

# WEB 2

Les 7: Validation

# ON THE EXAM

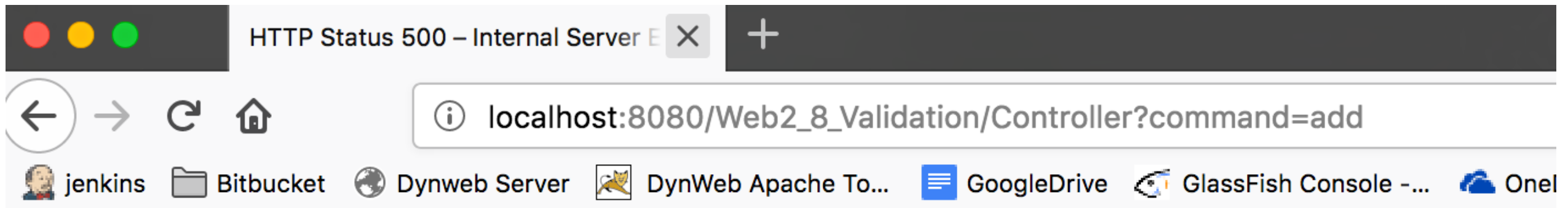


- ☑ When we add validation to a form: what do you have to add in Model, what in Controller and what in View?
- ☑ Why is client-side validation not enough?
- ☑ Why is server-side validation not enough?
- ☑ ...

# AGENDA

- ❑ Validation
- ❑ Client-side vs Server-side Validation





# HTTP Status 500 – Internal Server Error

**Type** Exception Report

**Message** Vul een naam in.

**Description** The server encountered an unexpected condition that prevented it from fulfilling the request.

## Exception

```
java.lang.IllegalArgumentException: Vul een naam in.  
    domain.model.Dier.setNaam(Dier.java:35)  
    ui.controller.Controller.add(Controller.java:95)  
    ui.controller.Controller.processRequest(Controller.java:52)  
    ui.controller.Controller.doPost(Controller.java:31)  
    javax.servlet.http.HttpServlet.service(HttpServlet.java:660)  
    javax.servlet.http.HttpServlet.service(HttpServlet.java:741)  
    org.apache.tomcat.websocket.server.WsFilter.doFilter(WsFilter.java:53)
```

**Note** The full stack trace of the root cause is available in the server logs.

**Apache Tomcat/9.0.4**



[Home](#)[Voeg Toe](#)[Zoek](#)[Overzicht](#)

- Vul een soort in.
- Vul een nummer in voor voedsel.

## Voeg je huisdier toe

Naam:

Soort:

Aantal keer eten per dag:

Alle velden zijn verplicht.

VALIDATION

# IMPLEMENTATION

- Model
  - add exceptions at the right places
- Controller
  - catch exceptions
  - give the error information to the view
- View
  - show the error information

# DO NOT

```
try{
    if(naam.isEmpty() && hoeveelheid.isEmpty()){
        //Beide velden leeg
        return "formulier.jsp";
    }else if(Double.parseDouble(hoeveelheid) < 0){
        //Hoeveelheid negatief
        return "formulier.jsp";
    }else if(naam.isEmpty() && !hoeveelheid.isEmpty()){
        //Naam is leeg
        return "formulier.jsp";
    }else if(!naam.isEmpty() && hoeveelheid.isEmpty()){
        //Hoeveelheid is leeg
        ...
    }else{
        //Alles goed
        return "berekening.jsp";
    }
}catch(NumberFormatException e){
    return "formulier.jsp";
}

try {
    request.setAttribute("berekening",
        organisatie.berekenKost(naam, Double.parseDouble(hoeveelheid)));
    return "berekening.jsp";
} catch (DomainException e) {
    return "formulier.jsp";
} catch (NumberFormatException e) {
    return "formulier.jsp";
}
```

# DO

```
if(naam.isEmpty() || hoeveelheid.isEmpty() || Double.parseDouble(hoeveelheid) < 0)){  
    //Minstens één veld heeft verkeerde invoer  
    return "formulier.jsp";  
}else{  
    //Alles goed  
    return "berekening.jsp";  
}  
  
try {  
    request.setAttribute("berekening",  
        organisatie.berekenKost(naam, Double.parseDouble(hoeveelheid)));  
    return "berekening.jsp";  
} catch (DomainException e) {  
    return "formulier.jsp";  
}
```



# Catch Specific Exceptions

```
String hoeveelheid = request.getParameter("hoeveelheid");

try {
    organisatie.berekenKost(naam, Double.parseDouble(hoeveelheid));
} catch (NumberFormatException|DomainException e) {
    ...
}
```

# AGENDA

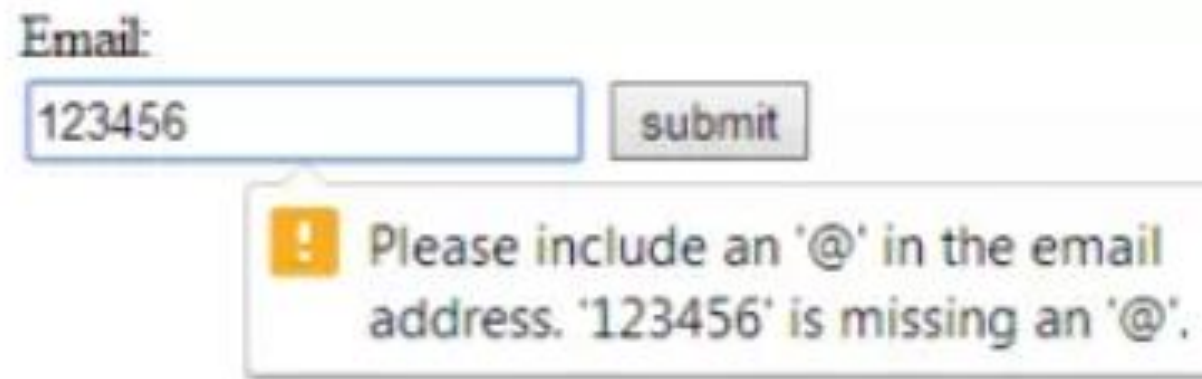
☒ Validation

☐ Client-side vs Server-side Validation



# CLIENT-SIDE VALIDATION

- HTML5

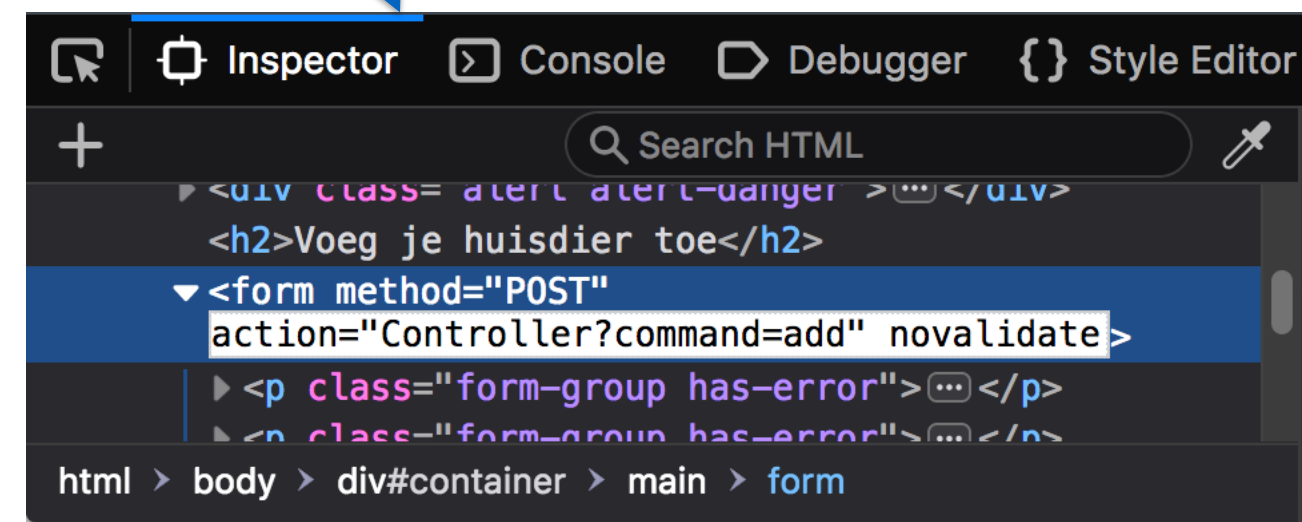
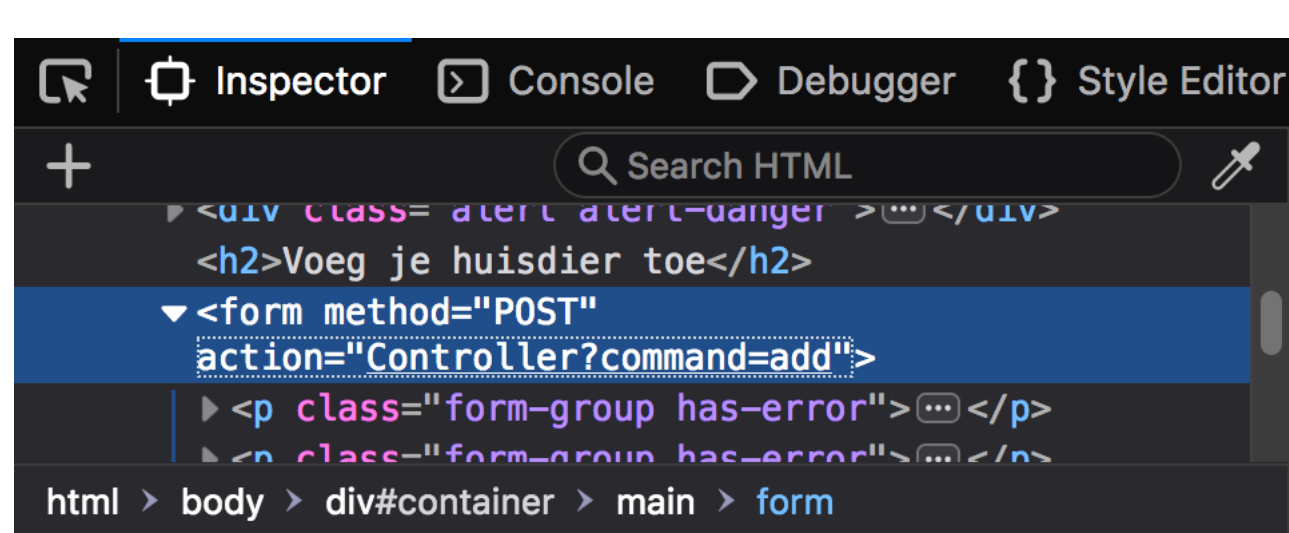


A screenshot of a web form illustrating HTML5 client-side validation. The form has a label "Email:" above a text input field containing "123456". To the right of the input field is a "submit" button. Below the input field, a validation message is displayed in a box: "Please include an '@' in the email address. '123456' is missing an '@'." The message is preceded by a yellow warning icon.

- don't trust the user: must always be accompanied by server-side validation
- read more <http://www.sitepoint.com/client-side-form-validation-html5/>

# HOW TO HACK CLIENT SIDE VALIDATION

- Open “Inspector”
- Go to element “form”
- Add attribute “novalidate”
- Fill out form and submit



# CLIENT-SIDE & SERVER-SIDE

- Only client-side validation is not enough
- Server-side validation: validate “business rules”
- Validate the same rules client-side & serverside? Yes! Why?

# DEMO

[https://github.com/UCLLWeb2-2122/Les7\\_ServerSideValidation](https://github.com/UCLLWeb2-2122/Les7_ServerSideValidation)



# MVC QUIZ

Tonen foutboodschap

Is een veld ingevuld?

Ligt een waarde tussen  
een bepaald bereik?

Oproepen domein

Exceptions opvangen

Valideer e-mailadres

MODEL	VIEW	CONTROLLER

# AGENDA

✓ Validation

✓ Client-side vs Server-side Validation

