

# Acceptance Test Plan – GradeBook System

---

## 1. Project Overview

The GradeBook system is designed for teachers to manage students, groups, grades, and generate report cards efficiently. The system supports multilingual functionality, ensuring usability for a diverse user base. This test plan outlines how acceptance testing will be conducted to verify that the system meets all functional, usability, and performance requirements.

## 2. Acceptance Criteria

- Teachers can securely register, log in, and manage accounts.
- Group and student creation, update, and deletion are fully functional.
- Grade categories and weights can be defined and edited.
- Grades can be entered, viewed, edited, deleted, and used to compute overall averages.
- Report cards can be generated, exported to PDF, and printed.
- The UI is intuitive and supports language switching.
- Multilingual data storage and display are supported across the system.

## 3. Acceptance Test Design

### 3.1 Functional Tests

| Test ID | Feature            | Test Description               | Expected Result                         |
|---------|--------------------|--------------------------------|---|
| FT01    | Authentication     | Register a new teacher account | Account is created and stored in DB     |
| FT02    | Authentication     | Log in with valid credentials  | Teacher is redirected to dashboard      |
| FT03    | Group Management   | Create a new group             | Group is saved and listed               |
| FT04    | Group Management   | Edit existing group details    | Group updates are visible immediately   |
| FT05    | Group Management   | Delete a group                 | Group is removed from the list          |
| FT06    | Student Management | Add a student to a group       | Student appears in group's student list |
| FT07    | Student Management | Edit student details           | Changes are reflected in student list   |
| FT08    | Student            | Delete a student               | Student is removed                      |

|      |                   |   |  |
|------|-------------------|---|--|
|      | Management        |   | from system                                |
| FT09 | Grade Categories  | Add/edit/delete grade categories        | Categories update correctly                |
| FT10 | Grade Entry       | Add/edit/delete grades for students     | Grades reflect correct values              |
| FT11 | Grade Calculation | Calculate overall and weighted averages | Results match expected calculations        |
| FT12 | Report Card       | Generate a report card                  | Report card is accurate and well-formatted |
| FT13 | Report Export     | Export report card as PDF               | PDF is generated and downloadable          |
| FT14 | Localization      | Switch language in UI                   | Interface updates to selected language     |

### 3.2 Usability Tests

| Test ID | Scenario         | Test Description                                     | Expected Outcome                                       |
|---------|------------------|--|--|
| UT01    | Navigation       | Can a new user find the "Add Student" button easily? | User locates and uses it without guidance              |
| UT02    | Language Setting | Can a user switch language without confusion?        | Language is switched intuitively and updates instantly |
| UT03    | Form Input       | Are grade inputs validated properly?                 | Invalid inputs show clear error messages               |

### 3.3 Performance Tests

| Test ID | Scenario          | Test Description                         | Expected Outcome            |
|---------|-------------------|--|-----------------------------|
| PT01    | Report Generation | Generate a report card with 10+ subjects | Completed within 3 seconds  |
| PT02    | Language Switch   | Change language from English to Chinese  | UI updates within 1 second  |
| PT03    | Bulk Grade Entry  | Add grades for 30 students               | System responds without lag |

## 4. Tools and Environment

- Testing Type: Manual UI testing, unit testing (JUnit), PDF export check
- Environment: JavaFX application with MariaDB backend
- Tools: IntelliJ IDEA, MySQL Workbench, Postman (if applicable), PDF viewer