

System Test Suite 1: Teacher Class Management Workflow

Objective

Verify that a teacher can successfully create, invite a student, edit, and remove a class.

Pre-conditions

1. System is running (Backend: localhost:3000, Frontend: localhost:3001)
2. The test database is seeded with sample data.
3. Teacher account exists (email: alan@gmail.com, password: alanalan)
4. The browser is open and cleared of cache/cookies.

Test Environment

- Backend URL: <http://localhost:3000>
- Frontend URL: <http://localhost:3001>
- Database: PostgreSQL (seeded)
- Browser: Chrome/Firefox/Edge (latest version)

Test Cases

Test Case 3.1: Create a New Class

Field	Description
Test Case ID	STS-001-TC-01
Test Title	Verify teacher can create a new class successfully
Test Priority	High
Pre-condition	The teacher is logged in and on the “Create Your New Class” page (e.g., http://localhost:3001/class/create)

Test Steps:

1. Navigate to <http://localhost:3001/classes/new> (Create Class page)
2. Enter a valid class name in the Class Name field (e.g., “Introduction to English”)
3. ”)
4. Enter a short description in the Description field (e.g., “First-year fundamentals class”)
5. Click the Create Class button
6. Observe page behavior and navigation

Expected Result:

- User is redirected to the teacher dashboard or class list page (e.g., <http://localhost:3001/class>)
- The newly created class appears in the class list with the correct **Class Name** and **Description**, with the User name as a teacher’s class

The image consists of two side-by-side screenshots of a teacher dashboard interface.

Left Screenshot (Create Your New Class):

- The title is "Create Your New Class".
- A sub-instruction says "Fill in the details to get started."
- There are two input fields:
 - "Class Name": "Introduction to English".
 - "Description": "First-year fundamentals class".
- An orange "Create Class" button is at the bottom.

Right Screenshot (View Class Details):

- The title is "Introduction to English" with a pencil icon.
- The subtitle is "First-year fundamentals class".
- A red box highlights the "Teacher: Praewa Chan-on" and "Class code: INTPC3YL" information.
- A chart titled "Average Class Score" shows a scale from 0 to 10 with a single data point at 0.
- A "Members" section shows 0 members with a user icon.
- A "Assignment" section with a "Create Assignment" button.

Test Case 3.2: Create an Invite for a student

Field	Description
Test Case ID	STS-001-TC-02
Test Title	Verify that the teacher can invite a student to a class
Test Priority	High
Pre-condition	Teacher is logged in and has at least one existing class (e.g., "Introduction to English") and is on the Class Detail page (http://localhost:3001/class/{classId})

Test Steps:

1. On the Class Detail page, click the Members card or tab to navigate to the Members page (<http://localhost:3001/class/{classId}/member>).
2. In the "Enter student's email to invite" input field, type a valid student email (e.g., student1@gmail.com).
3. Click the Invite button.
4. Observe page behavior and any feedback messages.

Expected Result:

- The Student List section is updated to show the invited student with the correct email and status.
- The Members count for the class is updated accordingly.

The figure consists of two side-by-side screenshots of a web application's 'Members' page. Both screenshots have a header with 'Dashboard', 'Classes' (which is underlined), and 'Rubrics'. There are also notification and user icons in the top right.

Left Screenshot (Initial State):

- Header:** Shows 'Dashboard', 'Classes', and 'Rubrics'.
- Title:** 'Members'.
- Form:** 'Invite Students' with an input field 'Enter student's email to invite' and a red 'Invite' button.
- Chart:** 'Student Score Distribution' showing 'Class Score Distribution' for Grammar and Vocabulary. The Y-axis is 'Mock Score' from 0 to 10, and the X-axis is 'Students'. No data points are visible.
- Text:** 'Student List (0)'.

Right Screenshot (After Invitation):

- Header:** Shows 'Dashboard', 'Classes', and 'Rubrics'.
- Title:** 'Members'.
- Form:** 'Invite Students' with an input field 'Enter student's email to invite' and a red 'Invite' button.
- Chart:** 'Student Score Distribution' showing 'Class Score Distribution' for Grammar and Vocabulary. The Y-axis is 'Mock Score' from 0 to 10, and the X-axis is 'Students'. A single bar for 'student Chan-on' is visible at a score of approximately 2.5.
- Text:** 'Student List (1)' followed by a list item 'student Chan-on student@gmail.com View Dashboard >'.

Test Case 3.3: Edit an Existing Class

Field	Description
Test Case ID	STS-001-TC-03
Test Title	Verify teacher can edit class details successfully
Test Priority	High
Pre-condition	<ul style="list-style-type: none">- The teacher is logged in and has an existing class (e.g., “Introduction to English”).- The teacher is on the Edit Class page (http://localhost:3001/class/{classId}/edit).

Test Steps:

1. Navigate to the class list page: <http://localhost:3001/class>.
2. Click on the target class card “Introduction to English” to open the Class Detail page.
3. Click the edit icon (✎) next to the class name to open the Edit Class page (<http://localhost:3001/class/{classId}/edit>).
4. In the Class Name field, change the text to: Introduction to English – Section A.
5. In the Description field, update the text to: First-year fundamentals class (Section A).
6. Click the Confirm Edit button.
7. Observe page navigation and updated information.

Expected Result:

- User is redirected back to the Class Detail page or Class List page.
- The class card and class detail header now display the updated class name:
 - Introduction to English – Section A
- The class description is updated to:
 - First-year fundamentals class (Section A)
- No error message is shown, and data is saved correctly in the system.

Test Case 3.4: Delete an Existing Class

Field	Description
Test Case ID	STS-001-TC-04
Test Title	Verify teacher can delete a class successfully
Test Priority	High
Pre-condition	The teacher is logged in and has an existing class (e.g., “Introduction to English”). The teacher is on the Edit Class page (http://localhost:3001/class/{classId}/edit).

Test Steps:

1. Navigate to the class list page: <http://localhost:3001/class>.
2. Click on the class card “Introduction to English” to open the Class Detail page.
3. Click the edit icon (✎) next to the class name to go to the Edit Class page (/edit).
4. On the Edit Class page, locate and click the Delete Class button.
5. Confirm the deletion in the confirmation pop-up
6. Click the Confirm Delete Edit button.
7. Observe system behavior and page redirection.

Expected Result:

- The class is removed from the database.
- The user is redirected to the Classes page (/class).
- The deleted class no longer appears under “My Courses”.
- No errors are displayed.