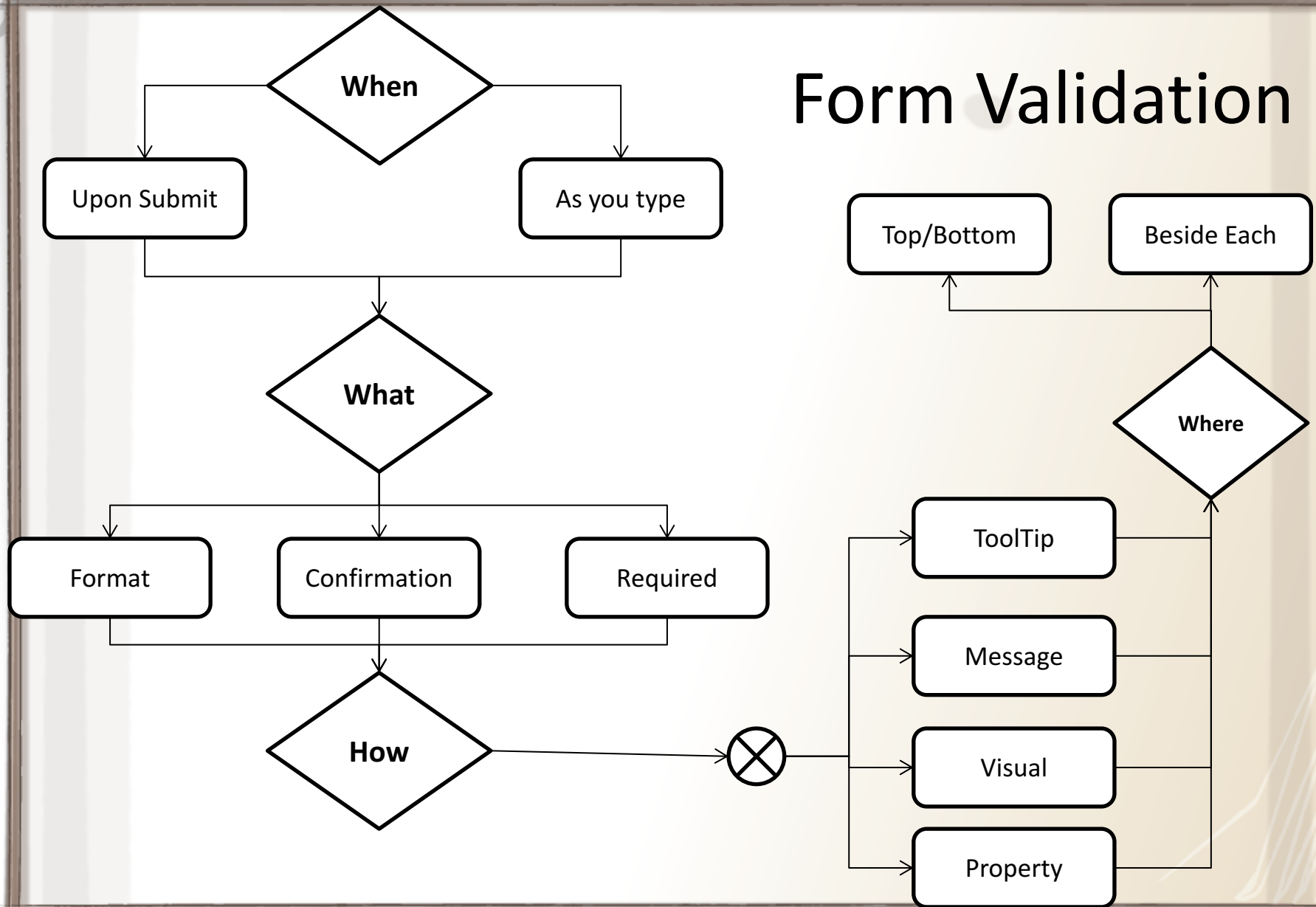


## >> Form Data Validation in JavaScript

(c) Dr. Mohammed Misbhaudhin



# Form Validation

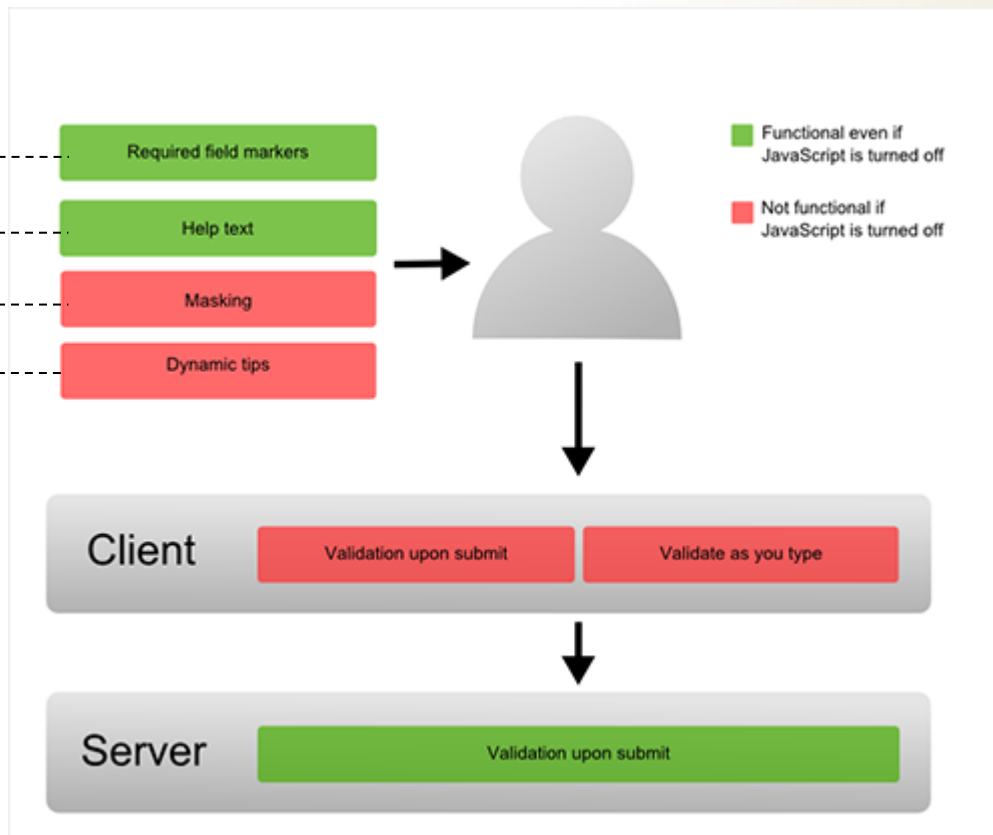


# Validation Types

\* On required fields

Beside the fields

Text  
disappears on  
typing  
Popup tool tips



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# When?

## – Validation upon Submit

- Classic way - user submits his data via the “**submit**” button
- Typical technique for server-side validation

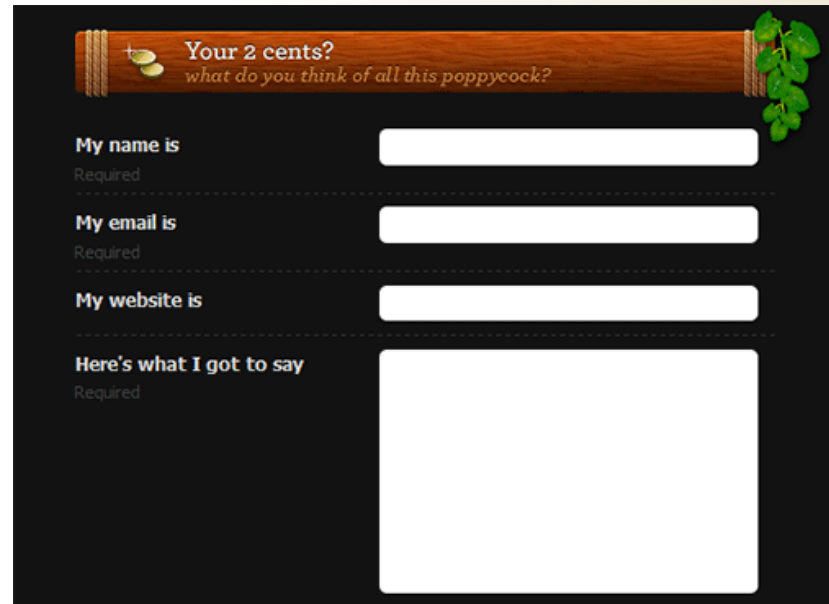
## – Instant Validation (Real-time/as you type)

- Alerts users while they are filling in the form
- **Key:** field loses focus
- Changing the color of field labels
- Providing error tips (balloons) next to each field

# What?

## – Required fields

- Ensure that the user provided all the necessary details in the web form
- A common way to mark required fields is with an **asterisk (\*)**



The image shows a web form with a dark background and a wooden-textured header. The header contains the text "Your 2 cents?" and "what do you think of all this poppycock?" with a small green plant icon on the right. Below the header, there are four input fields, each preceded by a label and a "Required" note. The labels are "My name is", "My email is", "My website is", and "Here's what I got to say". The "Here's what I got to say" field is a larger text area.

**Your 2 cents?**  
*what do you think of all this poppycock?*

**My name is**  
Required

**My email is**  
Required

**My website is**

**Here's what I got to say**  
Required

# What?

## – Correct format

- Applies to various cases such as email address, URL, dates, phone numbers and others
- Use **regular expressions** (*not in the scope*)
- Do not impose a strict input pattern on the users – interpret intelligently

Create your free Carbonmade portfolio

First, fill out your portfolio information.

Portfolio title

Wrong URL

Web address

wrong url .carbonmade.com

The url may only contain letters and numbers.

# What?

## – Confirmation fields

- Let the users confirm their input using additional confirmation fields

**Sign up. It's free.**

Username

Password

Choose password

Re-type password

**Next step >**

Current member? [Login](#)

# How?

## – Error Message

- Provide a clear and unambiguous message
- Preferably in red color
- Should contain an appropriate icon

## – Visual / Location

- Red inline messages or markers next to every invalid field
- Changing the background color or border color of invalid fields
- Changing the color of field labels
- Providing error tips (balloons) next to each field

### **Note:**

It is a good idea to have hints as the initial value of your input fields.  
Hint will disappear after user starts typing the data.



# Where?

## – Error Message Location

- Top/Bottom for all errors upon pressing the “submit” button (Single Span Tag to hold the error message)
- Beside each element (Span Tag beside each element)

# Exercise

- Go Online and download the HTML page named “facultyForm.html”

# When

## Try Now

1. Complete the function in the script tag
2. Alert user with message "Form Submitted"

```
<script type="text/javascript">
```

```
</script>
```

# Error

## Try Now

1. Notice the span tag after each form element. They have the same class **(error)** and a unique id
2. Each Span has an appropriate message
3. Span is styled such that
  - i. Red Color (*color property*)
  - ii. Italics (Slanted) (*font-style property*)
4. View it in the browser
5. Make them disappear (**Hint:** Use *visibility: hidden*)

# Modifying CSS

1. Get a handle on the element  
`var elem = document.getElementById(".....");`
2. Use "style" object to set the property  
`elem.style.visibility = "visible";`

**Note:**

If the property has a "-" in the name such as background-color

- Remove the hyphen (-)
- Capitalize the first letter of the second word
- backgroundColor

2. Can also use the setAttribute function  
`elem.setAttribute("style","visibility: visible");`

## Now Add function

Try Now

1. If a value is missing then display the error message
  - Use "" to identify an empty string

**Note:**

- i. "" is different from " "
- ii. "" is empty string
- iii. " " is a space

2. Change other properties if you wish to  
like the background color or the border color