# Lab 6

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validation checklist for an education system that consists of three models (Student, Faculty, and Administrator)

Student Model has: ID, name, age, GPA, joining year, graduation year, specialization

```
    ID

  -Cannot be null. [@NotEmpty (message = "Empty ID")]
  -ID length must be 10
  @Size(min=10, max =10, message = "ID length must be 10")
  -ID must contain digits only
  @Pattern(regexp = "^\\d{10}$", message = "ID must contain
  digits only")]
  name
  -Cannot be null. [@NotEmpty (message = "Empty name")]
  -Name at least 4 characters
  [@Size(min=4, message = "Name at least 4 characters")]
  -The name must be at most 10 characters.
  @Size(max =10, message = "The name must be at most 10
  characters.")
  -Name must contain characters only
  @Pattern(regexp = "^[a-zA-Z]{4,10}$", message = "Name must
  contain characters only")]
 age
```

-Cannot be null.[@NotNull (message = "Empty age")]

```
-Age must be 18 at least
  @Min(value = 18, message = "Age must be 18 at least")]
  -Age must be positive
  @Positive (message = "Age must be positive") ]
• GPA
  -Cannot be null.[@NotNull (message = "Empty GPA")]
  -GPA must be Positive or zero
  @PositiveOrZero(message = "GPA must be Positive or zero")]
  -GPA does not exceed 5
  [@Max(value = 5, message = "GPA does not exceed 5")]
 joining year
  -Cannot be null.[@NotNull (message = "Empty joining year")]
  -must be in this format yyyy-MM-dd
  [@JsonFormat (pattern = "yyyy-MM-dd")]
  -joining year should be Past or Present
  @PastOrPresent (message = "joining year should be Past or
  Present")
• graduation year
  -Cannot be null.[@NotNull (message = "Empty graduation year")]
  -must be in this format yyyy-MM-dd
   [@JsonFormat(pattern "yyyy-MM-dd")]
 specialization
  -Cannot be null.[@NotEmpty (message = "Empty specialization")]
  -specialization must be at least 4 character and at most 12 character
```

```
[@Size(min = 4, max = 12, message = "specialization must be at
least 4 character and at most 12 character ")]
-specialization must contain characters only

[@Pattern(regexp = "^[a-zA-Z]{4,12}$", message =
"specialization must contain characters only")]
```

**Faculty Model has:** ID, name, age, email, phone number, salary, department, number of classes, gender, nationality, position.

ID

```
-Cannot be null. [@NotEmpty (message = "Empty ID")]
```

-ID must contain 10 digits

```
[@Size(min=10, max =10, message = "ID must contain 10 digits")]
```

-ID must contain digits only

```
[@Pattern(regexp = "^\\d{10}$", message = "ID must contain
digits only")]
```

- Nama
  - -Cannot be null.[@NotEmpty (message = "Empty name")]
  - -Name length at least 4 characters and at most 10 characters

```
[@Size(min = 4, max=10, message = "Name length at least 4
characters and at most 10 characters")]
```

-Name must contain characters only

```
[@Pattern(regexp = "\[a-zA-Z]{4,10}", message = "Name must contain characters only")]
```

- age
  - -Cannot be null.[@NotNull (message = "Empty age")]
  - -Age must be Positive (@Positive (message = "Age must be Positive")]
  - -Age should be at least 30 years.

```
[@Min(value = 30, message = "Age should be at least 30 years")]
```

### • Email

```
-Cannot be null.[@NotEmpty (message = "Empty email")]
```

-Email must be Valid [@Email (message = "Enter Valid email")]

### • Phone number

```
-Cannot be null.[@NotEmpty (message = "Empty phone number")]
```

-Phone number should be 10 digits.

```
[@Size(min = 10, max = 10, message = "Phone number should be 10
digits")]
```

-Phone number should start with 05.

```
[@Pattern(regexp = "^05\\d{8}", message = "Phone number should start with 05 and contain 10 digits")]
```

## Salary

```
-Cannot be null.[@NotNull (message = "Empty salary")]
```

```
-Salary should be positive [@Positive (message = "Salary should be positive")]
```

-Salary should be more than 2000

```
[@Min(value = 2001, message = "Salary should be more than 2000
")]
```

## Department

```
-Cannot be null.[@NotEmpty (message = "Empty department")]
```

-Department length at least 5 characters and at most 12 characters

```
[@Size(min=5, max = 12, message = "Department length at least 5 characters and at most 12 characters ")]
```

-Department must contain characters only

```
[@Pattern(regexp = "^[a-zA-Z]{5,12}", message = "Department
must contain characters only")
```

]

Number of classes

```
-Cannot be null.[@NotNull (message = "Empty classes")]
-Faculty should have at least 3 classes
```

```
[@Min(value = 3, message = "Faculty should have at least 3
classes")]
```

-Faculty should have at most 5 classes

```
[@Max(value = 5, message = "Faculty should have at most 5
classes")]
```

Gender

```
-Cannot be null.[@NotEmpty (message = "Empty gender")]
```

-Gender must be Male or Female

```
[@Pattern(regexp="Male|Female", message = "Gender must be Male
or Female")]
```

Nationality

```
-Cannot be null.[@NotEmpty (message = "Empty nationality")]
```

-Nationality must contain characters only

```
[@Pattern(regexp = "^[a-zA-Z]{4,10}", message = "Nationality must contain characters only")]
```

• Position

```
-Cannot be null.[@NotEmpty (message = "Empty position")]
```

-Position must be Professor, Lecturer, or Assistant Professor

```
[@Pattern(regexp = " Professor|Lecturer|Assistant
Professor", message = "Position must be Professor,
Lecturer, or Assistant Professor")]
```

Administrator Model has: ID, name, age, email, department, position, hireDate, isActive.

```
    ID
```

```
-Cannot be null.[@NotEmpty (message = "Empty ID")]
-ID must contain digits only.
```

```
[@Pattern(regexp = "^\\d{10}$", message = "ID must contain
digits only")]
```

-ID must contain 10 digits.

```
[@Size(min = 10, max = 10, message ="ID must contain 10 digits")]
```

### • Nama

```
-Cannot be null.[@NotEmpty (message = "Empty name")]
```

-Name length at least 4 characters and at most 10 characters

```
[@Size(min = 4, max=10, message = "Name length at least 4 characters and at most 10 characters")]
```

-Name must contain characters only

```
[@Pattern(regexp = "^[a-zA-Z]{4,10}", message = "Name must contain characters only")]
```

## age

```
-Cannot be null.[@NotNull (message = "Empty age")]
```

```
-Age must be Positive.[@Positive (message = "Age must be Positive")]
```

-Age should be at least 30 years.

```
@Min(value = 30, message = "Age should be at least 30 years")]
```

### • Email

```
-Cannot be null.[@NotEmpty (message = "Empty email")]
```

```
-Email must be Valid [@Email (message = "Enter Valid email")]
```

## • Department

```
-Cannot be null.[@NotEmpty (message = "Empty Department")]
```

-Department must be HR, IT, or Finance.

```
[@Pattern(regexp = "HR|IT|Finance", message = "Department must be HR, IT, or Finance")]
```

- Position
  - -Cannot be null.[@NotEmpty (message = "Empty position")]
  - -Position must be Office Manager, or System Administrator

```
[@Pattern(regexp = "Office Manager|System
Administrator", message = "Position must be Office Manager, or
System Administrator")]
```

- Hiredate
  - -Cannot be null.[@NotNull (message = "Empty hire Date")]
  - -must be in this format yyyy-MM-dd

```
[@JsonFormat(pattern = "yyyy-MM-dd")]
```

- isActive
  - -Cannot be null. [@NotNull (message = "is Active Empty")]