

Test Plan

(ver. 2.0)

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International Online Survey

(IOS)

Bad Robot Enterprises

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International Online Survey Test Plan

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Section 1: Introduction

1.1: Introduction & Test Explanation

This document is the first of many possible versions that will be used to describe the testing requirements for the International Online Survey. These are the requirements that need to be tested in order for the International Online Survey to be considered fully functional. As the project development continues towards a completed project, the requirements will be fulfilled, and some items maybe removed, or revised. This document will keep track of these changes, as well as those requirements that have been completed. Many updates will be made to this document in order to better prepare for the Acceptance Test document due in May 2008.

The test plan will begin with system testing. In system testing, our team is concerned with validating the specified functional requirements on the International Online Survey system. The functional requirements of the IOS system will be listed in the system test section along with non-functional requirements, exception handling, our approach to testing, and will end with the system's pass/fail criteria. This test is a crucial part of the test plan because it will help us determine if we met all of the requirements promised at the beginning of our work. Following the system test in this document is the unit testing. This is where our team tests each program unit individually to make sure that specific unit is free of data, logic, or standard errors. We have divided the units up by each page in the system. Every page in the web system has its own unit and within each unit are a number of test cases. These test cases test specific actions within each unit. The following units and test cases are represented in an Excel table format and as we progress and begin to actually produce our software, these units may become more in depth and more dense. The final portion of this document contains the integration and regression testing. This is a crucial stage in the testing process because this is where the separate units tested before combine to become a whole. We are concerned with the functionality of the units together and how they interact with each other in this stage of testing. Finally our testing is complete with regression testing which is only incorporated if software functionality that was working normal, stops working completely or no longer works correctly. Regression testing is used to discover regression bugs which may be causing these errors. As the project continues to grow, so too will this test document.

Section 2: System Test

2.1: Test Items & Functional Requirements Inventory

This section will provide a list of items that are able to be physically tested, unlike the non-functional requirements which are more subjective, and will be discussed later. This portion of the testing will require the most time, and effort not only from the testing team, but from the developing team to create and fulfill the requirements specified by our client, while trying to keep all modules independent and self sustaining.

The following list outlines the required functionality to be included in the final solution. The requirements are listed according to user case and then by screens the user will view.

General:

- * The International Online Survey is web-based.
YES NO

Administrator:

- * The Administrator user will have an account.
YES NO
- * The Administrator user will have a username and password.
YES NO
- * The Administrator will establish usernames and passwords for other users.
YES NO

Login Screen:

- * The Administrator will log in with correct username and password.
YES NO
- * An incorrect login will provide an appropriate error message.
YES NO

Welcome Screen:

- * The Administrator will have access to a control panel on the welcome screen.
YES NO
- * The Administrator will be able to view all surveys.
YES NO
- * The Administrator will be able to see site statistics, such as the number of members and surveys.
YES NO
- * The Administrator user will be able to search the database for illegal surveys.

- | | | |
|---|-----|----|
| | YES | NO |
| * The Administrator will be able to choose an illegal survey and delete it. | YES | NO |
| * The Administrator will be able to remove or warn the user who created the illegal survey. | YES | NO |
| * The Administrator will submit the changes. | YES | NO |
| * A message will appear indicating that a change has been accepted. | YES | NO |
| * The Administrator will have a message box, displaying all messages from users. | YES | NO |
| * The Administrator will have a link to create new accounts upon request. | YES | NO |
| * The Administrator will have a link to manage their account. | YES | NO |
| * The Administrator will have a link to list all of the current users. | YES | NO |
| * The Administrator will have access to a search bar, which searches the entire site. | YES | NO |
| * The Administrator will be able to logout from the welcome screen by clicking the "Logout" link. | YES | NO |

Manage Account Screen:

- | | | |
|---|-----|----|
| * The Administrator will be able to change their account name and password. | YES | NO |
| * In order for the changes to take place, the secret question must be answered correctly. | YES | NO |
| * The Administrator will be able to exit the manage account screen. | YES | NO |

Change User Password Screen:

- | | | |
|---|-----|----|
| * The Administrator user will be able to choose a user for which the password is to be changed. | YES | NO |
| * The Administrator will enter a new password for the chosen user. | YES | NO |
| * The Administrator will submit changes. | YES | NO |
| * A message will appear indicating that a change has been accepted. | YES | NO |
| * The Administrator user will be able to exit the change user password screen. | YES | NO |

Create An Account Screen:

- * The Administrator will be able to email the account name and password to the user requesting an account.
YES NO
- * The Administrator will be able to check if the account name already exists.
YES NO
- * The Administrator will be able to check if the email address already has an account registered.
YES NO
- * The Administrator will choose to give out a student account or teacher account based on the registration information.
YES NO
- * The Administrator user will be able to exit the create an account screen.
YES NO

List Current Users Screen:

- * The Administrator will be able to sort users alphabetically by selecting a letter.
YES NO
- * The Administrator will be able to search the users by account type.
YES NO
- * The Administrator will be able to search the users by typing in an account name in the search bar.
YES NO
- * The Administrator will be sent to the list current users results page after the search.
YES NO
- * The Administrator user will be able to exit the list current users screen.
YES NO

List Current Users Results Screen:

- * The Administrator will view search results alphabetically.
YES NO
- * The Administrator will be able see account names and account types of the search results.
YES NO
- * The Administrator will be able to click on the accounts to view information about them.
YES NO
- * The Administrator user will be able to exit the list current users results screen.
YES NO

Teacher:

- * The Teacher user will have an account established by the Administrator.
YES NO
- * The Teacher user will have a username and password.
YES NO

Login Screen:

- * The user will log in with correct username and password.
YES NO
- * An incorrect login will provide an appropriate error message.
YES NO

Welcome Screen:

- * The Teacher will have a link to manage their account.
YES NO
- * The Teacher will have a link to create a survey.
YES NO
- * The Teacher will be able to view all surveys they have created.
YES NO
- * The Teacher will be able to select a specific survey and view those results.
YES NO
- * The Teacher will have access to a search bar, which searches the entire site.
YES NO
- * The Teacher will be able to logout from the welcome screen by clicking the "Logout" link.
YES NO

Manage Account Screen:

- * The Teacher will be able to change their account name and password.
YES NO
- * In order for the changes to take place, the secret question must be answered correctly.
YES NO
- * The Teacher will be able to exit the manage account screen.
YES NO

User Screen:

- * The Teacher will be able to see their personal profile (name).
YES NO
- * The Teacher will be able to view all the active surveys they created.
YES NO
- * The Teacher will be able to view every survey they published.
YES NO

- * The Teacher will be able to view all surveys they created that they have not published.
YES NO
- * The Teacher will be able to click on any of these surveys and view the survey and results.
YES NO
- * The Teacher will be able to exit the user screen.
YES NO

Create a Survey Screen:

- * The Teacher will be able add a title to the survey and information about it.
YES NO
- * The Teacher will be able to add a new question or edit an existing question.
YES NO
- * The Teacher will be able to choose from a number of question formats (multiple choice, T/F, short answer, etc.).
YES NO
- * The Teacher will be asked if the survey will be password protected and if it will be,
YES NO
- * The Teacher will create a password.
YES NO
- * The Teacher will confirm this password.
YES NO
- * The Teacher will be able to save the survey.
YES NO
- * The Teacher will receive a confirmation when the survey is saved.
YES NO
- * The Teacher will be able to print out the survey.
YES NO
- * The Teacher will be able to edit that survey.
YES NO
- * The Teacher will be able to exit the create a survey screen.
YES NO

View Results Screen:

- * The Teacher will be able to view all surveys they have created.
YES NO
- * The Teacher will be able to select a specific survey and view those results.
YES NO
- * The Teacher will be able to send the results to other Teachers, an email will be sent to the other Teacher contain a link to the survey results.
YES NO
- * The Teacher will be able to print out the survey results.
YES NO
- * The Teacher will be able to allow Students to view the results or deny the Students.
YES NO

* The Teacher will be able to exit the view results screen.
YES NO

Student:

- * The Student user will have an account established by the Administrator.
YES NO
- * The Student user will have a username and password.
YES NO

Login Screen:

- * The user will log in with correct username and password.
YES NO
- * An incorrect login will provide an appropriate error message.
YES NO

Welcome Screen:

- * The Student will have a link to manage their account.
YES NO
- * The Student will have a link to take a survey.
YES NO
- * The Student will be able to view survey invitations.
YES NO
- * The Student will be asked for a password to all locked surveys.
YES NO
- * The Student will be given a confirmation if the password was correct or an error if it was incorrect.
YES NO
- * The Student will be able to see a description of the survey.
YES NO
- * The Student will be able to click on a survey and will be directed to the complete survey screen.
YES NO
- * The Student will be able to see the date they were invited to take the survey.
YES NO
- * The Student will be able to see who invited them to take the survey.
YES NO
- * The Student will be able to view completed and incomplete surveys.
YES NO
- * The Student will be able to view survey results if granted permission.
YES NO
- * The Student will have access to a search bar, which searches the entire site.
YES NO
- * The Student will be able to logout from the welcome screen by clicking the "Logout" link.
YES NO

Manage Account Screen:

- * The Student will be able to edit or add any of their personal information.
YES NO
- * The Student will be able to change their account name and password.
YES NO
- * In order for the changes to take place, the secret question must be answered correctly.
YES NO
- * The Student will be able to exit the manage account screen.
YES NO

User Screen:

- * The Student will be able to see their personal profile (name, age, gender, etc.).
YES NO
- * The Student will be able to view all the surveys they have taken.
YES NO
- * The Student will be able to view all surveys they have not taken that have been assigned.
YES NO
- * The Student will be able to click on any of these surveys and view the survey and results, if they are public.
YES NO
- * The Student will be able to exit the user screen.
YES NO

Take a Survey Screen:

- * The Student will be able to view all general surveys open to the public.
YES NO
- * The Student will be able to view up to date results of the general surveys.
YES NO
- * The Student will be able to complete any of the general surveys.
YES NO
- * The Student will be able to see the most popular general surveys.
YES NO
- * The Student will be able to view a protected survey they successfully unlocked.
YES NO
- * The Student will be able to complete the survey.
YES NO
- * The Student will be able to save their answers and submit them.
YES NO
- * The Student will be notified if any questions were left blank.
YES NO
- * The Student will be notified that their survey was submitted successfully.
YES NO

* The Student will be able to exit the take a survey screen.
YES NO

Teacher/Student:

Search Results Screen:

- * The user will view search results alphabetically.
YES NO
- * The user will be able see account names and account types or survey names.
YES NO
- * The user will be able to click on the accounts or surveys to view information about them.
YES NO

Password Recovery Screen:

- * The user must answer their secret question and submit their email address.
YES NO
- * The user will be sent an email containing their account password.
YES NO
- * The user will be shown a message if the secret question was answered wrong or if the email address entered was not found.
YES NO

Along with these requirements, the testing team will concentrate on testing all separate units that compose these requirements. These unit tests are included later on in this document.

2.2: Non-Functional Requirements Inventory Testing

- * The system should be quick and smooth, using fast servers and databases.
- * The system should also be aesthetically pleasing.

2.3: Exception Handling

While using the International Online Survey there may be some un-predicted circumstances that will cause an error and the International Online Survey must be able to handle some of these errors:

User does not provide all required information for registration:

The user must complete all required fields indicated by a red *. Required fields will contain necessary information to complete a proper profile. Failure to complete required fields will result in the system asking them to resubmit their information again with the proper data.

User must enter the login name and password that was given to them after registration when attempting to login. Failure to enter valid information will result in the system asking the user to please try again and resubmit their login requirements.

2.4: Approach to Testing

Our approach will be to start with the unit tests provided in this document, then move outwards ensuring that full modules are working correctly, and then look at integration testing of these modules to ensure the system is working properly. The goal of our system is to allow users, in our case, teachers to create surveys and issue you them to their students in order to collect data. The main feature of our program is that we are offering the use of this system free of charge, which allows many more users to take advantage of the software. As the semester continues, we will discuss our progress throughout the testing stages of our software development.

2.5: Pass/Fail Criteria

In order to ensure that the system as a whole passes testing, we must start with each individual piece. The following is a checklist of the major requirements, some of which are based on screens, to ensure that each item has either passed or failed. In order for an item to pass, it will have to undergo its specific unit test as provided. If the unit test causes a failure in the system, we will then need to fix it and use regression testing to re-test the unit/requirement.

Item Being Tested	Testing For	Expected Outcome	Pass	Fail	Comments
1 Login Page	Does the screen load?	The screen should load correctly and users will have the ability to type in their login information.			
2 Teacher Account Creation Page	Does the screen load? Is all data uploaded to the database correctly?	The screen should load correctly and users will have the ability to type in their personal information.			
3 Student Account Creation Page	Does the screen load? Is all data uploaded to the database correctly?	The screen should load correctly and users will have the ability to type in their personal information.			
4 Administrator Welcome Page	Does the screen load?	The screen should load correctly and students will have access to all functions designated to their user type.			
5 Teacher Welcome Page	Does the screen load?	The screen should load correctly and students will have access to all functions designated to their user type.			
6 Student Welcome Page	Does the screen load?	The screen should load correctly and students will have access to all functions designated to their user type.			
7 Administrator/Teacher Account Management Page	Does the screen load? Is all data uploaded to the database correctly?	The screen should load correctly and users will have the ability to change their personal information.			

Item Being Tested	Testing For	Expected Outcome	Pass	Fail	Comments
8 Administrator Account Creation Page	Does the screen load? Is all data uploaded to the database correctly?	The screen should load correctly and the new user will be created?			
9 Permanent User Page (Teacher)	Does the screen load?	The screen should load and display correctly the information about the user.			
10 Permanent User Page (Student)	Does the screen load?	The screen should load and display correctly the information about the user.			
11 List Current Users Page (Administrator)	Does the screen load?	The screen should load correctly.			
12 List Current Users Results Page (Administrator)	Does the screen load?	The screen should load correctly with all results from the previous search page.			
13 Teacher Initial Survey Creation Page	Does the screen load?	Forms to input survey title, topic, and type.			
14 Teacher Survey Creation Page	Does the screen load?	Dropdown to pick from a select list of question types.			
15 Teacher Edit Survey Page	Does the screen load?	Displays all questions currently added to this survey with buttons to edit, delete, and move.			
16 Student Account Management Page	Does the screen load? Is all data uploaded correctly to the database?	The screen should load correctly and users will have the ability to change their personal information.			
17 Student Survey Page	Does the screen load? Is all data uploaded correctly to the database?	Displays the survey with a submit button at the bottom. All data should be uploaded to the database correctly.			
18 Search Results Page	Does the screen load?	The screen displays correctly.			

Section 3: Unit Tests

The following 18 units will be tested individually and will either pass or fail. If the units meet all functional requirements, they will pass and are ready for the integration test. Once again, the interaction between these units is not important at this time; we are focusing on the performance of each unit individually. All data, logic, and standard errors will be corrected in these units before we move into the next phase of testing.

3.1: Unit Test Catalog

Test Result	Test Number	Unit Test Name
P F	1	Login Page
P F	2	Teacher Account Creation Page
P F	3	Student Account Creation Page
P F	4	Administrator Welcome Page
P F	5	Teacher Welcome Page
P F	6	Student Welcome Page
P F	7	Administrator/Teacher Account Management Page
P F	8	Administrator Account Creation Page
P F	9	Permanent User Page (Teacher)
P F	10	Permanent User Page (Student)
P F	11	List Current Users Page (Administrator)
P F	12	List Current Users Results Page (Administrator)
P F	13	Teacher Initial Survey Creation Page
P F	14	Teacher Survey Creation Page
P F	15	Teacher Edit Survey Page
P F	16	Student Account Management Page
P F	17	Student Survey Page
P F	18	Search Results Page

3.2: Login Page

Test Number 1 - Login Page

Number	Test Case Name	Description	Input	Expected Result	Actual Result/Comments	Test Result (Pass/Fail)
1.1	Login page loads	Correct page loads	N/A	Login page loads and all components are displayed		
1.2	Correct Login - Administrator	Login with valid administrator account and password	Administrator username and password	Administrator Welcome page opens		
1.3	Correct Login - Teacher	Login with valid teacher account and password	Teacher username and password	Teacher Welcome page opens		
1.4	Correct Login - Student	Login with valid student account and password	Student username and password	Student Welcome page opens		
1.5	Incorrect Username Login	Login with invalid username	Username	Error message stating that the username is incorrect is displayed		
1.6	Incorrect Password Login	Login with invalid password	Password	Error message stating that the password is incorrect is displayed		
1.7	Login with empty fields	Login with username and password fields empty.	N/A	Error message stating that the fields are empty is displayed		
1.8	Select Save My E-Mail Address & Password	Selects Save My E-Mail Address & Password bubble	Save My E-Mail Address & Password	E-mail address & password of user appears every time this page is accessed		
1.9	Select Save My E-Mail Address	Selects Save My E-Mail Address bubble	Save My E-Mail Address	E-mail address of user appears every time this page is accessed		
1.10	Select Always Ask For My E-Mail Address & Password	Selects Save My E-Mail Address & Password bubble	Always ask	E-mail address & password of user never appears when this page is accessed		

Number	Test Case Name	Description	Input	Expected Result	Actual Result/Comments	Test Result (Pass/Fail)
1.11	Click Register Now - Teacher	User clicks the Teacher Register Now button	Teacher	The Teacher Account Creation page opens		
1.12	Click Register Now - Student	User clicks the Student Register Now button	Student	The Student Account Creation page opens		
					Summary of Tests for this Unit	

3.3: Teacher Account Creation Page

Test Number 2 - Teacher Account Creation Page

Number	Test Case Name	Description	Input	Expected Result	Actual Result/Comments	Test Result (Pass/Fail)
2.1	Teacher Account Creation page loads	Correct page loads	N/A	Account Creation page loads with proper items displayed		
2.2	Enter accepted username	Teacher enters a username that is accepted	Username	The name is accepted and it will be sent to the admin upon submission		
2.3	Enter unaccepted username	Teacher enters a username that is taken or inappropriate	Username	A proper error message will display explaining the problem with the username		
2.4	Enter accepted password	Teacher enters a password that is accepted	Password	The password is accepted and is compared to the retype		
2.5	Enter unaccepted password	Teacher enters a password that is unaccepted	Password	A proper error message will display explaining the problem with the password		
2.6	Retype password correctly	Teacher retypes password correctly	Password	Password is accepted and paired with username, sent to admin upon submission		
2.7	Retype password incorrectly	Teacher retypes password incorrectly	Password	A proper error message will display explaining the retype does not match		
2.8	Password strength	After user types in password, the strength of that password is displayed	Password	The strength bar will display weak for an easy to hack password, strong if difficult		
2.9	Select secret question	Teacher selects a secret question to answer if they want to change password	N/A	The selected secret question will be sent to the admin upon submission		
2.10	Enter secret question answer	Teacher enters an answer to the secret question selected prior	Answer to secret question	Answer to secret question will be sent to admin with question upon submission		

Number	Test Case Name	Description	Input	Expected Result	Actual Result/Comments	Test Result (Pass/Fail)
2.11	Alternate e-mail address	Teacher enters an optional alternate e-mail address	E-mail address	The alternate e-mail address is sent to the admin upon submission		
2.12	Click submit button	Teacher clicks the submit button	N/A	If form is filled out correctly a success message, if not, error message		
					Summary of Tests for this Unit	

3.4: Student Account Creation Page

Test Number 3 - Student Account Creation Page

Number	Test Case Name	Description	Input	Expected Result	Actual Result/Comments	Test Result (Pass/Fail)
3.1	Student Account Creation page loads	Correct page loads	N/A	Account Creation page loads with proper items displayed		
3.2	Enter accepted username	Student enters a username that is accepted	Username	The name is accepted and it will be sent to the admin upon submission		
3.3	Enter unaccepted username	Student enters a username that is taken or inappropriate	Username	A proper error message will display explaining the problem with the username		
3.4	Enter accepted password	Student enters a password that is accepted	Password	The password is accepted and is compared to the retype		
3.5	Enter unaccepted password	Student enters a password that is unaccepted	Password	A proper error message will display explaining the problem with the password		
3.6	Retype password correctly	Student retypes password correctly	Password	Password is accepted and paired with username, sent to admin upon submission		
3.7	Retype password incorrectly	Student retypes password incorrectly	Password	A proper error message will display explaining the retype does not match		
3.8	Password strength	After user types in password, the strength of that password is displayed	Password	The strength bar will display weak for an easy to hack password, strong if difficult		
3.9	Select secret question	Student selects a secret question to answer if they want to change password	Secret question	The selected secret question will be sent to the admin upon submission		

Number	Test Case Name	Description	Input	Expected Result	Actual Result/Comments	Test Result (Pass/Fail)
3.10	Enter secret question answer	Student enters an answer to the secret question selected prior	Answer to secret question	Answer to secret question will be sent to admin with question upon submission		
3.11	Alternate e-mail address	Student enters an optional alternate e-mail address	E-mail address	The alternate e-mail address is sent to the admin upon submission		
3.12	Enter first name	Student enters their first name	First name	The student's first name is sent to the administrator upon submission		
3.13	Enter last name	Student enters their last name	Last name	The student's last name is sent to the administrator upon submission		
3.14	Select gender	Student fills bubble for male or female	Gender	The student's gender will be sent to the administrator upon submission		
3.15	Enter birth date	Student enters their birth date by selecting month and day and typing in year.	Date of birth	All birth date information sent to administrator upon submission		
3.16	Improper birth date	Student forgets one part of the birth date or enters illegal value	N/A	An error message appears telling the user to input their information again		
3.16	Select state	Student selects their state from the pull down menu	State	State selected is sent to administrator upon submission		
3.17	Enter zip code	Student enters their zip code	Zip code	Zip code sent to the administrator upon submission		
3.18	Select time zone	Student selects their time zone from the pull down menu	Time zone	Time zone will be sent to the administrator upon submission		

Number	Test Case Name	Description	Input	Expected Result	Actual Result/Comments	Test Result (Pass/Fail)
3.19	Small business checkbox	Student either checks or unchecks 'I work for a small business'	Small business employee	If student works for small business, info will be sent to admin upon submission		
3.20	Click the submit button	Student clicks the submit button	N/A	If all fields are filled out correctly, info sent to admin Error message if missing		
					Summary of tests for this unit	

3.5: Administrator Welcome Page

Test Number 4 - Administrator Welcome Page

Number	Test Case Name	Description	Input	Expected Result	Actual Result/Comments	Test Result (Pass/Fail)
4.1	Administrator welcome page loads	Correct page loads	N/A	Welcome page loads and all components are displayed		
4.2	Administrator name is displayed	The correct administrator name is displayed next to 'Welcome'	N/A	Top left corner will say 'Welcome _____' with admin name in blank		
4.3	Click Manage Account	Admin clicks manage account link	Left Click	Administrator manage account page opens		
4.4	Click Create Accounts	Admin clicks create accounts link	Left Click	Create Accounts page opens		
4.6	Click List Current Users	Admin clicks the list current users link	Left Click	Current Users page opens		
4.7	Click account name	Admin clicks an account name in the permanent users box	Left Click	The users information of the account selected will be displayed		
4.8	Click Delete (permanent users box)	Admin clicks delete in the permanent users box	Left Click	The selected user's account is removed from the database		
4.9	Click survey name	Admin clicks a survey name in the surveys box	Left Click	The selected survey is displayed for the administrator		
4.10	Click Delete (surveys box)	Admin clicks delete in the surveys box	Left Click	The selected survey is removed from the database		
4.11	Click Ban	Admin clicks ban in the quality control box	Left Click	The selected user's account is banned from the website		
4.12	Display message	Admin clicks a message in the quality control box	Left Click	The message selected is opened and displayed for administrator		

Number	Test Case Name	Description	Input	Expected Result	Actual Result/Comments	Test Result (Pass/Fail)
4.13	Display Total Users	Total Users Published is displayed in the live stats box	N/A	Numerical value of the total users is displayed.		
4.14	Display Current Users Logged In	Current Users Published is displayed in the current users box	N/A	Numerical value of the total users logged in is displayed.		
4.15	Display Total Surveys Created	Total Surveys Created Published is displayed in the live stats box	N/A	Numerical value of the total surveys created is displayed.		
4.16	Display Total Surveys Published	Total Surveys Published is displayed in the live stats box	N/A	Numerical value of the total surveys published created is displayed.		
					Summary of Tests for this Unit	

3.6: Teacher Welcome Page

Test Number 5 - Teacher Welcome Page

Number	Test Case Name	Description	Input	Expected Result	Actual Result/Comments	Test Result (Pass/Fail)
5.1	Teacher welcome page loads	Correct page loads	N/A	Welcome page loads and all components are displayed		
5.2	Teacher name is displayed	The correct teacher name is displayed next to 'Welcome'	N/A	Top left corner will say 'Welcome _____' with teacher name in blank		
5.3	Click Manage Account	Teacher clicks manage account link	Left Click	Teacher manage account page opens		
5.4	Click Create a Survey	Teacher clicks create a survey link	Left Click	Create a Survey page opens		
5.5	Click '+' next to Published Surveys	Teacher clicks the '+' next to Published Surveys	Left Click	Published Surveys expands and teacher's surveys are displayed		
5.6	Click '+' next to Active Surveys	Teacher clicks the '+' next to Active Surveys	Left Click	Active Surveys expands and teacher's surveys are displayed		
5.7	Click '+' next to Unpublished Surveys	Teacher clicks the '+' next to Unpublished Surveys	Left Click	Unpublished Surveys expands and teacher's surveys are displayed		
5.8	Search Function	Teacher clicks the Search button	Survey Name/ Account Name	Search Results page opens with results answering search queries.		
5.9	Click Survey Name	Teacher clicks a survey name which is displayed	Left Click	Survey the teacher selects opens		
					Summary of Tests for this Unit	

3.7: Student Welcome Page

Test Number 6 - Student Welcome Page

Number	Test Case Name	Description	Input	Expected Result	Actual Result/Comments	Test Result (Pass/Fail)
6.1	Student welcome page loads	Correct page loads	N/A	Welcome page loads and all components are displayed		
6.2	Student name is displayed	The correct student name is displayed next to 'Welcome'	N/A	Top left corner will say 'Welcome _____' with student name in blank		
6.3	Click Manage Account	Student clicks manage account link	Left Click	Student Manage Account page opens		
6.4	Click Take a Survey	Student clicks Take a Survey link	Left Click	Take a Survey page opens		
6.5	Click View Public Results	Student clicks view public results link	Left Click	Public Survey Results page opens		
6.6	Click survey name (history box)	Student clicks a survey name in the history box	Left Click	The survey selected is displayed to the student		
6.7	Click survey name (non-completed surveys box)	Student clicks a survey name in the non-completed surveys box	Left Click	The survey selected is displayed to the student		
6.8	Search Function	Student clicks the Search button	Survey Name/ Account Name	Search Results page opens with results answering search queries.		
					Summary of Tests for this Unit	

3.8: Administrator/Teacher Account Management Page

Test Number 7 - Administrator/Teacher Management Page

Number	Test Case Name	Description	Input	Expected Result	Actual Result/Comments	Test Result (Pass/Fail)
7.1	Administrator/Teacher Management page loads	Correct page loads	N/A	Management page loads, all components are displayed		
7.2	Administrator/Teacher name is displayed	The correct admin/teacher name is displayed next to 'Welcome'	N/A	Left corner says 'Welcome _____' with admin/teacher name in blank		
7.3	Enter new accepted username	Admin/teacher enters a username that is accepted	Username	Admin user name changed, teacher username sent to admin upon submission		
7.4	Enter new unaccepted username	Admin/teacher enters a username that is taken or inappropriate	Username	A proper error message will display explaining the problem with the username		
7.5	Enter new accepted password	Admin/teacher enters a password that is accepted	Password	The password is accepted and is compared to the retype		
7.6	Enter new unaccepted password	Admin/teacher enters a password that is unaccepted	Password	A proper error message will display explaining the problem with the password		
7.7	Retype new password correctly	Admin/teacher retypes password correctly	Password	Admin password changed, teacher password sent to admin upon submission		
7.8	Retype new password incorrectly	Admin/teacher retypes password incorrectly	Password	A proper error message will display explaining the retype does not match		
7.9	Password strength	After user types in password, the strength of that password is displayed	Password	The strength bar will display weak for an easy to hack password, strong if difficult		
7.10	Secret Question displayed	Admin/teacher secret question is displayed to the user	N/A	The selected secret question will be displayed		

Number	Test Case Name	Description	Input	Expected Result	Actual Result/Comments	Test Result (Pass/Fail)
7.11	Enter secret question answer	Admin/teacher enters the answer to the secret question displayed prior	Answer to secret question	If answer is correct, allow submission, if incorrect display appropriate message		
7.12	Click submit button	Admin/teacher clicks the submit button	Left Click	If form is filled out correctly a success message, if not, error message		
					Summary of Tests for this Unit	

3.9: Administrator Account Creation Page

Test Number 8 - Administrator Create User Account Page

Number	Test Case Name	Description	Input	Expected Result	Actual Result/Comments	Test Result (Pass/Fail)
8.1	Administrator Create User Account page opens	Correct page loads	N/A	Create User Account page loads with proper items displayed		
8.2	Enter e-mail address	Administrator enters an e-mail address	E-mail address	Account info is sent to the entered e-mail address upon submission		
8.3	Select Account Type	Administrator selects the type of account	Account type	The type of account created is selected based on the type chosen		
8.4	Click submit button	Administrator clicks the submit button	Left Click	The account information is sent to the e-mail address entered above		
					Summary of Tests for this Unit	

3.10: User Page (Teacher)

Test Number 9 - User Page (Teacher)

Number	Test Case Name	Description	Input	Expected Result	Actual Result/Comments	Test Result (Pass/Fail)
9.1	User (teacher) page opens	Correct page loads	N/A	Permanent user page loads, all components are displayed		
9.2	Teacher name is displayed	The correct teacher name is displayed	N/A	Teacher name appears at the top of the page and next to 'Name:'		
9.3	Active Surveys	All of the teachers active surveys	N/A	The currently active surveys created by the teacher are displayed		
9.4	Published Surveys	All of the surveys published by the teacher	N/A	The entire history of published surveys by the teacher is displayed		
9.5	Unpublished Surveys	All of the surveys created but not published by the teacher	N/A	The surveys created that are yet to be published by the teacher are displayed		
9.6	Click survey name	Teacher clicks a survey name which is displayed	Left Click	Survey the teacher selects opens		
					Summary of Tests for this Unit	

3.11: User Page (Student)

Test Number 10 - User Page (Student)

Number	Test Case Name	Description	Input	Expected Result	Actual Result/Comments	Test Result (Pass/Fail)
10.1	User (student) page opens	Correct page loads	N/A	Permanent user page loads, all components are displayed		
10.2	Teacher name is displayed	The correct student name is displayed	N/A	Student name appears at the top of the page		
10.3	Student information displayed	The correct student information is displayed	N/A	All of the students personal information is displayed under 'Student Profile'		
10.4	Surveys Taken	All of the surveys taken by the student	N/A	The surveys taken by the student are displayed		
10.5	Surveys Not Taken	All of the surveys still waiting to be taken by the student	N/A	The surveys assigned to the student which have not been taken are displayed		
10.6	Click survey name	Student clicks a survey name which is displayed	Left Click	Survey the teacher selects opens		
					Summary of Tests for this Unit	

3.12: List Current Users Page

Test Number 11 - List Current Users Page (Administrator)

Number	Test Case Name	Description	Input	Expected Result	Actual Result/Comments	Test Result (Pass/Fail)
11.1	List Current Users Page opens	Correct page loads	N/A	Page loads, all components are displayed		
11.2	Click letter	Administrator clicks a letter next to sort users	Left Click	List results page opens with accounts begging with letter chosen		
11.3	Select account type	Administrator selects an account type next to Search	Account type	The following search will narrow down the results to the account type selected		
11.4	Enter search criteria	Administrator enters an account name to search for	Account name	The following search will narrow down the results to the account name selected		
11.5	Click Search button	Administrator clicks the search button	Left Click	List results page opens using above search criteria		
					Summary of Tests for this Unit	

3.13: List Current Users Results Page

Test Number 12 - List Current Users Results Page (Administrator)

Number	Test Case Name	Description	Input	Expected Result	Actual Result/Comments	Test Result (Pass/Fail)
12.1	List Current Users Results Page opens	Correct page loads	N/A	Page loads, all components are displayed		
12.2	Name field	The name column displays properly	N/A	List of names which agree with the previous page are displayed		
12.3	Account Type field	The Account Type column displays properly	N/A	List of account types are displayed next to the names		
12.4	Click Name	Administrator clicks a Name	Left Click	The information of the Name selected will be displayed		
					Summary of Tests for this Unit	

3.14: Teacher Initial Survey Creation Page

Test Number 13 - Teacher Initial Survey Creation Page

Number	Test Case Name	Description	Input	Expected Result	Actual Result/Comments	Test Result (Pass/Fail)
13.1	Teacher Initial Survey Creation Page loads	Correct page loads	N/A	Creation page loads and all components are displayed		
13.2	Teacher name is displayed	The correct teacher name is displayed next to 'Welcome'	N/A	Top left corner will say 'Welcome _____' with teacher name in blank		
13.3	Click Manage Account	Teacher clicks manage account link	Left Click	Teacher manage account page opens		
13.4	Click Create a Survey	Teacher clicks create a survey link	Left Click	Create a Survey page opens		
13.5	Enter Survey Topic	Teacher enters the topic of their survey	Survey topic	The survey topic is sent to the database upon submission		
13.6	Enter Survey Name	Teacher enters the name of their survey	Survey name	The survey name is sent to the database upon submission		
13.7	Select protection	Teacher selects protected or public	Left Click	If public is selected, survey will be accessed by all, and the opposite if protected		
13.9	Click Submit	Teacher clicks the Submit button	Left Click	The prior information is sent into the database, next survey creation page opens		
13.10	Search Function	Teacher clicks the Search button	Survey Name/ Account Name	Search Results page opens with results answering search queries.		
					Summary of Tests for this Unit	

3.15: Teacher Survey Creation Page

Test Number 14 - Teacher Create Survey Page

Number	Test Case Name	Description	Input	Expected Result	Actual Result/Comments	Test Result (Pass/Fail)
14.1	Teacher Create Survey Page loads	Correct page loads	N/A	Create Survey page loads, all components are displayed		
14.2	Teacher name is displayed	The correct teacher name is displayed next to 'Welcome'	N/A	Top left corner will say 'Welcome _____' with teacher name in blank		
14.3	Click Manage Account	Teacher clicks manage account link	Left Click	Teacher manage account page opens		
14.4	Click Create a Survey	Teacher clicks create a survey link	Left Click	Create a Survey page opens		
14.5	Click question type	Teacher selects the question type from the pull down menu	Left Click	An empty format of the selected question type is displayed		
14.6	Click Submit Question	After question is created, teacher clicks submit question	Left Click	The survey is displayed with created questions		
14.7	Click Publish Survey	Teacher clicks the publish survey button when complete	Left Click	Survey is published to the website and is displayed to the teacher		
14.9	Click Edit Survey	Teacher clicks the edit survey button	Left Click	The Edit Survey page opens		
14.10	Search Function	Teacher clicks the Search button	Survey Name/ Account Name	Search Results page opens with results answering search queries.		
					Summary of Tests for this Unit	

3.16: Teacher Edit Survey Page

Test Number 15 - Teacher Edit Survey Page

Number	Test Case Name	Description	Input	Expected Result	Actual Result/Comments	Test Result (Pass/Fail)
15.1	Teacher Edit Survey Page loads	Correct page loads	N/A	Edit Survey page loads, all components are displayed		
15.2	Teacher name is displayed	The correct teacher name is displayed next to 'Welcome'	N/A	Top left corner will say 'Welcome _____' with teacher name in blank		
15.3	Click Manage Account	Teacher clicks manage account link	Left Click	Teacher manage account page opens		
15.4	Click Create a Survey	Teacher clicks create a survey link	Left Click	Create a Survey page opens		
15.5	Click Add Question	Teacher clicks the add question button	Left Click	Teacher Create Survey page opens		
15.6	Click arrow up/down	Teacher clicks the arrows next to a question up/down	Left Click	Question moves up if up arrow is clicked and down if down arrow is clicked		
15.7	Click Delete	Teacher clicks the delete button next to a question	Left Click	The selected question is removed from the survey		
15.8	Click Submit Changes	Teacher clicks the submit changes button	Left Click	The changes made are published over the old survey		
15.9	Search Function	Teacher clicks the Search button	Survey Name/ Account Name	Search Results page opens with results answering search queries.		
					Summary of Tests for this Unit	

3.17: Student Account Management Page

Test Number 16 - Student Account Management Page

Number	Test Case Name	Description	Input	Expected Result	Actual Result/Comments	Test Result (Pass/Fail)
16.1	Student Account Management page loads	Correct page loads	N/A	Account Management page loads with proper items displayed		
16.2	Enter new accepted username	Student enters a username that is accepted	Username	The name is accepted and it will be sent to the admin upon submission		
16.3	Enter new unaccepted username	Student enters a username that is taken or inappropriate	Username	A proper error message will display explaining the problem with the username		
16.4	Enter new accepted password	Student enters a password that is accepted	Password	The password is accepted and is compared to the retype		
16.5	Enter new unaccepted password	Student enters a password that is unaccepted	Password	A proper error message will display explaining the problem with the password		
16.6	Retype new password correctly	Student retypes password correctly	Password	Password is accepted and paired with username, sent to admin upon submission		
16.7	Retype new password incorrectly	Student retypes password incorrectly	Password	A proper error message will display explaining the retype does not match		
16.8	Password strength	After user types in password, the strength of that password is displayed	Password	The strength bar will display weak for an easy to hack password, strong if difficult		
16.9	Secret Question	Student's secret question is displayed	N/A	The secret question chosen during account creation is displayed		
16.10	Enter secret question answer	Student enters an answer to the secret question selected prior	Answer to secret question	If correct, account changes sent to admin upon submission, error if wrong		

Number	Test Case Name	Description	Input	Expected Result	Actual Result/Comments	Test Result (Pass/Fail)
16.11	Enter new first name	Student enters their first name	First name	The student's first name is sent to the administrator upon submission		
16.12	Enter new last name	Student enters their last name	Last name	The student's last name is sent to the administrator upon submission		
16.13	Select new gender	Student fills bubble for male or female	Gender	The student's gender will be sent to the administrator upon submission		
16.14	Enter new birth date	Student enters their birth date by selecting month and day and typing in year.	Year of birth	All birth date information sent to administrator upon submission		
16.15	Select new state	Student selects their state from the pull down menu	State	State selected is sent to administrator upon submission		
16.16	Enter new zip code	Student enters their zip code	Zip code	Zip code sent to the administrator upon submission		
16.17	Select new time zone	Student selects their time zone from the pull down menu	Time zone	Time zone will be sent to the administrator upon submission		
16.18	Small business checkbox	Student either checks or unchecks 'I work for a small business'	Small business employee	If student works for small business, info will be sent to admin upon submission		
16.19	Click the submit button	Student clicks the submit button	N/A	If all fields are filled out correctly, info sent to admin Error message if missing		
					Summary of tests for this unit	

3.18: Student Survey Page

Test Number 17 - Student Take Survey Page

Number	Test Case Name	Description	Input	Expected Result	Actual Result/Comments	Test Result (Pass/Fail)
17.1	Student Take Survey page loads	Correct page loads	N/A	Take Survey page loads, all components are displayed		
17.2	Student name is displayed	The correct student name is displayed next to 'Welcome'	N/A	Top left corner will say 'Welcome _____' with student name in blank		
17.3	Click Manage Account	Student clicks manage account link	Left Click	Student Manage Account page opens		
17.4	Click Take a Survey	Student clicks Take a Survey link	Left Click	Take a Survey page opens		
17.6	Answer question	Student answers a question	Answer	The answer to the question is stored in the database upon submission		
17.7	Click Save Answers	Student clicks the save answers button	Left Click	Answers are saved, student may return back and complete the survey later		
17.8	Click Submit Survey	Student clicks the submit survey button	Left Click	The survey results are shown if all fields are filled, error message if empty fields		
17.9	Search Function	Student clicks the Search button	Survey Name/ Account Name	Search Results page opens with results answering search queries.		
					Summary of Tests for this Unit	

3.19: Search Results Page

Test Number 18 - Search Results Page

Number	Test Case Name	Description	Input	Expected Result	Actual Result/Comments	Test Result (Pass/Fail)
18.1	Search Results page opens	Correct page loads	N/A	Search Results page loads, all components are displayed		
18.2	Survey/Usernames	The survey names or account names are displayed	N/A	All of the names that matched the search are displayed		
18.3	Click username	User clicks a username	Left Click	The information of the selected user is displayed		
18.4	Click survey name	User clicks a survey name	Left Click	The survey selected is displayed to the user		
					Summary of Tests for this Unit	

Section 4: Integration/Regression Test

4.1: Explanation & Integrated Units

The International Online Survey is being created on the foundation of already produced modules, the integration and regression tests conducted for this project will consist mostly of user created instances.

In the event that a unit does not pass the following tests, that unit will be fixed, and then that unit along with all related units will be re-evaluated for accuracy. In the event that one unit passes and the other does not pass, both units will need to be evaluated in order to determine where and why the error occurred. In that event, depending on the circumstances in which the error occurred, all affected units may need to be retested.

Unit Number	Linked Units
1	2, 3, 4, 5, 6
2	1
3	1
4	7, 8, 9, 10, 11, 12, 18
5	7, 13, 14, 15, 18
6	16, 17, 18
7	4, 5
8	4
9	4
10	4
11	4
12	4
13	5, 18
14	5, 18
15	5, 18
16	6
17	6, 18
18	4, 5, 6, 13, 14, 15, 17

Examples of Integration Tests:

- If the user does not provide valid login information, they do not have access to the rest of the program or information in the database.
- If a Teacher logs in, they are not able to see or access the Account Creation Page.
- If a Teacher or Administrator selects Manage Account, the proper account management page will load.