instructor Page	

NUMBER: 1.0.7		NAME: Correct Lecture Instructor Login
<i>Test Number Possibly Effected</i>	<i>Test Name Possibly Effected</i>	<i>Pass/Fail</i>
4.0.1	Load Lecture Instructor Page	

NUMBER: 1.0.8		NAME: Correct Lab/Lecture Instructor Login
<i>Test Number Possibly Effected</i>	<i>Test Name Possibly Effected</i>	<i>Pass/Fail</i>
4.0.1	Load Lecture Instructor Page	
3.0.1	Load Lab Instructor Page	

NUMBER: 1.0.9		NAME: Correct Course Administrator Login
<i>Test Number Possibly Effected</i>	<i>Test Name Possibly Effected</i>	<i>Pass/Fail</i>
5.0.1	Load Course Administrator Page	

NUMBER: 1.0.10		NAME: Forgot Password
<i>Test Number Possibly Effected</i>	<i>Test Name Possibly Effected</i>	<i>Pass/Fail</i>
1.2.1	Load Forgot Password Page	

NUMBER: 1.0.11		NAME: Register
<i>Test Number Possibly Effected</i>	<i>Test Name Possibly Effected</i>	<i>Pass/Fail</i>
1.1.1	Load Create Account Page	

NUMBER: 1.1.2		NAME: Ensure all fields are entered and correct
<i>Test Number Possibly Effected</i>	<i>Test Name Possibly Effected</i>	<i>Pass/Fail</i>
1.1.3	Register	

NUMBER: 1.1.3		NAME: Register
<i>Test Number Possibly Effected</i>	<i>Test Name Possibly Effected</i>	<i>Pass/Fail</i>
5.2.1	view all Instructors page	
5.3.1	view all Students page	

NUMBER: 1.2.2		NAME: Ensure all fields are entered and correct
Test Number Possibly Effected	Test Name Possibly Effected	Pass/Fail
1.2.3	Submit Information- E-mail sent to student	

NUMBER: 1.2.3		NAME: Submit Information - Email sent to student
Test Number Possibly Effected	Test Name Possibly Effected	Pass/Fail
1.2.4	Correct Student Login	

NUMBER: 2.0.2		NAME: Generate Lab Grades Table
Test Number Possibly Effected	Test Name Possibly Effected	Pass/Fail
2.0.2.1	Correct Labs Displayed in Tables	
2.0.2.2	Correct Unsubmitted labs Information in Table	
2.0.2.3	Correct Submitted Pre-Labs information in Table	
2.0.2.4	Correct Submitted, Ungraded labs information in tables	
2.0.2.5	Correct Graded Labs Information in Tables	

NUMBER: 2.0.3		NAME: Submit Lab
Test Number Possibly Effected	Test Name Possibly Effected	Pass/Fail
2.0.2.1	Correct Labs Displayed in Tables	
2.0.2.2	Correct Unsubmitted labs Information in Table	
2.0.2.3	Correct Submitted Pre-Labs information in Table	
2.0.2.4	Correct Submitted, Ungraded labs information in tables	
2.0.2.5	Correct Graded Labs Information in Tables	

NUMBER: 2.1.1		NAME: Load Student Upload Pre-Lab Page
Test Number Possibly Effected	Test Name Possibly Effected	Pass/Fail
2.1.2	Correct Pre-Lab Number Is Displayed	

NUMBER: 2.1.4		NAME: Correct Pre-Lab Number Is Displayed
Test Number Possibly Effected	Test Name Possibly Effected	Pass/Fail
2.0.2.3	Correct Submitted Pre-Labs information in Table	

NUMBER: 2.2.1		NAME: Load Student Upload Page
Test Number Possibly Effected	Test Name Possibly Effected	Pass/Fail
2.2.2	Correct Lab Number Is Displayed	

NUMBER: 2.2.4		NAME: Correct Lab Number Is Displayed
Test Number Possibly Effected	Test Name Possibly Effected	Pass/Fail
2.0.2.1	Correct Labs Displayed in Tables	
2.0.2.2	Correct Unsubmitted labs Information in Table	
2.0.2.4	Correct Submitted, Ungraded labs information in tables	

NUMBER: 2.3.1		NAME: Load Report	
Test Number Possibly Effected	Test Name Possibly Effected	Pass/Fail	
2.3.2	Correct Name		
2.3.3	Correct Lab Number Is Displayed		
2.3.4	Incorrect Messages in Red		
2.3.5	Correct Messages in Black		

NUMBER: 3.0.2		NAME: Lab Section Drop Down	
Test Number Possibly Effected	Test Name Possibly Effected	Pass/Fail	
4.1.1	Load Lab Instructor Page		

NUMBER: 3.0.3		NAME: Lab Number Dropdown	
Test Number Possibly Effected	Test Name Possibly Effected	Pass/Fail	
4.1.1	Load Lab Instructor Page		

NUMBER: 3.0.4		NAME: View	
Test Number Possibly Effected	Test Name Possibly Effected	Pass/Fail	
4.1.1	Load Lab Instructor Page		

NUMBER: 3.1.1		NAME: Load Lab Instructor View Grades Page	
Test Number Possibly Effected	Test Name Possibly Effected	Pass/Fail	
3.1.2	Generate Lab Grades Table		
3.1.3	Correct Lab Displayed in Table		

NUMBER: 3.1.4		NAME: View Submitted Labs, Lab Instructor	
Test Number Possibly Effected	Test Name Possibly Effected	Pass/Fail	
2.2.2	Correct Lab Number is Displayed		

NUMBER: 3.1.5		NAME: View Errors, Lab Instructor	
Test Number Possibly Effected	Test Name Possibly Effected	Pass/Fail	
3.2.1	Load Report		
3.2.2	Accurate Error Information		

NUMBER: 3.2.1		NAME: Load Report	
Test Number Possibly Effected	Test Name Possibly Effected	Pass/Fail	
3.1.5	View Errors, Lab Instructor		
3.2.2	Accurate Error Information		

NUMBER: 3.2.2		NAME: Accurate Error Information	
Test Number Possibly Effected	Test Name Possibly Effected	Pass/Fail	
3.1.5	View Errors, Lab Instructor		
3.2.1	Load Report		

NUMBER: 4.0.1		NAME: Load Lecture Instructor Homepage
<i>Test Number Possibly Effected</i>	<i>Test Name Possibly Effected</i>	<i>Pass/Fail</i>
4.0.2	Lecture Section Dropdown	
4.0.3	Lab Number Dropdown	
4.0.4	View	

NUMBER: 4.0.4		NAME: View, Lecture Instructor Homepage
<i>Test Number Possibly Effected</i>	<i>Test Name Possibly Effected</i>	<i>Pass/Fail</i>
4.1.1	Load Page, Lecture Instructor View Grades	
4.1.2	Generate Lab Grades Table	
4.1.3	Correct Labs Displayed in Table	

NUMBER: 4.1.1		NAME: Load Lecture Instructor View Grades Page
<i>Test Number Possibly Effected</i>	<i>Test Name Possibly Effected</i>	<i>Pass/Fail</i>
4.1.2	Generate Lab Grades Table	
4.1.3	Correct Labs Displayed in Table	

NUMBER: 5.0.1		NAME: Load Course Administrator Homepage
<i>Test Number Possibly Effected</i>	<i>Test Name Possibly Effected</i>	<i>Pass/Fail</i>
5.0.2	Lab or Lecture Session Dropdown	
5.0.3	Lab Number Dropdown	

NUMBER: 5.0.4		NAME: View, Course Administrator Homepage
<i>Test Number Possibly Effected</i>	<i>Test Name Possibly Effected</i>	<i>Pass/Fail</i>
5.5.1	Load Page, Course Administrator View Grades	
5.5.2	Generate Lab Grades Table	
5.5.3	Correct Labs Displayed in Table	

NUMBER: 5.0.5		NAME: Create New Instructor Account
<i>Test Number Possibly Effected</i>	<i>Test Name Possibly Effected</i>	<i>Pass/Fail</i>
5.1.1	Load Page, Create Instructor Account Page	
5.1.2	Register-Complete Information	
5.1.3	Register-Incomplete Information	

NUMBER: 5.0.6		NAME: View All Instructors
<i>Test Number Possibly Effected</i>	<i>Test Name Possibly Effected</i>	<i>Pass/Fail</i>
5.2.1	Load Page, View All Instructors	
5.2.2	Edit Instructor	
5.2.3	Delete Instructor	

NUMBER: 5.0.7		NAME: View All Students
<i>Test Number Possibly Effected</i>	<i>Test Name Possibly Effected</i>	<i>Pass/Fail</i>
5.3.1	Load Page, View All Students	
5.3.2	Edit Student	
5.3.3	Delete Student	

NUMBER: 5.0.8		NAME: Upload Answer Key
<i>Test Number Possibly Effected</i>	<i>Test Name Possibly Effected</i>	<i>Pass/Fail</i>
5.4.1	Load Page, Upload Answer Key	
5.4.2	Browse	
5.4.3	Submit-incorrect	
5.4.4	Submit-correct	

NUMBER: 5.0.9		NAME: Search
<i>Test Number Possibly Effected</i>	<i>Test Name Possibly Effected</i>	<i>Pass/Fail</i>
none at this time		

NUMBER: 5.1.1		NAME: Load Create Instructor Account Page
<i>Test Number Possibly Effected</i>	<i>Test Name Possibly Effected</i>	<i>Pass/Fail</i>
5.1.2	Register-complete Information	
5.1.3	Register-Incomplete Information	

NUMBER: 5.1.2		NAME: Register - Complete Information
<i>Test Number Possibly Effected</i>	<i>Test Name Possibly Effected</i>	<i>Pass/Fail</i>
none at this time		

NUMBER: 5.1.3		NAME: Register - Incomplete Information
<i>Test Number Possibly Effected</i>	<i>Test Name Possibly Effected</i>	<i>Pass/Fail</i>
none at this time		

NUMBER: 5.2.1		NAME: Load View All Instructors Page
<i>Test Number Possibly Effected</i>	<i>Test Name Possibly Effected</i>	<i>Pass/Fail</i>
5.2.2	Edit	
5.2.3	Delete	

NUMBER: 5.2.2		NAME: Edit Instructor
<i>Test Number Possibly Effected</i>	<i>Test Name Possibly Effected</i>	<i>Pass/Fail</i>
none at this time		

NUMBER: 5.2.3		NAME: Delete Instructor
<i>Test Number Possibly Effected</i>	<i>Test Name Possibly Effected</i>	<i>Pass/Fail</i>
none at this time		

NUMBER: 5.3.1		NAME: Load View All Students Page
<i>Test Number Possibly Effected</i>	<i>Test Name Possibly Effected</i>	<i>Pass/Fail</i>
5.3.2	Edit	
5.3.3	Delete	

NUMBER: 5.3.2		NAME: Edit Student
<i>Test Number Possibly Effected</i>	<i>Test Name Possibly Effected</i>	<i>Pass/Fail</i>
none at this time		

NUMBER: 5.3.3		NAME: Delete Student
<i>Test Number Possibly Effected</i>	<i>Test Name Possibly Effected</i>	<i>Pass/Fail</i>
none at this time		

NUMBER: 5.4.1		NAME: Load Upload Answer Key Page
<i>Test Number Possibly Effected</i>	<i>Test Name Possibly Effected</i>	<i>Pass/Fail</i>
5.4.2	Browse	
5.4.3	Submit-incorrect	
5.4.4	Submit-correct	

NUMBER: 5.4.2		NAME: Browse
<i>Test Number Possibly Effected</i>	<i>Test Name Possibly Effected</i>	<i>Pass/Fail</i>
none at this time		

NUMBER: 5.4.3		NAME: Submit - Incorrect
<i>Test Number Possibly Effected</i>	<i>Test Name Possibly Effected</i>	<i>Pass/Fail</i>
none at this time		

NUMBER: 5.4.4		NAME: Submit - Correct
<i>Test Number Possibly Effected</i>	<i>Test Name Possibly Effected</i>	<i>Pass/Fail</i>
none at this time		

NUMBER: 5.5.1		NAME: Load Course Administrator View Grades Page
<i>Test Number Possibly Effected</i>	<i>Test Name Possibly Effected</i>	<i>Pass/Fail</i>
5.5.2	Generate Lab Grades Table	
5.5.3	Correct Labs Displayed in Table	
5.5.4	View Submitted Labs, Course Administrator	
5.5.5	View Errors, Course Administrator	

IV. Glossary of Terms

Cell: The smallest component of a Microsoft Excel workbook. Location is designated by its sheet, row, and column in the workbook.

Comments: Data stored in a Microsoft Excel workbook that pertains to a particular cell but is invisible unless user chooses to view the comment on a cell.

Gantt Chart: A popular type of bar chart that illustrates a project schedule including start and finish dates, tasks, and events that are to occur to complete the project

HTML: Hypertext Markup Language (HTML) is programming language used in the creation of Web pages.

Java: A programming language used for developing object oriented programs.

JavaScript: Javascript is a scripting language developed by Netscape that can interact with HTML source code, enabling Web authors to spice up their sites with dynamic content.

MySQL: An open source relational database management system (RDBMS) that uses Structured Query Language (SQL), the most popular language for adding, accessing, and processing data in a database.

PHP: PHP Hypertext Preprocessor is a widely-used, open-source, general-purpose scripting language that is especially suited for web development.

Sheet: Component of a workbook. Workbooks are composed of single or multiple sheets, each of which containing a spreadsheet. It should be noted that sheets within workbooks may access each others contents.

Structure Diagrams: graphical representation of the structure of the Automated Excel Grading System

Student User/Account: The most basic user of this software. Will be able to create their own accounts and use them to upload lab's and pre-lab's and also view their grades

Use Case Narrative: The basic functionality that the system will have for each of the users

Workbook: The type of files that Microsoft Excel uses which will be submitted to the Automated Excel Grading System for grading. Has file extension “.xls”

WriteableSheet: Denoted by the Automated Excel Grading System as a sheet that can has permissions such that the system may alter its contents.

xls: File extension for Workbook. See “Workbook.”