

API Test Cases: Room Management Module

Introduction

This document provides the API test cases for the Room Management module, based on the logic defined in room_route.py. These tests are designed to verify the functionality for creating new room records, which is restricted to users with the 'Manager' role.

Testing Environment

- **Tool:** Postman
- **Base URL:** http://127.0.0.1:5000
- **Prerequisites:**
 - The application is running, and the database is seeded.
 - A valid JWT for a Manager (e.g., EM007) is stored as {{managerToken}}.
 - A valid JWT for a Learning Advisor (e.g., EM005) is stored as {{laToken}}.

Manager Features

Feature: Add Room

- **Feature ID:** ROM-001
- **Endpoint:** POST /room/manager/add
- **Description:** Verifies a Manager's ability to create a new room.

Test Case ID	Description	Test Steps	Expected Result
ROM-001-TC-001	Successful Room Creation	1. Set method to POST. 2. Set URL to {{baseUrl}}/room/manager/add. 3. Set Authorization header to Bearer {{managerToken}}.	ER: Status code is 201 Created . The response body contains the new room object with a

		4. Set Body to raw JSON: { "name": "Computer Lab" }. 5. Send request.	generated ID and the provided name.
ROM-001-TC-002	Unauthorized Access (Attempt by Learning Advisor)	1. Set method to POST. 2. Set URL to {{baseUrl}}/room/manager/add. 3. Set Authorization header to Bearer {{laToken}}. 4. Set Body to raw JSON: { "name": "Unauthorized Room" }. 5. Send request.	ER: Status code is 403 Forbidden . The response body contains an access denied message.
ROM-001-TC-003	Invalid Request (Missing name field)	1. Set method to POST. 2. Set URL to {{baseUrl}}/room/manager/add. 3. Set Authorization header to Bearer {{managerToken}}. 4. Set Body to raw JSON: {}. 5. Send request.	ER: Status code is 400 Bad Request . The response body contains an "Invalid input" error message indicating the name field is required.
ROM-001-TC-004	Invalid Request (Not JSON)	1. Set method to POST. 2. Set URL to {{baseUrl}}/room/manager/add. 3. Set Authorization header to Bearer {{managerToken}}. 4. Set Body to text instead of JSON. 5. Send request.	ER: Status code is 400 Bad Request . The response body contains the message: "Missing or invalid JSON".

- **Results**

Test Case ID	Result	Status	Notes
ROM-001-TC-001	<ul style="list-style-type: none">• 404 Not Found• The requested URL was not found on the server. If you entered the URL manually please check your spelling and try again	FAILED	See ROM-BUG-001
ROM-001-TC-002	Similar to ROM-001-TC-001	FAILED	See ROM-BUG-001
ROM-001-TC-003	Similar to ROM-001-TC-001	FAILED	See ROM-BUG-001
ROM-001-TC-004	Similar to ROM-001-TC-001	FAILED	See ROM-BUG-001