**15. Spring MVC Form Validation - Applying Built-In Validation Rules**

**Form Validation**:

When we accept user inputs in any web application it become necessary to validate them. We can validate the user input at client side using JavaScript but it’s also necessary to validate them at server side to make sure we are processing valid data incase user has JavaScript disabled.

**Need of form validation**:

Check the user input form for

1. Required fields
2. Valid numbers in a range
3. Valid format (postal code)
4. Custom business rule for validation

**Java’s Standard Bean Validation API**:

1. For form validation we can use “Java’s Standard Bean Validation API”.
2. It defines a metadata model and API for entity validation.
3. Not tied to either the web tier or the persistence tier
4. Available for server-side apps and also client-side JavaFX/Swing apps
5. For more info <https://beanvalidation.org/>

**Spring support Validation**:

1. Spring version 4 and higher supports Bean Validation API
2. Preferred method for validation when building Spring apps
3. Simply add Validation JARs to our project

**Bean Validation Features**:

1. Required
2. Validate length
3. Validate numbers
4. Validate with regular expressions
5. Custom validation
6. More …..

**Validation Annotations**:

|  |  |
| --- | --- |
| **Annotation** | **Description** |
| @NotNull | Checks that the annotated value is not null |
| @Min | Must be a number >= value |
| @Max | Must be a number <= value |
| @Size | Size must match the given size |
| @Pattern | Must match a regular expression pattern |
| @Future / @Past | Date must be in future or past of given date |

**Our Road Map**:

1. Set up our development environment
2. Required field
3. Validate number range: min, max
4. Validate using regular expression (regexp)
5. Custom validation

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