



CS544 EA

# Applications

Validation: Programmatic Validation

# Programmatic Validation

```
public class App {  
    public static void main(String[] args) {  
        ValidatorFactory factory = Validation.buildDefaultValidatorFactory();  
        Validator validator = factory.getValidator();  
  
        Car car = new Car( null, true );  
  
        Set<ConstraintViolation<Car>> constraintViolations =  
            validator.validate( car );  
  
        assertEquals( 1, constraintViolations.size() );  
        assertEquals( "may not be null",  
            constraintViolations.iterator().next().getMessage() );  
    }  
}
```

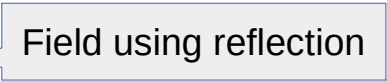
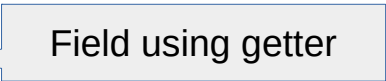
Create a validator

Car with @NotNull manufacturer and @AssertTrue registered

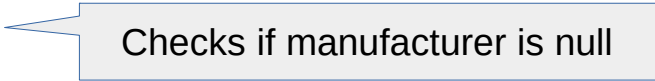
Validate the car

Check if it worked

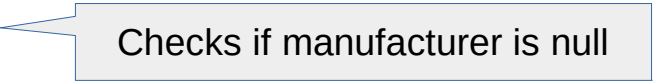
# Checking a Single Prop / Value

- If you don't want to validate an entire object:
  - You can validate individual values 
  - You can validate individual properties 
    - Uses JavaBean property name (no get, lowercase first)
  - These will not follow @Valid annotations

```
Set<ConstraintViolation<Car>> constraintViolations = validator.validateValue(  
    Car.class,  
    "manufacturer",  
    null );
```



```
Set<ConstraintViolation<Car>> constraintViolations = validator.validateProperty(  
    Car.class,  
    "manufacturer",  
    null );
```



# Constraint Violation Methods

Method	Description	Example
getMessage()	The error message	"may not be null"
getMessageTemplate()	The name in the bundle	{...NotNull.message}
getRootBean()	Root of object graph	Car
getRootBeanClass()	Class or root bean	Car.class
getLeafBean()	'leaf' the constraint is on	Person
getPropertyPath()	From root to property	Car.Person.name
getInvalidValue()	Value failing the constraint	null
getConstraintDescriptor()	Access to annotation etc.	@NotNull