

Webengineering

2017-07-03

Dr. Michael Lesniak

mlesniak@micromata.de



Roadmap 2017-07-03

- Organization
 - Code (show examples)
 - Bootstrap
 - Component communication
 - Lecture project: I'm here until 7pm for questions regarding
 - technology
 - design
 - functional and non-functional requirements
 - questions
 - tips and hints
 - ...and to discuss interesting topics you mentioned in the forum
- 
- Short...
- More time
for ...

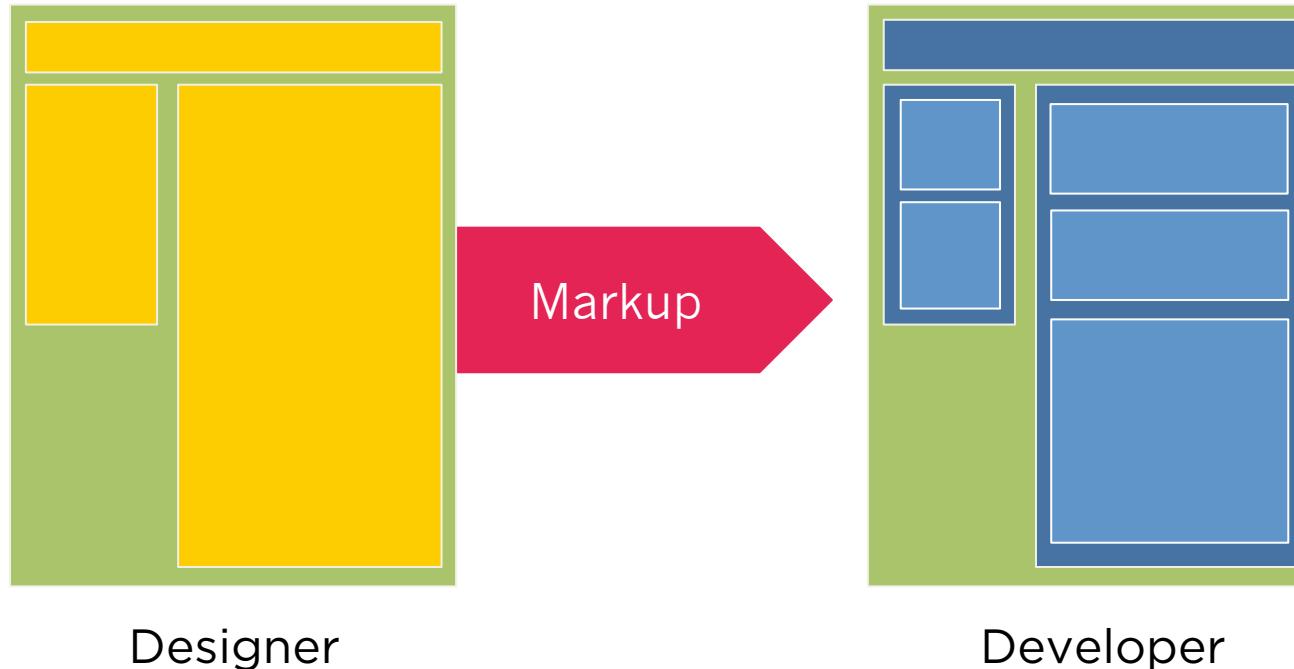
Organization

- 2017-07-10
 - Last lecture :-)
 - TBD // forum
- 2017-07-17
 - **NO LECTURE**

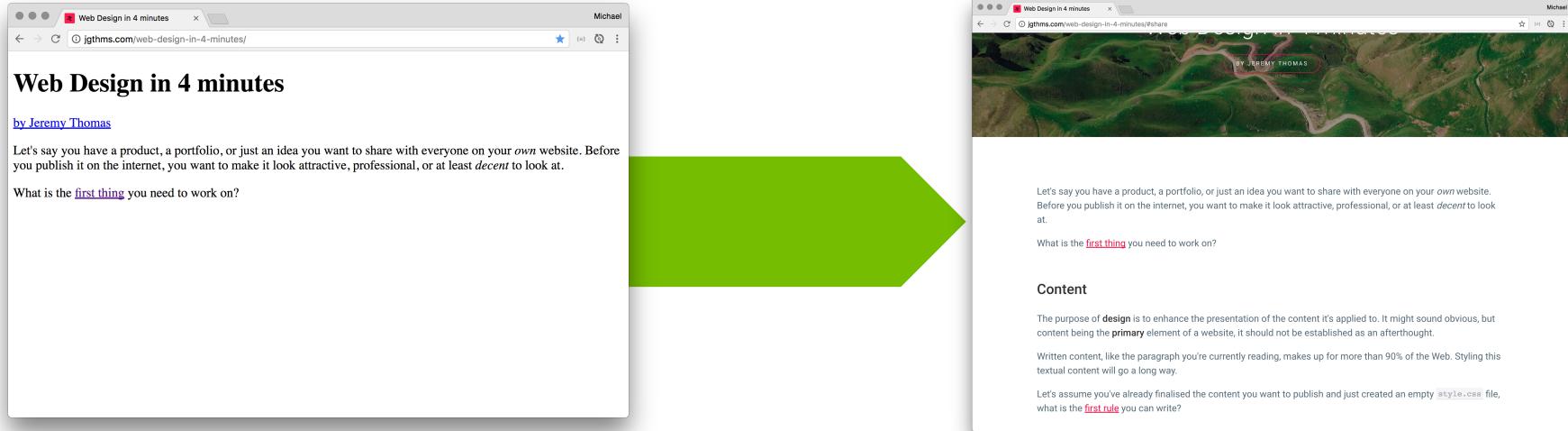
July								
	M	T	W	T	F	S	S	
2017-07-10	26	26	27	28	29	30	1	2
	27	3	4	5	6	7	8	9
	28	10	11	12	13	14	15	16
2017-07-17	29	17	18	19	20	21	22	23
	30	24	25	26	27	28	29	30
	31	31	1	2	3	4	5	6

CSS

- We won't discuss Cascading Style Sheets (CSS) in detail
 - quite complex
 - many details
- Not a fundamental topic of Web**engineering**
- In most (larger) projects, you have dedicated designers for your layout



CSS in 4 minutes



<http://jgthms.com/web-design-in-4-minutes/>

Bootstrap

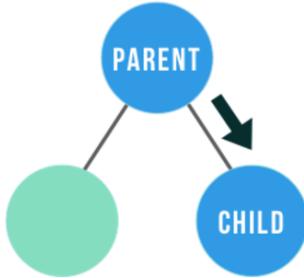
- Built by Twitter
- Open-Source
- Framework for
 - HTML
 - CSS
 - JavaScript
- Responsive
- Really great documentation with a lot of examples
- Good *get-something-working-fast-and-good-looking* approach if you don't have a designer

The screenshot shows the Bootstrap documentation website. At the top, there's a blue header bar with the text "Aww yeah, Bootstrap 4 is coming!" and navigation links for Bootstrap, Getting started, CSS, Components, JavaScript, Customize, Themes, Jobs, Expo, and Blog. Below the header, a purple sidebar on the left contains the word "CSS". The main content area has a white background. It features a section titled "Overview" with a small icon of a person looking at a screen. To the right of the overview, there's a sidebar with links to Overview, Grid system, Typography, Code, Tables, Forms, Buttons, Images, Helper classes, Responsive utilities, Using Less, Using Sass, and Preview theme. The main content area also includes a snippet of HTML code for the DOCTYPE declaration.

<https://getbootstrap.com/>

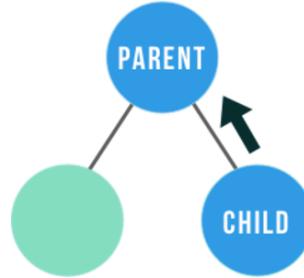
"Bootstrap is the most popular HTML, CSS, and JS framework for developing responsive, mobile first projects on the web."

Component communication >> React



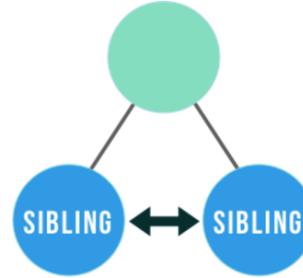
Parent to Child

- 1. Props
- 2. Instance Methods



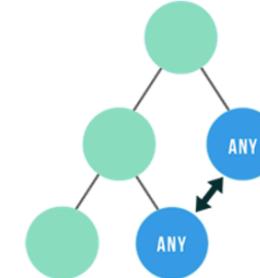
Child to Parent

- 3. Callback Functions
- 4. Event Bubbling



Sibling to Sibling

- 5. Parent Component



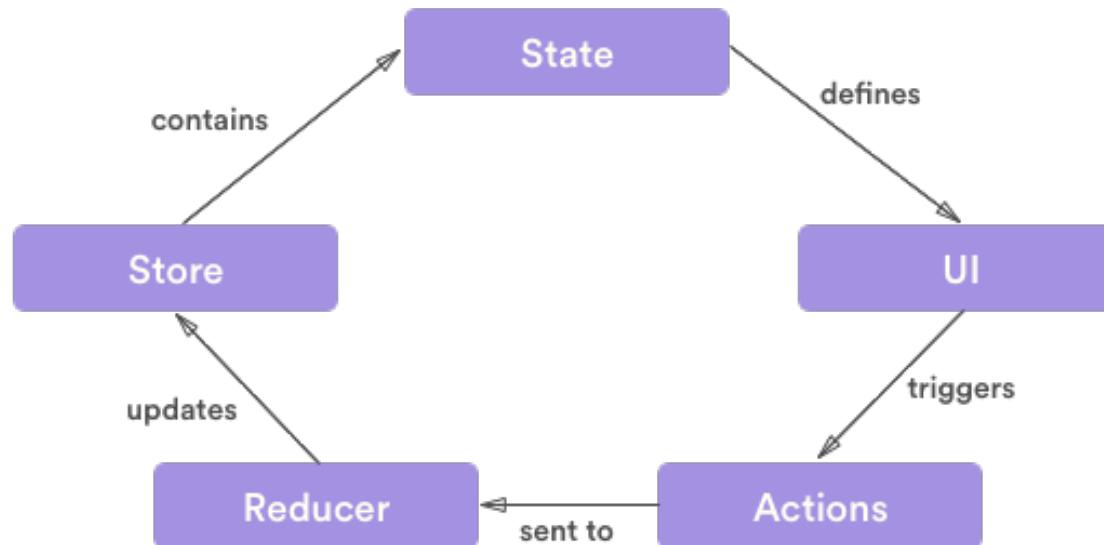
Any to Any

- 6. Observer Pattern
- 7. Global Variables
- 8. Context

<http://andrewhfarmer.com/component-communication/>

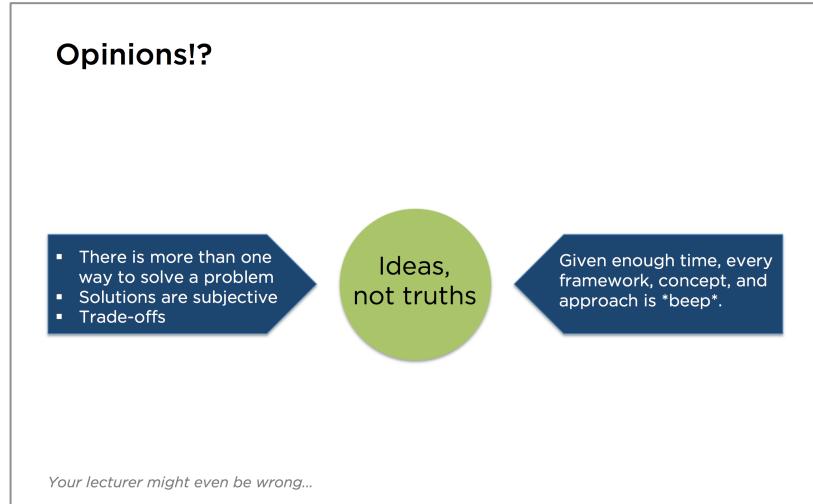
Component communication >> Advanced

- Use state and event handling frameworks
 - Famous one is [redux](#)
 - Bind to react with [react-redux](#)
- Use the right tool for the right job



Question everything

- I'm not a web designer, so take everything I do here with a grain of salt
- In fact: remember the first lecture: question everything ...



Q&A lecture project