

# PVSchool – Functional Test Scenarios

## Purpose

This document describes functional test scenarios verifying that the PVSchool application meets all functional assignment requirements.

## Test Scenario 1 – Create Data

Precondition: Application is running.

Steps:

1. Create a new teacher using the API or GUI.
2. Verify the teacher appears in the list.

Expected Result: The new teacher is stored and displayed correctly.

## Test Scenario 2 – Read Data

Steps:

1. Display the list of teachers and students.
2. Display timetable and report views.

Expected Result: Data is retrieved and displayed correctly.

## Test Scenario 3 – Update Data

Steps:

1. Modify an existing record (e.g., teacher data).

Expected Result: Updated data is persisted in the database.

## Test Scenario 4 – Delete Data

Steps:

1. Delete an existing record.

Expected Result: Record is removed from the database.

## Test Scenario 5 – Transaction

Steps:

1. Insert a grade for a student.

Expected Result: Grade is inserted and student last\_grade\_at is updated atomically.

## **Test Scenario 6 – Report Generation**

Steps:

1. Generate class-subject-grade report.

Expected Result: Aggregated data from multiple tables is displayed.

## **Test Scenario 7 – Import Data**

Steps:

1. Import teachers and students from CSV files.

Expected Result: Data is imported successfully.

## **Test Scenario 8 – Export Data**

Steps:

1. Export teachers and students to CSV.

Expected Result: CSV files are generated correctly.

## **Test Scenario 9 – GUI Verification**

Steps:

1. Navigate through dashboard, timetable, and report pages.

Expected Result: GUI pages load correctly and display valid data.