

The website is an ****Employee Management System**** for a ****Ministry of Education****, focused on validating employee data such as name, position, age, and annual leave, while ensuring consistency and correctness through validation rules.

1. Validation of Student Data:

- **Name:** It should contain only letters.
- **Date of Birth:** It should be in the past and logically consistent (e.g., a student cannot be 5 years old in university).
- **ID Number:** It should comply with national or university standards.
- **Email:** It should be in a valid format (e.g., example@domain.com).

2. Validation of Teacher Data:

- **Name:** It should contain only letters.
- **ID Number:** It should be valid and recognized.
- **Academic Qualification:** The teacher should have a suitable academic qualification for the specialization.
- **Experience:** There should be a specified number of years of teaching experience.

3. Validation of Manager or Supervisor Data:

- **Name:** It should contain only letters.
- **ID Number:** It should be valid and recognized.
- **Academic Qualification:** The manager or supervisor should have a suitable academic qualification.
- **Experience:** The manager or supervisor should have sufficient experience in management or academic supervision.

// Employee ID: Must not be null and should have at least 3 characters

@NotNull(message = "Can not be null")

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

id;

// Employee Name: Should contain only letters (no numbers) and should have at least 5 characters

@NotNull(message = "Can not be null")

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

@Pattern(regex = "[a-zA-Z]+\$", message = "Name must contain only letters and cannot contain numbers.")

name;

// Email: Should be a valid email format

@NotNull(message = "Can not be null")

@Email(message = "Must be a valid email format.")

email;

// Phone Number: Should start with '05' and consist of exactly 10 digits

@NotNull(message = "Can not be null")

@Pattern(regex = "^05\\d{8}\$", message = "Phone number must start with '05' and consist of exactly 10 digits.")

// Age: Should be greater than 25

@NotNull(message = "Can not be null")

@Min(value = 25, message = "Age must be more than 25")

@Digits(integer = 3, fraction = 0, message = "Age must be a valid number.")

private int age;

// Position: Should be either 'supervisor' or 'coordinator'

@NotNull(message = "Can not be null")

@Pattern(regex = "^(supervisor|coordinator)\$", message = "Position must be either 'supervisor' or 'coordinator' only.")

position;

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// onLeave: Initially set to false (assert that it's false when not on leave)
@AssertFalse(message = "onLeave must be initially set to false.")
onLeave;
```

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// Annual Leave: Should be a positive number (at least 1 day)
@NotNull(message = "AnnualLeave cannot be null.")
@Positive(message = "AnnualLeave must be a positive number.")
annualLeave;
```

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// Hire Date: Should be a past or present date and formatted correctly
@NotNull(message = "Can not be null")
@PastOrPresent(message = "HireDate should be a date in the present or the past.")
@JsonFormat(pattern = "yyyy-MM-dd HH:mm") // Format date to yyyy-MM-dd HH:mm
LocalDateTime hireDate;
```