

System Test Suite 2: Teacher Assignment Management Workflow

Objective

Verify that a teacher can successfully create a rubric, create an assignment, view student submissions, grade submissions, and use the auto-grade feature.

Pre-conditions

1. System is running (Backend: localhost:3000, Frontend: localhost:3001)
2. Test database is seeded with sample data.
3. Teacher account exists (email: alan@gmail.com, password: alanalan)
4. At least one class exists with enrolled students.
5. At least one student has submitted work.
6. 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 2.1: Teacher Login

Field	Description
Test Case ID	STS-002-TC-01
Test Title	Verify teacher can login successfully
Test Priority	High
Pre-condition	Teacher is on login page (http://localhost:3001/login)

Test Steps:

1. Navigate to <http://localhost:3001/login>
2. Enter email: "alan@gmail.com"
3. Enter password: "alanalan"
4. Click "Sign In" button
5. Observe page navigation

Expected Result:

- User is redirected to dashboard (<http://localhost:3001/>)
- Dashboard displays "Welcome Back, Thanapon!" message
- Navigation bar shows teacher-specific menu items (Dashboard, Classes, Rubrics)
- No "Peer Reviews" or "My Performance" options visible

Test Case 2.2: Create a New Rubric

Field	Description
Test Case ID	STS-002-TC-02
Test Title	Verify teacher can create a grading rubric
Test Priority	High
Pre-condition	Teacher is logged in on dashboard

Test Steps:

1. Click "Rubrics" in navigation bar
2. Click "Create Rubric" button
3. Enter rubric name: "Essay Evaluation Rubric"
4. For Criterion 1:
 - Enter title: "Content Quality"
 - Low level: description: "Lacks depth and detail", points: 3
 - Medium level: description: "Adequate depth and detail", points: 7
 - High level: description: "Excellent depth and comprehensive detail", points: 10
5. Click "Add Criterion" button
6. For Criterion 2:
 - Enter title: "Grammar and Mechanics"
 - Low level: description: "Multiple errors", points: 2
 - Medium level: description: "Few errors", points: 5
 - High level: description: "Nearly error-free", points: 10
7. Verify max points display (should show 20)
8. Click "Save Rubric" button

Expected Result:

- Create Rubric page loads with form
- Rubric name field accepts input
- Each criterion has title field and three level fields (Low, Medium, High)
- Each level has description textarea and points input
- "Add Criterion" button adds new criterion section

- Max Points calculation updates dynamically at bottom
- After clicking "Save Rubric":
 - Success message appears ("Rubric created successfully!")
 - Redirects to /rubric page
 - New rubric appears in rubrics list

Test Case 2.3: Create Assignment with Rubric

Field	Description
Test Case ID	STS-002-TC-03
Test Title	Verify teacher can create assignment with rubric
Test Priority	High
Pre-condition	Teacher has created rubric, is on classes page

Test Steps:

1. Click "Classes" in navigation
2. Click on "Historical Investigation Fundamentals" class
3. Click "Create Assignment" button
4. Enter title: "Historical Sources Analysis"
5. Enter description: "Analyze three primary sources from the 19th century and evaluate their historical significance."
6. Select deadline: Choose a date 7 days from today, set time to 23:59
7. From "Grading Rubric" dropdown, select "Essay Evaluation Rubric"
8. Click "Create Assignment" button

Expected Result:

- Create Assignment page loads with form
- All fields accept input:
 - Title (text input)
 - Description (textarea)
 - Deadline (date-time picker)
 - Grading Rubric (dropdown with available rubrics)

- Date picker allows future date selection
- After clicking "Create Assignment":
 - Success message appears ("Assignment Created!")
 - Redirects to class detail page
 - New assignment appears in assignments list
 - Assignment shows title, open date, due date

Test Case 2.4: Edit Assignment Details

Field	Description
Test Case ID	STS-002-TC-04
Test Title	Verify teacher can edit assignment details
Test Priority	Medium
Pre-condition	Teacher is viewing an assignment they created

Test Steps:

1. On assignment detail page, click the edit icon (pencil) next to assignment title
2. Modify title to: "Historical Sources Analysis - Updated"
3. Change description to add: "Please focus on political documents."
4. Extend deadline by 2 days
5. Click "Update Assignment" button
6. Navigate back to view assignment

Expected Result:

- Edit icon is visible on assignment detail page
- Clicking it navigates to edit page with pre-filled form
- All fields are editable:
 - Title
 - Description
 - Deadline
 - Rubric
- After clicking "Update Assignment":

- Success message appears ("Assignment Updated!")
- Redirects to class detail page
- Assignment shows updated information

Test Case 2.5: Logout

Field	Description
Test Case ID	STS-002-TC-05
Test Title	Verify teacher can logout successfully
Test Priority	Medium
Pre-condition	Teacher is logged in on any page

Test Steps:

1. Click on user profile icon (circle icon) in top-right navigation
2. Click "Logout" in dropdown menu
3. Observe page behavior

Expected Result:

- Dropdown menu appears on icon click
- Logout option is visible with logout icon
- After clicking Logout:
 - User is redirected to login page
 - Session token is cleared
 - Attempting to navigate to protected routes redirects to login