

# Healthcare System

The healthcare system is designed to record patient information and manage appointments. The system includes patient and appointment models that have validation rules and criteria for its data.

## Patient Model:

### 1. Patient ID:

- @NotEmpty

Validates that the id is not empty.

- @Pattern(regex = "[a-zA-Z0-9]+\$")

Validates that id consist of letters and numbers with no special characters.

- Size(min = 4)

Validates that the id must be at least 4 characters.

### 2. Name:

- @NotEmpty

Validates that the name is not empty.

- @Pattern(regex = "[a-zA-Z ]+\$")

Validates that the name contains of only letters and spaces.

- @Size(min = 3)

Validates that the name must be at least 3 characters.

### 3. Phone Number:

- @Pattern(regex = "05\\d{8}\$")

Validates that the phone number starts with 05 and consists of 10 digits.

### 4. Height:

- @NotNull()

Validates that the height field is not null.

- @Positive()

Validates that the height is a positive number.

5. Weight:

- `@NotNull()`  
Validates that the height field is not null.
- `@Positive()`  
Validates that the height is a positive number.

6. Blood Type

- `@NotEmpty()`  
Validates that the blood type field is not empty.
- `@Pattern(regex = "^(A|B|AB|O)[+-$"])`  
Validates that the blood type corresponds to a valid blood category.

7. Medical history

- `@NotEmpty()`  
Validates that the medical history field is not empty.
- `@Size(max = 150)`  
Validates that the maximum length for the medical history is 150 characters.

8. Age:

- `@NotNull()`  
Validates that the age field is not null.
- `@Min(value = 0)`  
Validates that the minimum value of age is 0.
- `@Max(value = 150)`  
Validates that the maximum value of age is 150.

9. Gender

- `@NotEmpty()`  
Validates that the gender field is not empty.
- `@Pattern(regex = "^(Male|Female)$")`  
Validates that the gender is male or female only.

10. Date of birth

- `@NotNull()`  
Validates that the date of birth field is not null.
- `@PastOrPresent()`  
Validates that the date of birth is in the past or the present.

## Appointment Model:

### 1. Appointment Date and Time:

- @NotNull()  
Validates that the appointment date and time is not null.
- @Future()  
Validates that the appointment date and time is in the future.

### 2. Appointment reason:

- @NotEmpty()  
Validates that the appointment reason is not empty.
- @Size(max = 150)  
Validates that the maximum length for the appointment reason is 150 characters.

### 3. Doctor ID:

- @NotEmpty  
Validate that the ID is not empty.
- @Pattern(regexp = "[a-zA-Z0-9]+\$")  
Validates that ID consist of letters and numbers with no special characters.  
Size(min = 4)
- Validates that the id must be at least 4 characters.

### 4. Patient ID:

- @NotEmpty  
Validate that the id is not empty.
- @Pattern(regexp = "[a-zA-Z0-9]+\$")  
Validates that id consist of letters and numbers with no special characters.
- Size(min = 4)  
Validates that the id must be at least 4 characters.