

School Management System

Use:

Spring Web

Lombok

Validation

Student Model:

ID

- Cannot be null.
- Length must be more than 2 characters.

@NotNull(message = "ID cannot be null")

@Size(min = 3, message = "ID length must be more than 2 characters")

Name

- Cannot be null.
- Length must be more than 4 characters.
- Must contain only characters (no numbers).

@NotNull(message = "Name cannot be null")

@Size(min = 5, message = "Name length must be more than 4 characters")

@Pattern(regexp = "[a-zA-Z]+", message = "Name must contain only characters")

Email

- Must be a valid email format.

@Email(message = "Invalid email format")

Phone Number

- Must start with "05".
- Must consist of exactly 10 digits.

@Pattern(regexp = "05[0-9]{8}", message = "Phone number must start with '05' and consist of exactly 10 digits")

Age

- Cannot be null.
- Must be a number.
- Must be between 6 and 18 (age range for students).

@NotNull(message = "Age cannot be null")

@Min(value = 6, message = "Minimum age is 6")

@Max(value = 18, message = "Maximum age is 18")

Grade

- Cannot be null.
- Must be a number.
- Must be between 1 and 12 (representing grades from 1st to 12th).

@NotNull(message = "Grade cannot be null")

@Min(value = 1, message = "Minimum grade is 1")

@Max(value = 12, message = "Maximum grade is 12")

Class

- Cannot be null.
- Must be in the format "Grade-Level" (e.g., "6-A", "10-C").

@NotNull(message = "Class cannot be null")

@Pattern(regexp = "[1-9]-[A-Z]", message = "Class must be in the format 'Grade-Level'")

isActive

- Must be initially set to true.

@NotNull(message = "Admission date cannot be null")

@AssertTrue(message = "active must be true")

Join Date

- Cannot be null.
- Should be a date in the past or the present.

@NotNull

@PastOrPresent

Endpoints:

1. **Add Student:** student to system
2. **get all students:** retrieve all Student object
3. **update student by ID :** Updates the student information in the system.
4. **Delete Student:**
5. **Get all Active Students:**
6. **search the student information by ID.**
7. **get all student by class**