Lab 3 - Inclusive Classroom Prototype Test Plane

Travis Bennett, Aubrie Davie, Dalton Hanbury, Greg Hubbard, Colton Hurst, Randy

Layne, Grant Ralls, Sergiy Yermak

CS 411w Thomas Kenndey

November 11, 2021

Version 1

4 Test Procedures	3
4.1 Student Test Category	3
4.1.1 Student Dashboard	3
4.1.2 Live Video Call To Action	4
4.1.3 Video Meeting View	6
4.1.4 Live Video View	7
4.1.5 Recorded Video View	8
4.1.6 Graded Assignment/Feedback View	9
4.1.7 Student Profile View	10
4.1.8 Class Detail View	11
4.1.9 Student Assignment Submission View	12
4.2 Teacher Test Category	13
4.2.1 Teacher Dashboard	13
4.2.2 Assignment Index View	14
4.2.3 Assignment Overview Creation View	15
4.2.4 Assignment Content Creation View	17
4.2.5 Class Overview View	18
4.2.6 Video Recording Creation View	19
4.2.7 Grade Assignment View	20
4.3 Administrator Test Category	21
4.3.1 Administrator Dashboard	21
4.3.2 Class Creation View	22
4.3.3 Teacher Evaluation View	23
4.3.4 Teacher Index Overview	24
4.3.5 Class Overview	26
4.3.6 Student View	28
4.3.7 Student Index View	30
4.4 Multi-Role Test Category	31
4.4.1 Login View	31
4.4.2 Registration View	32
4.5 Assignments	33
4.5.1 Short Answer Question	33
4.5.2 Essay Question	35
4.5.3 True or False Question	37
4.5.4 Multiple Choice Question	39
5 Traceability to Requirements	41
5.1 Student Test Category	41
5.2 Teacher Test Category	41

5.3 Administrator Test Category	42
5.4 Multi-Role Test Category	42
5.5 Assignments Test Category	42

4 Test Procedures

4.1 Student Test Category

4.1.1 Student Dashboard

Test Category: System	Description: Verify student can view dashboard tabs				
Test Case: 4.1.1	Case Name: Student Dashboard View Version: 1.0 Written By: Randy Layne				
Requirements Fulfilled: 3.1.1.1	Purpose: To verify that a logged in student is able to view the Student Dashboard and navigate tabs.				

- 1. Obtain the login information of a student user
- 2. Several incomplete assignments should be seeded for student
- 3. Several completed assignments should be seeded for the student

Test	Case Activity	Pass/Fail	Comments	Expected Result
1	Using the login information from the setup instructions, fill out the login and press "Login"			The application should successfully navigate to the Student Dashboard view.
2	Scroll down in Classwork Tab			Assignments should be listed in tabular format, with incomplete assignments listed before complete assignments.
3	Click the name of an incomplete assignment			Application should redirect to the Student Assignment Submission view for that assignment.
4	Click back button in Student Assignment Submission view			Application should redirect back to the Student Dashboard view.
5	Click the name of a completed assignment			Application should redirect to Graded Assignment view for that assignment.
6	Click back button in Graded Assignment view			Application should redirect back to the Student Dashboard view.
7	Click the Meeting Tab			The meeting tab should display links to recorded video meeting and recorded video views.
8	Click Classwork Tab			The tabular assignment list should reappear.

4.1.2 Live Video Call To Action

Test Category: System	Description: Verify Live Video Call to Action appears						
Test Case: 4.1.2	Case Name: Video Call to Action Version: 1.0 Written By: Randy I						
Requirements Fulfilled: 3.1.1.2	Purpose: To verify that a live video is in progress.	Purpose: To verify that a logged in student sees a call to action when a ive video is in progress.					

Setup Conditions:

- 1. Obtain the login information of a teacher user
- 2. Create a live video session as a teacher user
- 3. Obtain the login information of a student user
- 4. Login as a student

Test	Case Activity	Pass/Fail	Comments	Expected Result
1	Navigate to the Student Dashboard			A call to action should appear in the lower right informing the user of a live video session.
2	Click the "Join Meeting" button in the call to action			Application should redirect to the Live Video view.
3	Navigate to the Student Dashboard			Application should redirect back to the Student Dashboard view. Call to action should still be present.
4	Click on an incomplete assignment			Application should redirect to Student Assignment Submission view for that assignment and Call to action should still be present.

4.1.3 Video Meeting View

Test Category: System	Description: Verify Video Meeting View functionality				
Test Case: 4.1.3	Case Name: Video Meeting View	Version: 1.0	Written By: Randy Layne		
Requirements Fulfilled: 3.1.1.3	Purpose: Verify that a logged in student is able to view Video Meeting View				

- 1. Obtain the login for a student user
- 2. Seed the DB with 3 recorded video meetings that are for classes that the student in step 1 is assigned to.
- 3. Seed the DB recorded video meetings that are for classes that the student in step 1 is not assigned to.
- 4. Seed the DB with a video meeting set to today's date plus one week that is for a class the student in step 1 is assigned to.
- 5. Seed the DB with a video meeting set to the current date and time that is for a class the student in step 1 is assigned to.
- 6. Login using credentials from step 1.
- 7. From the Student Dashboard view, click the meetings tab.

Test Case Activity		Pass/Fail	Comments	Expected Result
1	Click the Meetings link			Application should redirect to the Meeting View. A list of meetings should be displayed in chronological order.
2	Scroll down until the live video from the setup instructions is displayed.			The row should include a "Join" button.
3	Click the "Join" button			Application should redirect to the Live Video view.
4	Click the "Back" button			Application should redirect to the Video Meeting View
5	Find the first recorded video in the list			The row should include a "Watch" button.
6	Click the "Watch" button			Application should redirect to the Recorded Video view.
7	Click the "Back" button			Application should redirect to the Video Meeting View

8	Scroll through the list of videos.		The meeting that is not for a class the student is in should not be visible.
	videos.		student is in should not be visible.

4.1.4 Live Video View

Test Category: System	Description: Verify a student's ability to view ongoing live-streams				
Test Case: 4.1.4	Case Name: Live Video ViewVersion: 1.0Written By: Dalton Hanbury				
Requirements Fulfilled: 3.1.1.4	Purpose: To verify a student's ability to view ongoing live-streams				

- 1. Obtain the login information of a student user
- 2. Login as a student
- 3. Navigate to the Student Dashboard.
- 4. Navigate to the Video Meeting View.
- 5. Select an ongoing livestream to view.

Test Case Activity		Pass/Fail	Comments	Expected Result
1	Open the selected class livestream from the Video Meeting View.			Redirected to the Live Video View for the selected class meeting.
2	View the class details for the ongoing livestream.			The selected livestream's details such as the name of the class, title of the meeting, teacher teaching the class, and date of the meeting should be visible.
3	View and interact with the livestream		The class livestream should be via a Zoom livestream integra with chat and speaking feature available.	
4	Exit the Live Video View using the exit button.			Redirected back to the Video Meeting View.

4.1.5 Recorded Video View

Test Category: System	Description: Verify the ability of a student to view class recordings.				
Test Case: 4.1.5	Case Name: Recorded Version: Video View		Written By: Dalton Hanbury		
Requirements Fulfilled: 3.1.1.5	Purpose: To verify a student's ability to view class recordings uploaded by the teacher.				

Setup Conditions:

- 1. Obtain the login information of a student user
- 2. Login as a student.
- 3. Navigate to the Student Dashboard.
- 4. Navigate to the Video Meeting View.
- 5. Select a recorded meeting to view.

Test Case Activity		Pass/Fail	Comments	Expected Result
1	Open the selected class recording from the Video Meeting View.			Redirected to the Recorded Video View for the selected class recording.
2	View the class details for the recording.			The selected recording's details such as the name of the class, title of the meeting, teacher teaching the class, and date and time of the meeting should be visible.
3	View and interact with the recorded meeting.			The class recording should be visible via a Zoom recorded meeting integration with playback, pause, skip, and start features.
4	Exit the Recorded Video View using the exit button.			Redirected back to the Video Meeting View.

4.1.6 Graded Assignment/Feedback View

Test Category: System	Description: Verify that a student can view received feedback for graded assignments.				
Test Case: 4.1.6	Case Name: Graded Assignment/Feedback View	Version: 1.0	Written By: Dalton Hanbury		
Requirements Fulfilled: 3.1.1.6	Purpose: To verify that students can view received feedback for graded assignments.				

- 1. Obtain the login information of a student user.
- 2. Login as a student.
- 3. Navigate to the student dashboard.
- 4. Select a graded assignment to view.

Test	Case Activity	Pass/Fail Comments		Expected Result
1	Open the selected graded assignment from the student dashboard.			Redirected to the Graded Assignment/Feedback view for the specified graded assignment.
2	View background details associated with the graded assignment.			The name of the assignment, class associated with assignment, teacher notes, submission date, and due date should be visible.
3	View overall grade of assignment			Calculated grade average for the entire assignment based on the teacher's grade should be visible.
4	View attached files associated with graded assignment.			Attached files included by teacher or submitted by student should be visible.
5	View answers submitted by the student.			Answers submitted by the student and the corresponding questions should be visible.
6	View credit received for each answer submitted by the student.			Credit received for each question answered by the student should be visible.
7	View feedback received for each answer given by the student.			Feedback for short answers, essay, "true or false", and "select the only one that applies" questions should be visible.

4.1.7 Student Profile View

Test Category: System	Description: Verify that a student can create and modify their student profile.				
Test Case: 4.1.7	Case Name: Student Profile View	Version: 1.0	Written By: Gregory Hubbard		
Requirements Fulfilled: 3.1.1.7	Purpose: To verify that a logged in student can create and modify their student profiles				

- 1. Obtain the login information of the student user
- 2. Use the student credentials from step 1 to login the client-side application
- 3. From the Student Dashboard View, click on the student profile icon

Test Case Activity		Pass/Fail	Comments	Expected Result
1	Open the User Profile view selection from main page			The main page should direct to the profile edit/create page after click interaction.
2	Click "Profile add picture"			Field should allow the upload of a 180 x 180 pixel jpg.
3	Click "Profile change picture"			Field should allow the upload of a 180 x 180 pixel jpg to replace the previous profile picture.
4	Click "Profile remove pictures"			Field should allow the removal of user modified profile picture for default picture.
5	Click "Profile add preferred name"			Field should allow the input of an alphanumeric character string.
6	Click "Profile add pronouns"			Field should allow a selection of pronoun options
7	Click "Submit button"			Should save all fields and redirect the teacher to the student dashboard view.
8	Click "Back button"			Should clear all fields and redirect the teacher to the student dashboard view.

4.1.8 Class Detail View

Test Category: System	Description: Verify that a student can view important class details from a single window view.				
Test Case: 4.1.8	Case Name:Class Detail View Version: 1.0 Written By: Gregor Hubbard				
Requirements Fulfilled: 3.1.1.8	Purpose: To verify that a logged in student can view specific class information from a top level.				

- 1. Obtain the login information of the student user
- 2. Use the student credentials from step 2 to login the client-side application3. From the Student Dashboard View, click on the "Class Details" button

Test	Case Activity	Pass/Fail	Comments	Expected Result
1	Click "Class Details"			The window should display
2	Click "Display Current Grades"			Updated grades should be presented including respective assignment names and date of submission / grading.
3	Click "Display Most Recent Announcements"			List sorted by most recent class updates including: upcoming assignments, recent grades, recent teacher messages, and upcoming class meetings.
4	Click "Display Relevant Class Information"			List to hold static classroom information such as: course name, teacher contact information, classmates, and syllabus.

4.1.9 Student Assignment Submission View

Test Category: System	Description: Test the ability to navigate the submission view and submit an assignment.				
Test Case: 4.1.9	Case Name: Student Assignment Submission View	Written By: Dalton Hanbury			
Requirements Fulfilled: 3.1.1.9	Purpose: This tests the ability to navigate the submission view and submit an assignment.				

- 1. Obtain the login information of a Student user.
- 2. Login as a student
- 3. Navigate to the student dashboard
- 4. Select an assignment to submit

Test	Test Case Activity		Comments	Expected Result
1	Select an assignment to submit from the student dashboard and navigate to the Student Assignment Submission view.			Redirected to the Student Assignment submission view.
2	Use a text box to answer short answer questions.			Able to type answers to short answer questions using the text box and display the typed answers.
3	Use a text area to answer essay style questions.			Able to type answers to essay style questions using the text area and display the typed answers.
4	Use radio buttons to answer true or false questions.			Able to "select all answers that apply" using checkboxes and display the selected
5	Use radio buttons to answer multiple-choice questions.			Able to "select the only answer that applies" using radio buttons and display the selected answer.
6	Use the submit button to submit the assignment.			Redirected to the Student Dashboard with a displayed message indicating successful submission

4.2 Teacher Test Category

4.2.1 Teacher Dashboard

	Version: 1.0	Written Ry: Colton Hurst			
Case Name: Teacher Dashboard Version: 1.0 Written By: Colton Hurst					
Purpose: Tests that a teacher can access all needed sections of the app from the dashboard. Additionally, ensures there is a good UI/UX experience for the teacher, so the most used features are easily accessible.					
from the dashboard. Additionally, ensures there is a good UI/UX experience for the teacher, so the most used features are easily					

Obtain the login information for a teacher.

Test	Case Activity	Pass/Fail	Comments	Expected Result
1	Login as a teacher using the login information obtained from step 1 in the setup conditions above.			After logging in as a teacher, you should be brought to the teacher dashboard view.
2	After logging in, see and click the class overview view button.			Be routed to the class overview view page.
3	After logging in, see and click the video recording creation view button.			Be routed to the video recording creation view page.
4	After logging in, see and click the assignment overview creation view button.			Be routed to the assignment overview creation view page.

4.2.2 Assignment Index View

Test Category: System	Description: To verify Inclusive Classroom.	Description: To verify the Assignment Index View for a teacher using Inclusive Classroom.					
Test Case: 4.2.2	Case Name: Assignment Index View	Written By: Travis Bennett					
Requirements Fulfilled: 3.1.2.2	assignments within a cla name of the assignment	Purpose: This tests the ability for teachers to view all created assignments within a class. A table will be displayed that includes the name of the assignment, the date it was created, the due date for the assignment, and the number of submissions received.					

Setup Conditions:

- 1. Obtain the login information for a teacher.
- 2. Login as a teacher.
- 3. From the teacher dashboard, navigate to a class overview.

Test Case Activity		Pass/Fail	Comments	Expected Result
1	Click the "Grade" button next to an assignment.			This will navigate to the Grade Assignment View for that assignment.
2	Click the back button.			This will navigate back to the Assignment Index View.
3	Click the "Create Assignment" button.			This will navigate to the Assignment Creation View.

4.2.3 Assignment Overview Creation View

Test Category: System	Description: Verify that a teacher can create a new assignment					
Test Case: 4.2.3	Case Name: Assignment Overview Creation View Version: 1.0 Written By: Randy Layne					
Requirements Fulfilled: 3.1.2.3	Purpose: To verify that a logged in teacher can create assignments for their classes.					

- 1. Obtain the login information of a teacher user
- 2. On the client-side application login using the teacher credentials from step 2
- 3. From the Teacher Dashboard View, click on the "Create Assignment" button

Test	Case Activity	Pass/Fail	Comments	Expected Result
1	Select "Quiz" from assignment selection dropdown			Assignment question types should populate with true/false and multiple-choice question types.
2	Select "Exam" from assignment selection dropdown			Assignment question types should update to include short answer
3	Enter "2020/01/01" in the assignment start datetime field.			An error message should display saying "Assignment Start dates cannot be in the past"
4	Enter a date one week in the future using "yyyy/mm/dd" format in the assignment start datetime field.			Error message should go away
5	Enter "2020/01/01" in the assignment due datetime field.			An error message should display saying "Assignment Due dates cannot be before Start date"
6	Enter a date two weeks in the future using "yyyy/mm/dd" format in the assignment start datetime field.			Error message should go away
7	Click the class selection dropdown.			Field should only show classes that the teacher teaches
8	Click the Cancel button			Should clear the values of the form

9	Re-enter information from activities 1,4,6, and 7. Click the Submit button.	Should save values and redirect teacher to Assignment Question Creation View	
10	Create several assignments all with the same start and due dates, but with different assignment types. View the application logs using `cat logs/development.log grep "priority" `in a terminal.	The logs should show assignments that carry higher importance, e.g., exams, have a higher weighted priority than assignments of lower importance	

4.2.4 Assignment Content Creation View

Test Category: System		Description: Verify that a user with the role of teacher can see existing assignments created, and has the ability to create / view / update / delete these assignments.					
Test Case: 4.2.4	Case Name: Assignment Content Creation View	Assignment Content					
Requirements Fulfilled: 3.1.2.4	Purpose: This tests the ability for a teacher to manage their assignments for all of their classes.						

- 1. Obtain the login credentials for a teacher.
- 2. Log in as a teacher.
- 3. From the teacher dashboard view, click the assignment content creation view button.

Test	Case Activity	Pass/Fail	Comments	Expected Result
1	After clicking the assignment content creation view button, verify you can see the assignment: name, class(es), edit, submission over student fraction, creation date and due date.			You should be able to see the assignment: name, class(es), edit, submission over student fraction, creation date and due date.
2	On the assignment view content creation view page, click the table header for assignment name.			The list of assignments should be sorted, switching by name ascending/descending.
3	On the assignment view content creation view page, click the table header for assignment creation date.			The list of assignments should be sorted, switching by creation date ascending/descending.
4	On the assignment view content creation view page, click the table header for assignment due date.			The list of assignments should be sorted, switching by due date ascending/descending.
5	On the assignment view content creation view page, click the edit button for an assignment.			Be brought to the assignment content editor view, allowing the user to view/update/delete the assignment.

On the assignment view		Be brought to the assignment content
content creation view page,		editor view, allowing the user to
click the create button.		create the assignment.

4.2.5 Class Overview View

Test Category: System		Description: Verify that a user with the teacher role can see the general class details for classes they are teaching.				
Test Case: 4.2.5	Case Name: Teacher Class Overview View Test	Version: 1.0	Written By: Colton Hurst			
Requirements Fulfilled: 3.1.2.5	Purpose: To verify that a logged in teacher can see their classes.					

- 1. Login with teacher credentials.
- 2. From the dashboard, click the button that leads to Teacher Class Overview View

Test Case Activity		Pass/Fail Comments		Expected Result
1	View the Teacher Class Overview View.			Be able to see a list of classes assigned to the logged in teacher.
2	Click on a class listed.			Be able to see the following information about that class: Class Name Class Start Date Class End Date Class Weekly meeting time(s) Class location/room number Class description
3	Click on the "view" button for a class.			Be able to see the students listed in the class.

4.2.6 Video Recording Creation View

Test Category: System	Description: Verify that a teacher can create a new recording				
Test Case:	Case Name: Recording Overview Creation View	Version: 1.0	Written By: Gregory Hubbard		
Requirements Fulfilled: 3.2.1.1	Purpose: To verify that a logged in teacher can create new recordings for each class they teach				

- 1. Obtain the login information of the teacher user
- 2. Use the teacher credentials from step 2 to login the client-side application
- 3. From the Teacher Dashboard View, click on the "Create Recording" button

Test	Case Activity	Pass/Fail	Comments	Expected Result
1	Select Type of recording selection			The recording selection field should specify either live stream or recording.
2	Select Class identification selection			Field should allow class assignment only within the instructor's classes.
3	Select Recording post date			Field should not allow selection of past dates.
4	Select Recording recommended watch-by date			Field should not allow selection of past dates.
5	Click Submit button			Should save all fields and redirect the teacher to teacher dashboard view.
6	Click Back button			Should clear all fields and redirect the teacher to the teacher dashboard view.

4.2.7 Grade Assignment View

Test Category: System	Description: Verify that	Description: Verify that a teacher can grade a submitted assignment				
Test Case: 4.2.7	Case Name: Grade Assignment View	Grade Assignment				
Requirements Fulfilled: 3.1.2.7	Purpose: To verify that a logged in teacher can grade a student's assignments					

- Obtain the login information of a Teacher user.
 Navigate to the teacher dashboard

Test	Case Activity	Pass/Fail	Comments	Expected Result
1	Select the "View Classes" button			The teacher should be redirected to a view displaying all classes they are a teacher of
2	Select the "Mock Class" button			The teacher should be redirected to a view displaying a single gradable assignment named "Mock Assignment"
3	Select the "Mock Assignment" button			The teacher should be redirected to a view that displays a single student has turned in the assignment labeled "Mock student"
4	Select the "Mock Student" button			The Teacher should be redirected to a view that displays each question and student-inputted-answer
5	Set each credit to each question as .5			The input for the credit should be saved for each question to half. At the top of the view, the teacher should be able to see the final grade.
6	Select the "Submit" button			The Teacher should be met with a confirmation dialog box.
7	Select the "Confirm" button the the dialog box			The Teacher should be redirected to the view with "Mock Student"

4.3 Administrator Test Category

4.3.1 Administrator Dashboard

	4.3.1 Administrat	tor Dashboard				
Test	9 1 1	-	•			role of school administrator administrator dashboard.
Test	Case: 4.3.1	Case Name: Administrator Dashboard	Administrator		ion: 1.0	Written By: Sergiy Yermak
Requ 3.1.3		Purpose: This to dashboard.	est's abili	ty to a	ccess and	explore the administrator
	p Conditions:Obtain the login information	ion of a School	Administr	ator us	ser.	
Test	Case Activity	Pass/Fail	Comm	ents	Expecte	ed Result
1	Login using the administrater credentials.	tor			1	ted to the admin dashboard uccessful login
2	Click the button to the class creation view.	S			Redirect	ted to the class creation view.
3	Click the back button				Redirect dashboa	ted back to the admin rd.
4	Click the link to the teacher evaluation view.	r			Redirect view.	ted to the teacher evaluation
5	Click the back button				Redirect dashboa	ted back to the admin rd.
6	Click the link to the teacher index view.	r			Redirect	ted to the teacher index view.
7	Click the back button				Redirect dashboa	ted back to the admin rd.
8	Click the link to the studen index view.	t			Redirect	ted to the student index view.
9	Click the back button			_	Redirect	ted back to the admin

dashboard.

4.3.2 Class Creation View

	Description: Verify that a user with the role of school administrator can create new classes and assign a teacher with a group of students to those classes.				
Test Case: 4.3.2	Case Name: Class Creation View Version: 1.0 Written By: Sergiy Yermak				
	Purpose: This test's the ability to create a new class, assign a teacher to the newly created class, and assign a student to the class.				

- 1. Obtain the login information of a School Administrator user.
- 2. Log into the Inclusive Classroom Administrator Dashboard using School Administrator credentials.
- 3. Click on the Class Creation View link.

Test	Case Activity	Pass/Fail	Comments	Expected Result
1	View the one-line text input field for the class name.			A one-line text input field labeled "class name:" should be visible.
2	Input a string into the one- line text input labeled "Class name".			Able to input a string into the one- line text input labeled "class name".
3	Click on the select input field labeled "Assign teacher".			A list of teacher names expands from the select input field labeled "Assign teacher".
4	Click on an individual teacher's name to select a teacher.			Collapse the list of the teacher's name. Selected teacher's name is displayed in the select input field.
5	View a list of all students currently enrolled in the administrator's school.			A table containing in each of its rows the student's name, id, grade level, and a checkbox input field should be visible.
6	Click on an individual checkbox to select a student for the class.			A check should be visible inside the checkbox.
7	Click on the button labeled "Submit".			Display message that the class has been submitted.
8	Click the back button			Redirected back to the admin dashboard.

4.3.3 Teacher Evaluation View

Test Category: System	Description: Verify that a user with the role of school administrator ca evaluate an individual teacher assigned to a school				
Test Case: 4.3.3	Case Name: Teacher Evaluation View	Version: 1.0	Written By: Sergiy Yermak		
Requirements Fulfilled: 3.1.3.3	Purpose: This test's the ability to create a text evaluation of a specific teacher which is assigned to a school.				

- 1. Obtain the login information of a School Administrator user.
- 2. Log into the Inclusive Classroom Administrator Dashboard using School Administrator credentials.
- 3. Click on the Teacher Evaluation View link.

Test	Case Activity	Pass/Fail	Comments	Expected Result
1	View a select input field labeled "Select teacher".			A select input field labeled "Select Teacher" should be visible.
2	Click on the select input field labeled "Select teacher".			A list of teacher names expands from the select input field.
3	Click on an individual teacher's name to select a teacher.			Collapse the list of the teacher's name. Selected teacher's name is displayed in the select input field.
4	View a text area input field labeled "Evaluation".			A text area input field labeled "Evaluation" should be visible.
5	Input a string into the text area input field labeled "Evaluation".			Able to input a string into the text area input field labeled "Evaluation".
6	Click on the button labeled "Submit".			Display message that the evaluation has been submitted.
7	Click the back button			Redirected back to the admin dashboard.

4.3.4 Teacher Index Overview

Test Category: System	view the total number of and a class's details, whi	Description: Verify that a user with the role of school administrator can view the total number of students and all classes assigned to a teacher and a class's details, which include: class ID, class status, class description, class size, class start date, class end date, and class meeting times.				
Test Case: 4.3.4	Case Name: Teacher Index View Version: 1.0 Written By: Aubrie Day					
Requirements Fulfilled: 3.1.3.4	number of students assig	Purpose: To verify that a school administrator can view the total number of students assigned to a teacher, all classes assigned to a teacher, and a class's details.				

- 1. Obtain the login information of a School Administrator user.
- 2. Log into the Inclusive Classroom Administrator Dashboard using School Administrator credentials.

	credentials.	D (F.1)		
Test	Case Activity	Pass/Fail	Comments	Expected Result
1	Click the Teacher Index link on the Administrator Dashboard.			The administrator should be redirected to the Teacher Index View.
2	View a list of all teachers along the left side of the Teacher Index page.			A list of all teachers employed at the Administrator's school should be visible on the left side of the Teacher Index page.
3	Click on a teacher's name to view the teacher's name, the teacher's total number of students, a list of classes assigned to the teacher, and each class's status.			If the administrator clicks a teacher's name, then the selected teacher's name, the teacher's total number of students, a list of all classes assigned to the teacher, and each class's status should be visible.
4	View an expansion button next to the name of each class assigned to a teacher.			An expansion button should be visible next to the name of each class.
5	Click an expansion button next to a class name to view a table containing the class details, which include: class ID, class status, class description, class size, class			If the administrator clicks the expansion button, then a table that contains the class ID, class status, class description, class size, class start date, class end date, and class meeting times should be visible.

	start date, class end date, and class meeting times.		
6	Click a class's name to navigate to the Class Overview.		The administrator should be redirected to the Class Overview.
7	Click on the back button to return to the Teacher Index.		The administrator should return to the Teacher Index and see a list of classes assigned to a teacher.
8	Click on the back button to return to the Administrator Dashboard.		The administrator should return to the Administrator Dashboard and see links to Teacher Index, Student Index, Teacher Evaluations, and Class Creation.

4.3.5 Class Overview

Test Category: System		Description: Verify that a user with the role of school administrator can view all students enrolled in a class and the overall grade for each student in that class.				
Test Case: 4.3.5	Case Name: School Administrator Class Overview	Administrator Class				
Requirements Fulfilled: 3.1.3.5	Purpose: To verify that a school administrator can view an individual class's student enrollment and overall class grades.					

- 1. Obtain the login information of a School Administrator user.
- 2. Log into the Inclusive Classroom Administrator Dashboard using School Administrator credentials.

Test	Case Activity	Pass/Fail	Comments	Expected Result
1	Click the Teacher Index link on the Administrator Dashboard.			The administrator should be redirected to the Teacher Index View.
2	Click on a teacher's name listed in the Teacher Index.			The selected teacher's name, total number of students, assigned classes, and the class status should be visible.
3	Click on a class assigned to the selected teacher to navigate to the Class Overview.			The administrator should be redirected to the Class Overview.
4	View a class's name, status, and total number of students.			A class's name, status, and total number of students should be visible on the Class Overview page.
5	View an expansion button next to a class's name.			An expansion button should be visible next to the name of a class.
6	Click an expansion button next to a class name to view students enrolled in a class and each student's overall grade.			If the administrator clicks the expansion button, then a table containing each student's name and overall grade should be visible.
7	Click on an individual student's name to access the Student View.			The administrator should be redirected to the Student View of the individual student selected.

8	Click on the back button to return to the Teacher Index.	The administrator should return to the Teacher Index and see a list of classes assigned to a teacher.
9	Click on the back button that redirects to Administrator Dashboard.	The administrator should return to the Administrator Dashboard and see links to Teacher Index, Student Index, Teacher Evaluations, and Class Creation.

4.3.6 Student View

Test Category: System	1 -	Description: Verify that a user with the role of school administrator can see all information related to an individual student.			
Test Case: 4.3.6	Case Name: School Administrator Student View	Version: 1.0 Written By: Sergiy Yerm			
Requirements Fulfilled: 3.1.3.6	Purpose: This test's the ability to see all information related to a student which includes: name, classes enrolled in, overall class grade, and specific assignment grades.				

- 1. Obtain the login information of a School Administrator user.
- 2. Obtain specific student information which includes: Name, ID Number, classes enrolled in, and grades.
- 3. Log into the Inclusive Classroom Administrator Dashboard using School Administrator credentials.

Test	Case Activity	Pass/Fail	Comments	Expected Result
1	Click on Student Index View			Redirected to the Student Index View.
2	Click on a Student Name			Redirected to the Student View.
3	View Student name, ID number, table of classes enrolled in.			Student's name, ID number, and a table of classes that student is enrolled in should be visible and match the information obtained in setup condition 2.
4	Click on any row in the table of classes.			All of the student's assignments related to the class shall be displayed in table format with an assignment name and grade.
5	Click on the back button while in Student View.			Redirected to Student Index View
6	Click on the back button while in Student Index View			Redirected to Admin Dashboard.
7	Click the Teacher Index link on the Administrator Dashboard.			The administrator should be redirected to the Teacher Index View.

8	Click an expansion button next to a class name to view students enrolled in a class and each student's overall grade.	A table containing each student's name and overall grade shall become visible.
9	Click on an individual student's name to access the Student View	The administrator should be redirected to the Student View of the individual student selected.
10	Verify Test Case Activity 3.	Student's name, ID number, and a table of classes that student is enrolled in should be visible and match the information obtained in setup condition 2.
11	Verify Test Case Activity 4.	All of the student's assignments related to the class shall be displayed in table format with an assignment name and grade.
11	Click on the back button while in Student View.	Redirected to Teacher Index View.

4.3.7 Student Index View

Test Category: System	Description: Verify that a user with the role of school administrator can view all students enrolled in the administrator's school				
Test Case: 4.3.7	Case Name: School Administrator Student Index View	Version: 1.0	Written By: Sergiy Yermak		
Requirements Fulfilled: 3.1.3.7	Purpose: This test's the a	Purpose: This test's the ability to see all students enrolled in the school.			

Setup Conditions:

- 1. Obtain the login information of a School Administrator user.
- 2. Obtain the list of students enrolled in school.
- 3. Log into the Inclusive Classroom Administrator Dashboard using School Administrator credentials.

Test	Case Activity	Pass/Fail	Comments	Expected Result
1	Click on Student Index View			Redirected to Student Index View
2	View a table of students.			A table of student names and IDs should be visible and match the information obtained in setup condition 2.
3	Click on an individual student name.			Redirected to Student View.
4	Click the back button while in Student View			Redirected back to Student Index View.
5	Click on the back button while in Student Index View			Redirected back to Administrator Dashboard.

4.4 Multi-Role Test Category 4.4.1 Login View

Test Category: System	Description: Verify the login view of Inclusive Classroom				
Test Case: 4.4.1	Case Name: Version: 1.0 Written By: Travis Benderal Login View				
Requirements Fulfilled: 3.1.4.1	Purpose: To verify all parts of the login screen work as intended. This includes the login and register buttons, user input text boxes, and the submit capability.				

Setup Conditions:

- 1. Load up Inclusive Classroom
- 2. Ensure the database has user account information

Test	Case Activity	Pass/Fail	Comments	Expected Result
1	Click the login button.			The user will see text boxes to enter a username and password.
2	Enter the username and password of a student.			The user will be redirected to their student dashboard.
3	Press the log out button.			The user will be taken back to the login page.
4	Enter an incorrect username.			The user will be redirected to the login screen with a warning message indicating that the username and password combination is incorrect.
5	Enter a correct username and an incorrect password.			The user will be redirected to the login screen with a warning message indication that the username and password combination is incorrect.

4.4.2 Registration View

Test Category: System	Description: Verify that a user can register a new account.				
Test Case: 4.4.2	Case Name: Multi-role Registration View	Version: 1.0	Written By: Sergiy Yermak		
Requirements Fulfilled: 3.1.4.2	Purpose: This test's the ability to register a new account with Inclusive Classroom				

- 1. Obtain access to the database.
- 2. Open Inclusive Classroom Application

Test	Case Activity	Pass/Fail	Comments	Expected Result
1	Click the button labeled "Register" on the Login View			Redirected to the Register View
2	View one-line text input fields.			Each one-line text input field shall have a label, the following labels shall be displayed: first name, middle name, last name, email address, phone number, city name, state name, zip code.
3	View date picker input field.			A date picker input field labeled "birthday date" shall be displayed.
4	View a "Submit" button			A button labeled "Submit" shall be displayed.
5	Fill in every one-line text input field.			Able to input a string into each input field.
6	Select a date using the date picker input field.			Able to select a date using the date picker input field.
7	Click the button labeled "Submit"			Information provided in the one-line text and date-picker input fields shall be sent to the database.
8	Verify that the information has been added to the database.			Information provided in the one-line text and date-picker input fields shall be visible in the database.

4.5 Assignments

4.5.1 Short Answer Question

Test Category: System	Description: Verify that a teacher can make this type of question and a student can answer and submit it.				
Test Case: 4.5.1	Case Name: Short Answer Question Type	Version: 1.0	Written By: Sergiy Yermak		
Requirements Fulfilled: 3.1.5.1	Purpose: This test's the ability to create this type of assignment, view it, and answer it.				

- 1. Obtain the login information of a School Teacher user.
- 2. Obtain the login information of a School Student user who is assigned to the teacher's class.

	2. Obtain the login information of a school student user who is assigned to the teacher's class.				
Test	Case Activity	Pass/Fail	Comments	Expected Result	
1	Log into the Inclusive Classroom Teacher Dashboard using School Teacher credentials.			Redirected to the Teacher Dashboard	
2	Click the Assignment Overview Creation View link.			Redirected to the Assignment Overview Creation View.	
3	Fill out an HTML form for assignment creation, making sure that the assignment is linked to the class the student in setup condition 2 is assigned to.			Redirected to the Assignment Question Creation View.	
4	Click the edit assignment button.			Options to edit assignments are displayed.	
5	Click the add a question drop down selection button.			A selection of 4 questions are displayed	
6	Select Short Answer Question Type			Text box labeled "Question" and a submit button are displayed.	
7	Fill in the text box labeled "Question" and click submit			Question of type short answer is added to the assignment	
8	Log out			Redirected to the Login View	
9	Log into the Inclusive Classroom Student			Redirected to the Student Dashboard	

	Dashboard using School Student credentials.	
10	Click the Classwork Tab	Redirected to the Classwork Tab
11	View a table of incomplete assignments	A table of incomplete assignments shall have an assignment which was created in Test Activity 3
12	Click on the row which has the incomplete assignment which was created in Test Activity 3	Redirected to the Assignment Submission View
13	View the short answer question which was created in Test Activity 7	Short answer question which includes the question for the short answer, a text box for writing the question, and a submit button

4.5.2 Essay Question

Test Category: System	Description: Verify that a teacher can make this type of question and a student can answer and submit it.					
Test Case: 4.5.2	Case Name: Essay Question TypeVersion: 1.0Written By: Sergiy Yermak					
Requirements Fulfilled: 3.1.5.2	Purpose: This test's the ability to create this type of assignment question, view it, and answer it.					

- 1. Obtain the login information of a School Teacher user.
- 2. Obtain the login information of a School Student user who is assigned to the teacher's class.

Test Case Activity		Pass/Fail	Comments	Expected Result
1	1.1. Log into the Inclusive Classroom Teacher Dashboard using School Teacher credentials.			Redirected to the Teacher Dashboard
2	Click the Assignment Overview Creation View link.			Redirected to the Assignment Overview Creation View.
3	Fill out an HTML form for assignment creation, making sure that the assignment is linked to the class the student in setup condition 2 is assigned to.			Redirected to the Assignment Question Creation View.
4	Click the edit assignment button.			Options to edit assignments are displayed.
5	Click the add a question drop down selection button.			A selection of 4 questions are displayed
6	Select Essay Question Type			Text box labeled "Question" and a submit button are displayed.
7	Fill in the text box labeled "Question" and click submit			Question of type essay is added to the assignment

8	Log out	Redirected to the Login View
9	Log into the Inclusive Classroom Student Dashboard using School Student credentials.	Redirected to the Student Dashboard
10	Click the Classwork Tab	Redirected to the Classwork Tab
11	View a table of incomplete assignments	A table of incomplete assignments shall have an assignment which was created in Test Activity 3
12	Click on the row which has the incomplete assignment which was created in Test Activity 3	Redirected to the Assignment Submission View
13	View the short answer question which was created in Test Activity 7	Short answer question which includes the question for the short answer, a text box for writing the question, and a submit button

4.5.3 True or False Question

Test Category: System	Description: Verify that a teacher can make this type of question and a student can answer and submit it.					
Test Case: 4.5.3	Case Name: True or False Question Version: 1.0 Written By: Randy Layne					
Requirements Fulfilled: 3.1.5.3	Purpose: This test's the ability to create this type of assignment question, view it, and answer it.					

- 1. Obtain login credentials for a teacher user
- 2. Obtain login credentials for a student user assigned to a class of the teacher user in step 1
- 3. Login to the Teacher Dashboard using credentials from step 1.
- 4. Create an assignment in the assignment overview creation ensuring that the assignment is for a class the student user from step 2 is in.

Test	Case Activity	Pass/Fail	Comments	Expected Result
1	From the Assignment Overview Creation view, click the add questions button			Redirected to the Assignment Question Creation View.
2	Click the edit assignment button.			Options to edit assignments are displayed.
3	Click the add a question drop down selection button.			A selection of 4 questions are displayed
4	Select True or False Question Type			Text box labeled "Question" and a submit button are displayed.
5	Fill in the text box labeled "Question" and click submit			Question of type true or false is added to the assignment
6	Log out			Redirected to the Login View
7	Log into the Inclusive Classroom Student Dashboard using School Student credentials.			Redirected to the Student Dashboard
8	Click the Classwork Tab			Redirected to the Classwork Tab
9	View a table of incomplete assignments			A table of incomplete assignments shall have an assignment which was created in the setup instructions

10	Click on the row which has the incomplete assignment.		Redirected to the Assignment Submission View
11	View the true or false question which was created in Test Activity 5		True or False question which includes the question, two radio buttons labeled "true" and "false", and a submit button should be visible.

4.5.4 Multiple Choice Question

Test Category: System	Description: Verify that a teacher can make this type of question and a student can answer and submit it.					
Test Case: 4.5.4	Case Name: Multiple Choice Question Version: 1.0 Written By: Randy Layne					
Requirements Fulfilled: 3.1.5.4	Purpose: This test's the ability to create this type of assignment question, view it, and answer it.					

- 1. Obtain login credentials for a teacher user
- 2. Obtain login credentials for a student user assigned to a class of the teacher user in step 1
- 3. Login to the Teacher Dashboard using credentials from step 1.
- 4. Create an assignment in the assignment overview creation ensuring that the assignment is for a class the student user from step 2 is in.

Test	Case Activity	Pass/Fail	Comments	Expected Result
1	From the Assignment Overview Creation view, click the add questions button			Redirected to the Assignment Question Creation View.
2	Click the edit assignment button.			Options to edit assignments are displayed.
3	Click the add a question drop down selection button.			A selection of 4 questions are displayed
4	Select Multiple Choice Question Type			Text box labeled "Question", a text box labeled "Choice 1", a button labeled "Add Choice" and a submit button are displayed.
5	Fill in the text boxes labeled "Question" and "Choice 1" and click the "Add Choice" button.			A text box labeled "Choice 2" should appear between "Choice 1" and the "Add Choice" button.
6	Fill in the text box labeled "Choice 2" and click the submit button.			Question of type multiple choice is added to the assignment.
7	Log out			Redirected to the Login View
8	Log into the Inclusive Classroom Student Dashboard using School Student credentials.			Redirected to the Student Dashboard

9	Click the Classwork Tab	Redirected to the Classwork Tab
10	View a table of incomplete assignments	A table of incomplete assignments shall have an assignment which was created in the setup instructions
11	Click on the row which has the incomplete assignment.	Redirected to the Assignment Submission View
12	View the multiple choice question which was created in Test Activity 6	Multiple Choice questions which includes the question, two radio buttons labeled with the text entered into the "Choice 1" and "Choice 2" textboxes, and a submit button should be visible.

5 Traceability to Requirements

5.1 Student Test Category

Requirem ent ID	Test case ID								
	4.1.1	4.1.2	4.1.3	4.1.4	4.1.5	4.1.6	4.1.7	4.1.8	4.1.9
3.1.1.1	X								
3.1.1.2		X							
3.1.1.3			X						
3.1.1.4				X					
3.1.1.5					X				
3.1.1.6						X			
3.1.1.7							X		
3.1.1.8								X	_
3.1.1.9									X

5.2 Teacher Test Category

Requirement ID		Test case ID								
	4.2.1	4.2.1 4.2.2 4.2.3 4.2.4 4.2.5 4.2.6 4.2.7								
3.1.2.1	X									
3.1.2.2		X								
3.1.2.3			X							
3.1.2.4				X						
3.1.2.5					X					
3.1.2.6						X				

3.1.2.7	X
---------	---

5.3 Administrator Test Category

Requirement ID	Test case ID							
	4.3.1	4.3.2	4.3.3	4.3.4	4.3.5	4.3.6	4.3.7	
3.1.3.1	X							
3.1.3.2		X						
3.1.3.3			X					
3.1.3.4				X				
3.1.3.5					X			
3.1.3.6						X		
3.1.3.7							X	

5.4 Multi-Role Test Category

Requirement ID	Test case ID			
	4.4.1	4.4.2		
3.1.4.1	X			
3.1.4.2		X		

5.5 Assignments Test Category

Requirement	Test case ID
ID	

LAB 3 - INCLUSIVE CLASSROOM PROTOTYPE TEST PLAN

	4.5.1	4.5.2	4.5.3	4.5.4
3.1.5.1	X			
3.1.5.2		X		
3.1.5.3			X	
3.1.5.4				X