

2.6



# Input Validation



S.No.	Annotation	Description
1	@NotNull	Ensures that the annotated field is not null.
2	@NotEmpty	Ensures that the annotated field is not null and its size/length is greater than zero. (For collections, arrays, and strings)
3	@NotBlank	Ensures that the annotated string is not null and its trimmed length is greater than zero.
4	@Size	Validates that the annotated element's size falls within the specified range.



S.No.	Annotation	Description
5	@Max	Ensures that the annotated element is a number with a value no greater than the specified maximum.
6	@Email	Validates that the annotated string is a valid email address.
7	@Pattern	Validates that the annotated string matches the specified regular expression.
8	@Positive	Ensures that the annotated element is a positive number (greater than zero).
9	@PositiveOrZero	Ensures that the annotated element is a positive number or zero.



S.No.	Annotation	Description
10	@Negative	Ensures that the annotated element is a negative number (less than zero).
11	@NegativeOrZero	Ensures that the annotated element is a negative number or zero.
12	@Past	Ensures that the annotated date or calendar value is in the past.
13	@PastOrPresent	Ensures that the annotated date or calendar value is in the past or present.
14	@Future	Ensures that the annotated date or calendar value is in the future.



S.No.	Annotation	Description
15	@FutureOrPresent	Ensures that the annotated date or calendar value is in the future or present.
16	@Digits	Ensures that the annotated number has up to a specified number of integer and fraction digits.
17	@DecimalMin	Ensures that the annotated element is a number with a value no less than the specified minimum, allowing for decimal points.
18	@DecimalMax	Ensures that the annotated element is a number with a value no greater than the specified maximum, allowing for decimal points.



S.No.	Annotation	Description
19	@AssertTrue	Ensures that the annotated boolean field is true.
20	@AssertFalse	Ensures that the annotated boolean field is false.
21	@Valid	Validates the associated object recursively (applies bean validation to nested objects).



## Handling Validation Exceptions

- MethodArgumentNotValidException is thrown by the @Valid validation
- You can get a list of all the errors from the bindingResult of this exception.
- You can use this list to return some useful error messages as the API response.

