

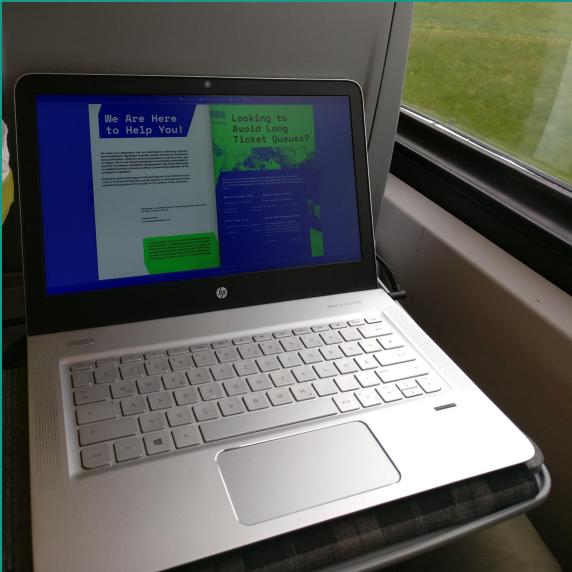
WeAreDevelopers 2018



May 16th-18th



Day 0



Day 1





Fireside Chat - The Woz

Steve Wozniak (Apple)

Fireside Chat
Steve Wozniak

Time on Stage
10:15 - 11:00

Stage
A+B+C

Session category
WeAreDevelopers

Speaker Bio



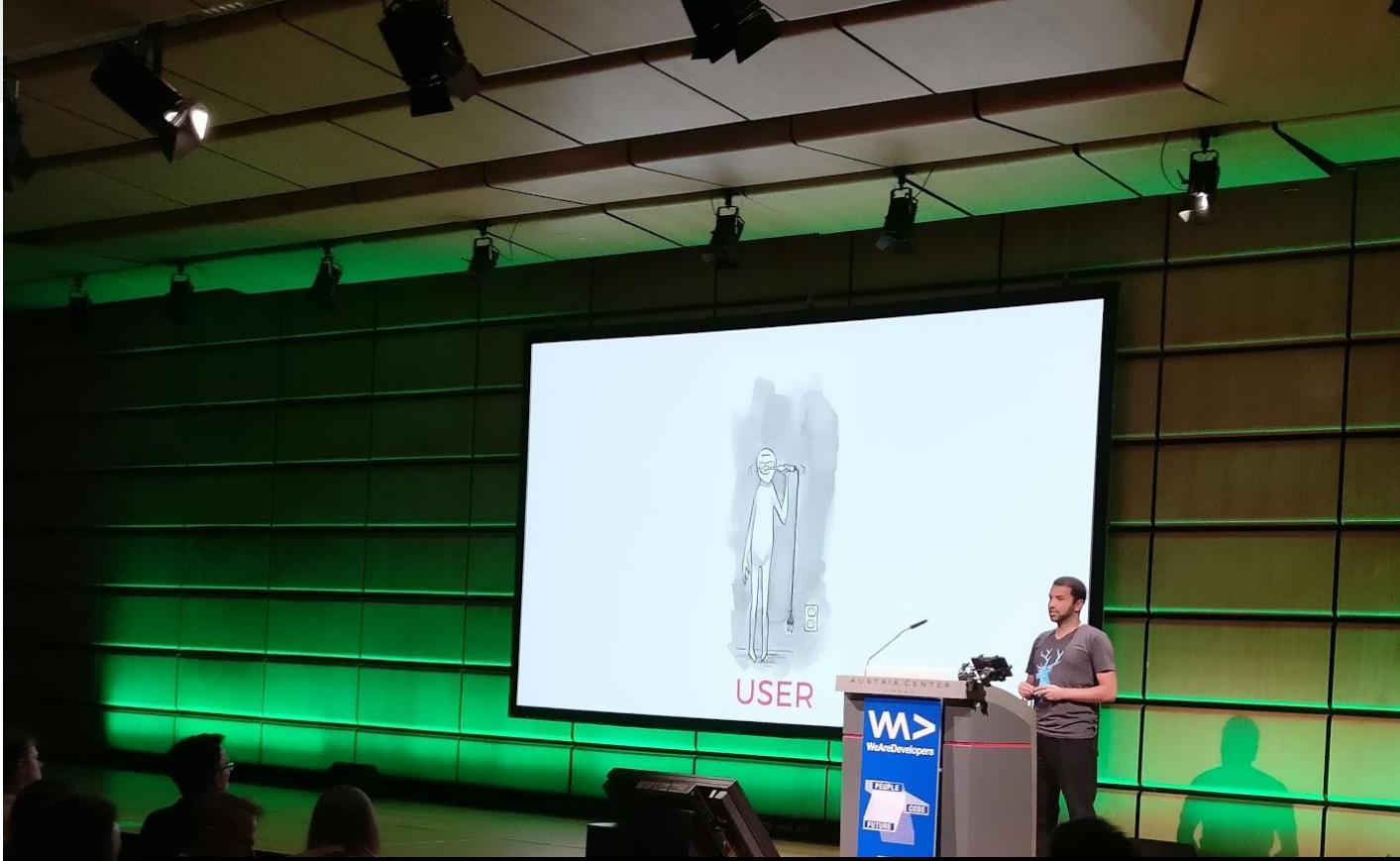
Steve Wozniak aka "The Woz" is considered to be one of the pioneers of the personal computer revolution. He co-founded Apple together with Steve Jobs. As a Silicon Valley icon and philanthropist for the past three decades, Steve Wozniak helped shape the computing industry into what it is today.

He single-handedly developed the 1976 Apple I, designed Apple II and was deeply involved in Apple's decision-making until 1985. He left Apple as a day-to-day employee, however he still remains on the company's official employee list and continues to represent the company at events. After Apple, The Woz was into remote control business until late 80s. Today, he is a Chief Scientist at the data virtualization company, Primary Data.

Wozniak founded the Electronic Frontier Foundation, an organization that defends free speech, privacy, innovation, and consumer rights.

Fireside Chat - The Woz

- enjoys his current job to travel around the world
- would suggest that Google and Facebook pay people for providing their personal data
- does not use Facebook, is confused why other people should see what he likes
- Recommends Apple Cloud, for 2.99\$/month you get 200GB
- Recommends Apple Cloud, for 2.99\$/month you get 200GB
- Recommends Apple Cloud, for 2.99\$/month you get 200GB
- has recently founded the online CS school <https://woz-u.com/>
- does not code nowadays, just some raspberry pi hacks



Offline-First Design & Web Components

Amahdy Abdelaziz (Google)

Offline Apps with Web Components
Amahdy Abdelaziz

Time on Stage
11:15 - 11:45

Stage D

Company
Vaadin

Session category
Frontend

Intermediate (incl. Code)

Session Info

There will be a live coding demo to see how it's simple to manipulate a large data, completely offline.

During this session I will cover:

- Quick Introduction to WebComponents
- Polymer elements
- Mobile-first concepts
- Offline-first concept
- Caching solution
- Offline storage solution
- In-browser database solution and showcase of current implementations
- PouchDB + CouchDB demo

Speaker Bio



International technical speaker, Google developer expert (GDE), trainer and developer advocate. Passionate about Web and Mobile apps development, including PWA, offline-first design, in-browser database, and cross platform tools. Also interested in Android internals such as building custom ROMs and customize AOSP for embedded devices. www.amahdy.net

Offline-First Design & Web Components

- Tech Specs vs Usability
- Familiar trends vs Target Audience
- Singularity of native apps → PWAs
- Fancy Tech vs User Experience
- Web Components are framework-independent
- Caching, Offline Storage, Data Replication, Firebase
- Pouch DB, slim web db (JS) for synchronizing data (when device is offline, data is cached, when back online again, synchronizes with back end storage) <https://pouchdb.com/>
- Initial load time: only snapshot of data, which is really necessary
- Security of stored data (everyone can open browser's dev tools)
- Race conditions (online update vs offline update - who wins?)
- Design strategies: 1) Mobile First. 2) Touch First. 3) Coffee-first (1 hand coffee, 1 hand phone)



Mastering Vue.js and Vuex

Christoffer Noring (Google)

Mastering Vue.js and Vuex
Christoffer Noring

⌚ Time on Stage
12:45 - 13:30

📍 Stage
D

🏢 Company
McKinsey

📁 Session category
IoT

●●○ Intermediate (incl. Code)

Session Info

Vue.js is the newest kid on the block. The adoption rate is through the roof. Let's try to uncover why that is, what makes Vue.js so great but let's also look at building professional apps in terms of tools to use, how to test it and what libraries that will empower you. This session will also cover centralized state management with Vuex.

Speaker Bio



Christoffer is a Google Developer Expert, a public speaker, and educator and a developer with more than 10 years of experience. He has a great interest in javascript with surrounding frameworks, tools and technologies.

Mastering Vue.js and Vuex

- Components for encapsulation (already in use for the chatbot)
- Data types, prop validation

```
Vue.component('my-component', {  
  props: {  
    propA: Number,  
    propB: [String, Number],  
    propC: {  
      type: String,  
      required: true  
    },  
  },
```

Mastering Vue.js and Vuex

- Components for encapsulation (already in use for the chatbot)
- Data types, prop validation

```
propD: {  
    type: Number,  
    default: 100  
},  
propE: {  
    type: Object,  
    default: function () {  
        return { message: 'hello' }  
    }  
},
```

Mastering Vue.js and Vuex

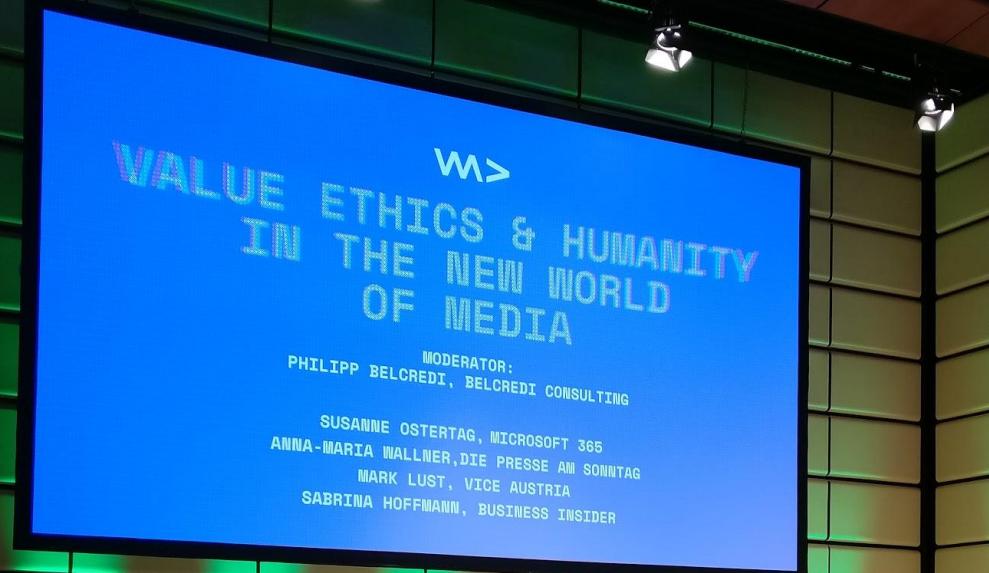
- Components for encapsulation (already in use for the chatbot)
- Data types, prop validation

```
propF: {  
    validator: function (value) {  
        return ['success', 'warning', 'danger'].indexOf(value) !== -1  
    }  
}  
})
```

Mastering Vue.js and Vuex

- State management with VUEX
- **store** holds the state of the app
- **mutations** change the state (store)
 - `this.$store.commit('mutationName')`
- **actions** are high-level mutations
 - may be async!
- **sub-stores** = module 1 + module 2 + ...

Value Ethics & Humanity in the New World of Media



Time on Stage
12:15 - 13:00

Stage
F1

Session category
Executive

Speaker Bio

Moderator: Philipp Belcredi, Scientist & Economist at Belcredi Consulting

Panelists:

Markus Lust, Editor in Chief at VICE
Susanne Ostertag, Head of Applications Services Group at Microsoft Austria

Sabrina Hoffmann, Editor in Chief at Business Insider
Anna-Maria Wallner, Managing Editor at Die Presse am Sonntag

Value Ethics & Humanity in the New World of Media

Panel Discussion

Generative Art Speedrun

Timothy Holman

⌚ Time on Stage
13:45 - 14:15

📍 Stage
D

Session category
DevOps

●● Intermediate (incl. Code)

Session Info

For so many of us, myself included, the art world is the entry point into the coding world. Join me, as we go through the ins and outs of generative art, and experience the joy of creating art with code. Generative art can be as simple or complex as you like, at the end of the day, everyone will have the mindset and processes down to create their own unique pieces of joy.

Speaker Bio



Tim is a tinkerer, tuner & tamperer of all things online who enjoys the artistic and creative aspects of development. If you've grown up on the web, you'll have probably bumped into something of his somewhere along the line. More on Tim's blog: tholman.com

Generative Art

Timothy Holman (<http://tholman.com>)



Space Jam! Digging Up the Web's Distant Past

Björn Ganslandt

Time on Stage
14:15 - 14:45

Stage
D

Company
Intuo

Session category
Frontend

●●○ Intermediate (incl. Code)

Session Info

As web developers we spend a good amount of time learning the latest techniques and features. So much that we sometimes forget the web's history extends beyond IE11. So let's use those shiny dev tools of ours for a bit of web archeology for a change and explore Space Jam, a website that has been largely unchanged since 1996. Shortly before CSS became a W3C recommendation that year, Warner Brothers released a movie featuring Michael Jordan, Bill Murray and Bugs Bunny taking on a group of aliens in an epic basketball match. A movie accompanied by a website. Exploring its source we'll see concepts that endured, were discarded and ones that are just about to reemerge 20 years later. Join me in a celebration of animated gifs, backward compatibility and the open web.

Speaker Bio



Björn bridges the gap between user experience and frontend development at intuo in Vienna. He splits his time between user observation, CSS wrangling and UI scribbling. At one point he was a design theory researcher and hosted a weekly radio show, but still feels very much inadequate when it comes to discussing typography and music. In his spare time Björn typesets books and builds duplo houses with his daughter Ada.



Space Jam! Digging Up the Web's Distant Past

Björn Ganslandt (Intuo)

Serverless vs Kubernetes

Niklas Heidloff (IBM)



When to Use Serverless? When to Use Kubernetes? Niklas Heidloff

⌚ Time on Stage
15:00 - 15:45

📍 Stage
E2

🏢 Company
IBM

📁 Session category
Backend

◉ Beginner (incl. Code)

Session Info

There is a lot of debate whether to use Serverless or Kubernetes to build cloud-native apps. Both have their advantages and unique capabilities which developers should take into consideration when planning new projects. We will throw some light on the topics ease of use, maturity, types of scenarios, developer productivity and debugging, supported languages, DevOps and monitoring, performance, community and pricing. Cloud-native architectures shift the complexity from within an application to orchestrations of Microservices. Both Kubernetes and Serverless have their strengths which we will discuss. Besides the core development topics, developers should also understand operational aspects how complicated it is to maintain your own systems versus using managed platforms.

Speaker Bio



Niklas Heidloff works for IBM as a Developer Advocate. He likes learning, conversational user experiences and serverless technologies. Niklas is a proud father of five and loves BBQ.

Serverless vs Kubernetes

- Apache OpenWhisk vs Kubernetes
- Life cycles: code, test, deploy, run
- Serverless: devs don't care about servers
- Kubernetes = orchestration framework
- Istio (YAML) = Extension for kubernetes, manages microservices
- Serverless *easier* than kubernetes
- A/B-testing: easy with kubernetes + istio (config in YAML: weight 50, weight 50)
- Serverless: A/B-testing not possible
- Helm: package manager for kubernetes
- Serverless monitoring: Grafana
- Serverless != admin-less
 - On-premise deployments
 - Security vulnerabilities (docker images)



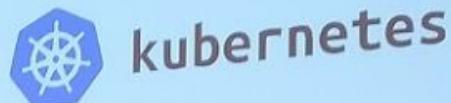
Summary



@nheidloff

Use **Serverless** for ...

- Variable and irregular loads (can lead to lower costs)
- Developer productivity for first time experience
- Inherent auto-scalability



Use **Kubernetes** for ...

- Mature deployment options, e.g. A/B testing, monitoring
- Minimal response latency
- High performance computing without resource restrictions

IBM
CODE

Time on Stage
16:15 - 17:00

Stage
E1

Company
Google Cloud

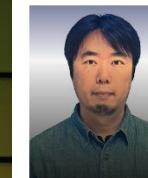
Session category
Stories

●○○ Beginner

Session Info

TensorFlow, the open source library for machine learning from Google, has been democratizing the world of machine intelligence since its launch in 2015. With TensorFlow, combined with the scalability of Google's Cloud Machine Learning Engine, now anyone can leverage deep learning technology at low cost and without much expertise. We will explore examples of business that have adopted TensorFlow and Cloud ML to solve their real-world problems: a cucumber farmer in Japan who was able to build a deep learning-based cucumber sorter by himself, a used car auction service using TF for classifying car models and parts, and a food manufacturer that has been able to increase productivity significantly in their baby food factory.

Speaker Bio



Kaz Sato is Staff Developer Advocate at Google Cloud team, Google Inc. Focusing on Machine Learning and Data Analytics products, such as TensorFlow, Cloud ML and BigQuery. Kaz has been invited to major events including Google Cloud Next SF, Google I/O, Strata NYC etc., authoring many GCP blog posts, and supporting developer communities for Google

Cloud for over 8 years. He is also interested in hardwares and IoT, and has been hosting FPGA meetups since 2013.

WeAreDevelopers

How about these?

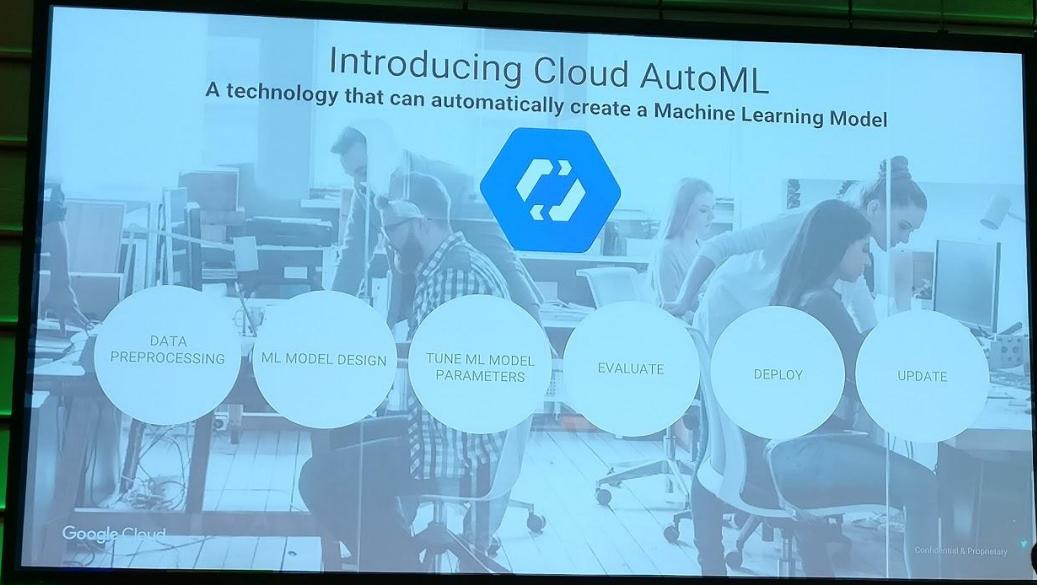
The slide displays eight images arranged in two rows of four. The top row shows a small white dog with a very shaggy coat, a yellow-handled mop head, a long-handled mop head, and a standard white mop head. The bottom row shows a white mop head, a blue mop head, a yellow bucket next to a mop head, and a yellow mop head. Below the images is a caption in small text.

CC BY-SA 2.0 Wikimedia Commons https://commons.wikimedia.org/w/index.php?title=File:Westminster_Dog_Show_(cropped).jpg
CC-BY-2.0 Wikimedia Commons https://commons.wikimedia.org/w/index.php?title=File:2014_Westminster_Kennel_Club_Dog_Show_(24873158651).jpg
CC-BY-2.0 Petzl https://www.flickr.com/photos/petzl/6034605172/
CC-BY-2.0 Jeffrey Beall https://www.flickr.com/photos/cerfrey/6953762020/



Real-world ML with TensorFlow & Cloud ML

Kaz Sato (Google)



A man in a dark sweater stands on stage, gesturing with his hands.

<https://cloud.google.com/automl/>

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WeAreDevelopers



AI is the New Normal

Anand Raman (Microsoft)

AI Is the New Normal
Anand Raman

Time on Stage
17:30 - 18:00

Stage D

Session category
AI / ML / NLP

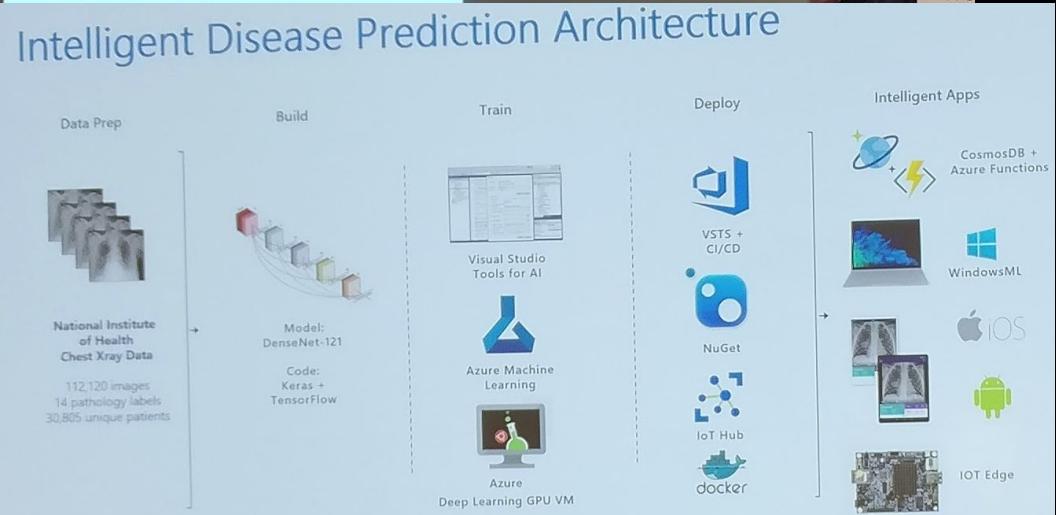
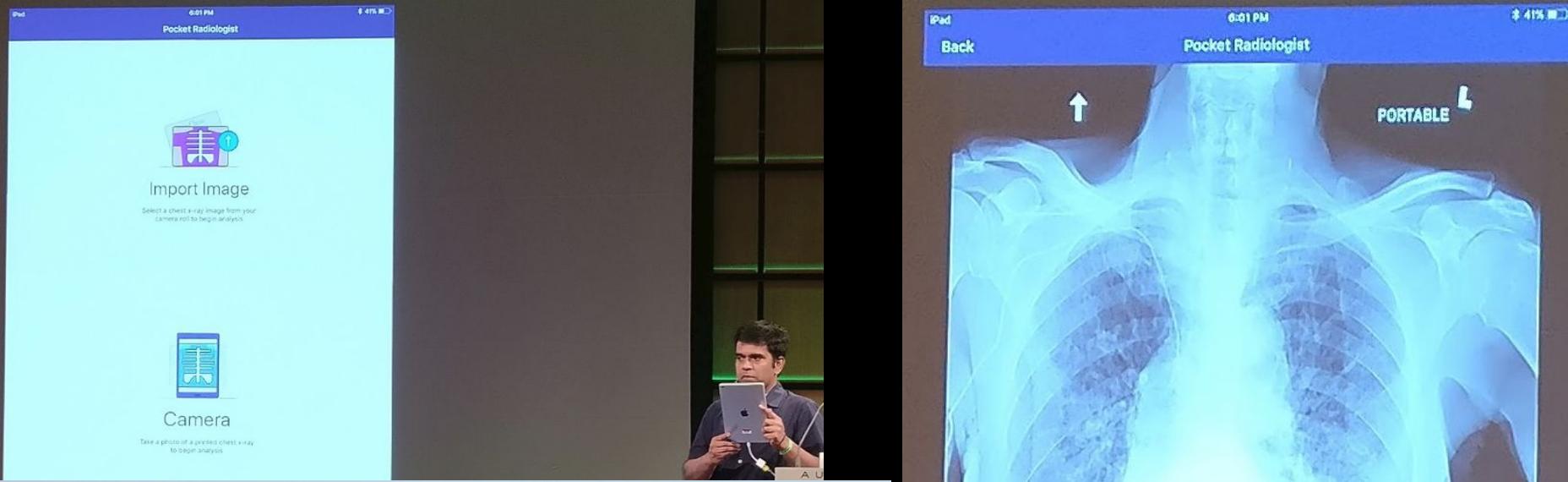
Session Info

AI is now becoming the part of every software workload. Widespread use of mobile devices and powerful personal computing have driven a major shift among organizations of all types to adopt Artificial Intelligence (AI) using scalable, cost-efficient cloud computing infrastructure. In this talk, you will learn about the application of AI technologies in the cloud. We will help you understand how to add pre-built AI capabilities like object detection, face understanding, translation and speech to applications. We will show how developers can build Cognitive Search applications that understand deep content in images, text and other data. We will also show how the platform can be used to build your own custom AI models for predictive applications and how to use the Azure platform to accelerate machine learning. By the end of this session, developers will know how to leverage new tools and resources to build intelligent apps and customize those apps on Azure.

Speaker Bio



Anand Raman is the Chief of Staff for AI Platform and GM for AI Ecosystem at Microsoft. Previously he was the Chief of Staff for Microsoft Azure Data Group covering Data Platforms and Machine Learning. In the last decade, he ran the product management and the development teams at Azure Data Services, Visual Studio and Windows Server User Experience teams at Microsoft. Anand holds a PhD in Computational fluid mechanics and worked several years as researcher before joining Microsoft.



Dinner, Fire and Work

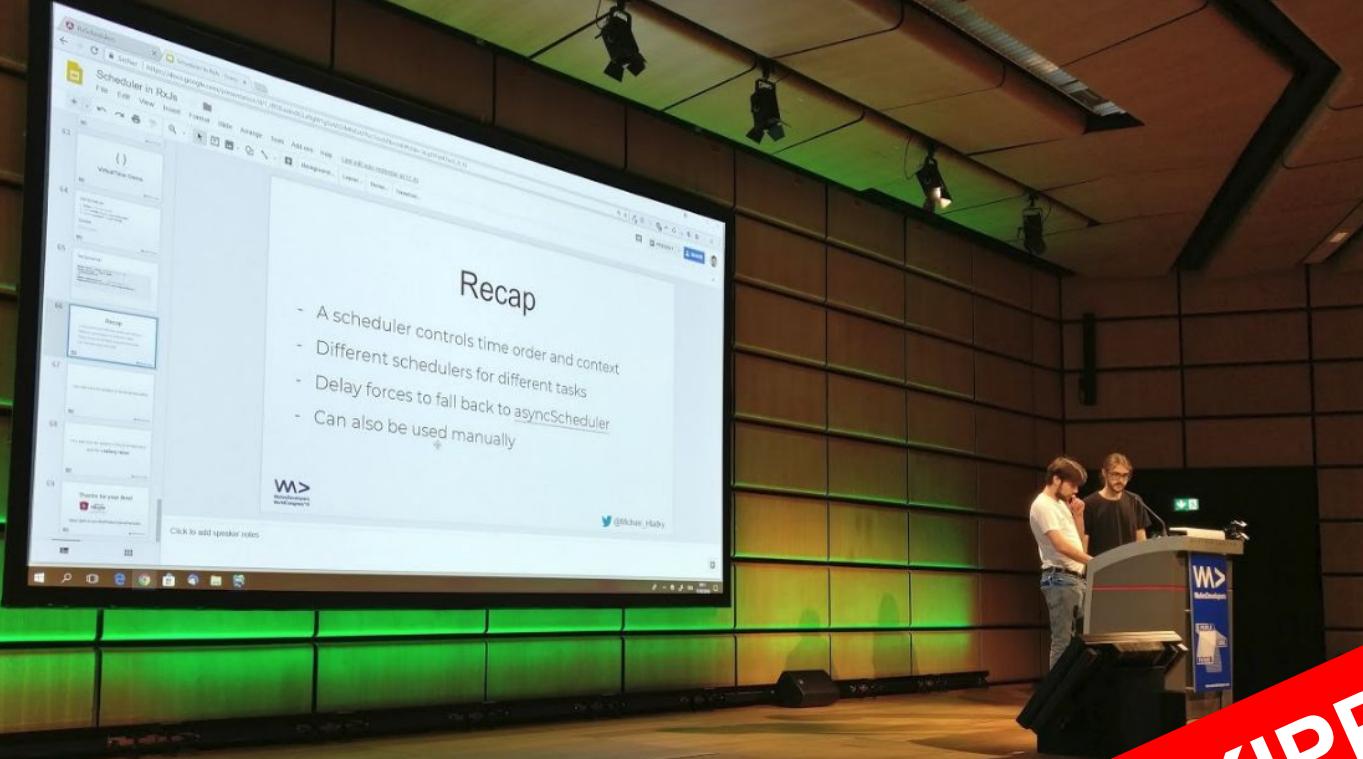


Day 2



Reactive Programming

Tracy Lee (GDE)



Session Info

Everybody needs to code in order to get a job in the future is a constant message by people who learned our trade by coding or to sell coding teaching services. Or politicians who have no clue. If we look closer though, then coding is yet another task that is not immune from automation or machine learning takeovers. Time to reconsider our approach to "coding as the end-all"

Speaker Bio



Chris Heilmann dedicated the last 20 years of his life to make the web work and thrive. As a lead developer on some of the largest web products he learned that knowledge is not enough without teamwork and good handover. He dedicated most of his time since on educating, writing and sharing, presenting on average at 30 conferences a year. He strives to make

code and coders work efficiently and get more done quickly without losing the understanding of what we do. He is the author of several JavaScript books and the Developer Evangelism handbook (<http://developer-evangelism.com>). He is currently a Senior Program Manager in Microsoft and spends a lot of time pondering how machine learning and AI can aid humans and replace jobs we're too important to do.



I am worried about
the perception of
coding...

- Huge misconception: everybody who learns to code will have a great, fulfilling job.
- Danger: people who just learned to code will immediately build products
- Arrogant assumption: what we call coding now can never be automated.



Sacrificing the Golden Calf of Coding

Christian Heilmann (Microsoft) [Slides](#)



DOOM's Development: A Year of

John Romero (DOOM)

DOOM's Development: A Year of Madness
John Romero

Time on Stage
11:00 - 11:45

Stage
A

Company
Doom

Session category
Stories

Intermediate

Session Info

Few games can match the ubiquity and legacy of DOOM, the seminal first-person shooter that ushered in thousands of mods, clones, and successors. "Does it run DOOM?" is the oft-heard phrase as it is the canonical first-port for any system, be it a toaster, touch bar or printer. Programmer, game designer, level designer and DOOM II final boss John Romero will deliver a postmortem on the game showing rarely seen material, memorializing its immersive but nerve-wracking 3D environments, networked multiplayer deathmatches, demonic imagery and themes, Barney WADS, exploding barrels, and BFG 9000.

Speaker Bio



John is an award-winning game designer, level designer, and programmer whose work portfolio includes 130 games, of which 107 have been published commercially. John Romero has co-founded 8 widely successful game companies, including id Software, Gazillion Entertainment, and Loot Drop. He co-owns Loot Drop and Romero Games. He is regarded as one of the world's best game designers and his products have won over a hundred awards to prove it. Furthermore, John Romero is fully a self-taught designer and programmer, drawing inspiration from early Apple II programmers.

W>

Join at
slido.com
#WeAreDevs

- Top questions (58)
- Dominik
How did you handle version control back then? 129
 - Anonymous
How did you monetize doom? 166
 - Ivan
What are your thoughts on DOOM (2016)? 119
 - Rafiq
Latest question
What are your thoughts on devs using psychologists to design games to trigger dopamine feedback loops and/or drive revenue?

ARE DEVS



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Storytelling in SW-Development

Christina Hauk (Nagarro)



Storytelling in SW-Development

- Mainly about BDD ([Behavior-Driven Development](#))
- BDD is extension of TDD
- Strongly connected to user stories > "As a [role] I want [feature] so that [benefit]".
- Descriptive keywords are essential
- Natural language-based testing with [Cucumber.js](#)



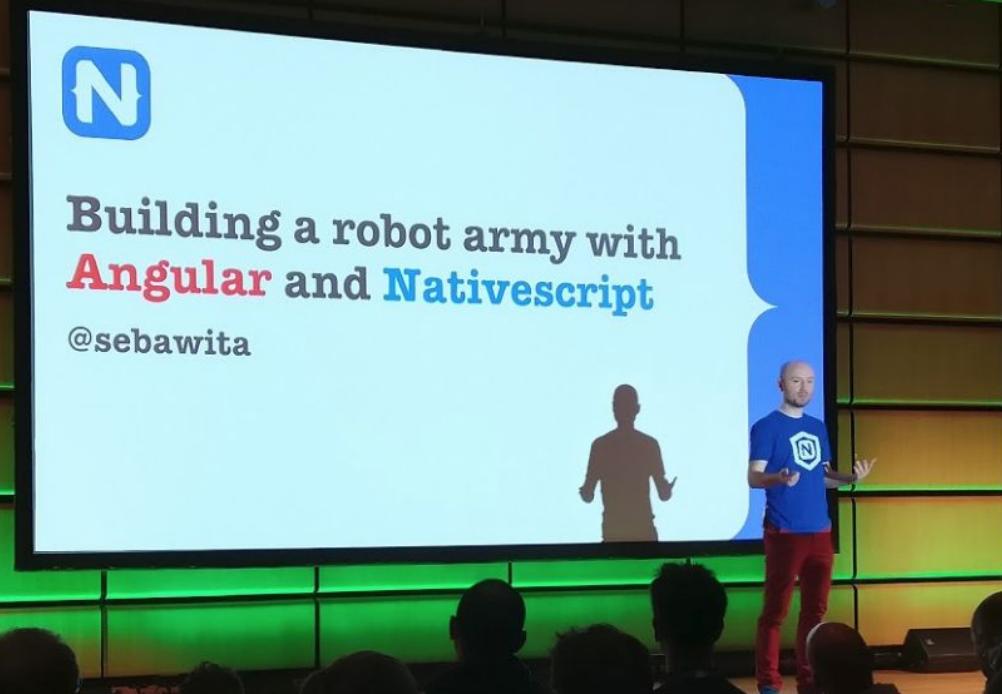
Storytelling in SW-Development

```
const { Given, When, Then } = require('cucumber')
const { expect } = require('chai')

Given('a variable set to {int}', function(number) {
  this.setTo(number)
})

When('I increment the variable by {int}', function(number) {
  this.incrementBy(number)
})

Then('the variable should contain {int}', function(number) {
  expect(this.variable).to.eql(number)
})
```



Time on Stage
13:45 - 14:30

Stage D

Company Progress

Session category Frontend

● Beginner (incl. Code)

Session Info

The idea of this talk is to show everyone how easy and most importantly fun it is work with building apps that can communicate with real objects like robots, drones and lightbulbs. I will go through few steps of:

- explain how BLE works (i.e. what are the protocols, how to connect, what are the limitations)
- explain how Angular can be used as the core framework to build IOT apps
- (for web) explain how Web Bluetooth API to build web apps and demo with a real drone and/or robot
- (for native mobile) explain and show/demo how the Bluetooth works on mobile devices and how to use it with NativeScript as an example
- summarise, point into the right direction where to learn more
- predict the future

Speaker Bio

Sebastian Witalec is a Developer Advocate for Progress who specialises in Angular and NativeScript. He loves working on both serious and fun projects and one day he will use his roboarmy to conquer the world.

Building a Robot Army with Angular

Sebastian Witalec (Progress)

Slides (humorous)

Native JavaScript modules

Serg Hospodarets

[Slides](#)



Native JavaScript modules
Serg Hospodarets

Time on Stage 15:15 - 16:00 Stage F2

Session category Frontend

Intermediate (incl. Code)

Session Info

All the modern browsers support native JavaScript modules, and it's a perfect time to start using them, which will change the way we are bundling the JavaScript using Webpack, Rollup, and other bundlers, and how the code is executed.

We will take a look how it works, what is the level of support in the browsers and Node.js, plus main findings and gotchas on the way of publishing and using them in production.

Looking into examples, we will understand the native modules features, performance details and lazy loading JS modules techniques.

Speaker Bio



Serg is a Lead Front-End Developer / Lead Engineering Manager based in Dublin. He loves the Web and shares his knowledge in his blog hospodarets.com.

Being a big fan of moving JavaScript and CSS forward, Serg participates specifications debates and discusses new features with the community.

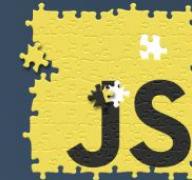
He likes to stay on top of the latest Web technologies and browser additions, participates their development, standardization, and enhancement.

Serg highlights all this and the browsers/DevTools additions on Twitter @malyw

Native JavaScript modules

- Ways how to modularize a JavaScript app
- External JavaScript files

First attempt: external JS files



```
<script src="./vendor/polyfill.js"></script>
<script src="./lib/core.js"></script>
<script src="./components/dropdown.js"></script>
<script src="./components/modal.js"></script>
<script src="./application.js"></script>
```

```
// dropdown.js
var delay = 2000; // in ms

// modal.js
var delay = 4000; // in ms
```

Variable
overwrite

A red annotation "Variable overwrite" is placed next to the second "delay" declaration in the code, with a black arrow pointing from it to the variable name.

```
// dropdown.js
(function(){
  var delay = 2000; // in ms
  APP.dropdown.delay = delay;
})();
// modal.js
(function(){
  var delay = 4000; // in ms
  APP.modal.delay = delay;
})();
```

Pros:

- Code separation
- Separate modules

Cons:

- Code reuse
- Global scope

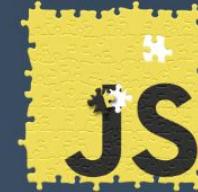
Simple solutions:

- Global vars
- IIFE (immediately-invoked function expressions)

Native JavaScript modules

- Ways how to modularize a JavaScript app
- External JavaScript files
- Async Module Definition

Async Module Definition



```
// dropdown.js
define(
  // Module definition
  'components/dropdown',
  // dependencies
  ['vendor/polyfill',
   'lib/core'],
  // module code
  function(core) {
    var dropdown = {};
    dropdown.delay = 2000; // in ms
    return dropdown;
  });

// application.js
define([
  'components/dropdown',
  'components/modal',
], function(dropdown, modal) {
  // APP LOGIC
});
```

Pros:

- Module scope
- Module reuse
- Dependency injection
(testing etc.)
- Tooling: Require.js etc.

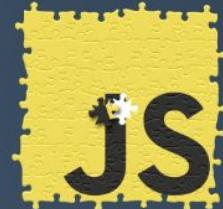
Cons:

- Confusing syntax
- Dependencies order because of
async nature
- Multiple requests in HTTP 1 era
- Usage with Angular, required
additional effort to avoid minification
problems

Native JavaScript modules

- Ways how to modularize a JavaScript app
- External JavaScript files
- Async Module Definition
- CommonJS

CommonJS



```
// dropdown.js
require('../vendor/polyfill');
require('../lib/core');

var dropdown = {};
dropdown.delay = 2000; // in ms
module.exports= dropdown;

// application.js
const dropdown = require('./components/dropdown');
const modal = require('./components/modal')

// APP LOGIC
```

Pros:

- Supported in Node.js
- Scoping and context
- Modules reuse
- Tooling: Browserify etc.

Cons:

- No async module load (either load and use as a callback, or implement something with file.read and extracting module.exports)
- Not a standard, not supported in browsers

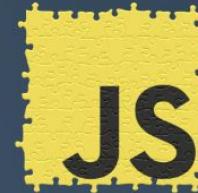


Native JavaScript modules

- Ways how to modularize a JavaScript app
- External JavaScript files
- Async Module Definition
- CommonJS
- ECMAScript Modules (ESM)

ECMAScript Modules

aka JavaScript modules, aka ESM



```
// dropdown.js
import './vendor/polyfill.js';
import './lib/core.js';

export const dropdown = {};
dropdown.delay = 2000; // in ms

// application.js
// STATIC imports
import {dropdown} from './components/dropdown.js';

// Dynamic imports
import('./components/modal.js')
  .then(({modal})=> {
    modal.open();
  });

// OTHER APP LOGIC
```

Pros:

- Module scopes
- Modules reuse
- Multiple, named exports
- Deferred, but executed in order
- Both static and dynamic
- ES 2015 standard
- Tooling:
Webpack/Babel/Rollup

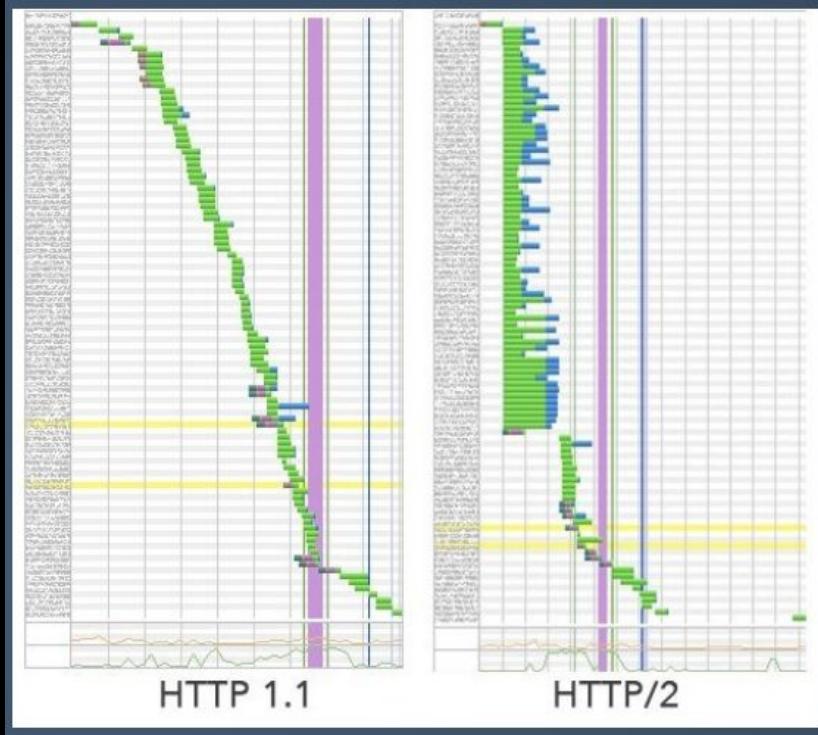
Cons:

- Not supported in browsers?
- Not supported in Node.js?

Native JavaScript modules

- Ways how to modularize a JavaScript app
- External JavaScript files
- Async Module Definition
- CommonJS
- ECMAScript Modules (ESM)
 - Modules have own scopes and context
 - Still have access to global scope
 - Imports are immutable references (cannot be reassigned)
 - ESM are singletons (loaded and executed only once even if imported via different paths or methods)
 - Always CORS (cross-origin mechanism)
 - Deferred by default
 - “Use strict” by default
 - Unit testing support with chai and other frameworks
 - Performance bottleneck if many modules are loaded - call for HTTP/2

Slides





Conclusions/takeaways

- Great support
- How to include: type="module" (browser), .mjs (Node.js)
- nomodule solution for migration
- HTTP2 and <link module-preload /> for performance
- Simplified configuration, debugging and publishing
- Not fully ready for enterprise projects, perfect for small and middle-size apps





Web Component Architecture and Patterns

Ana Cidre (codestrand)

Web Component Architecture and Patterns

Ana Cidre

⌚ Time on Stage
16:45 - 17:15

📍 Stage
F2

Session category
Frontend

Session Info

In this talk, we are going to look at what web components are, why we need them and how we can construct them according to best practices. In order to do this we will see several examples, and each example will be tackled with its own approach. Through these examples we will be able to see the pros and cons of different ways of structuring web components.

Our journey will take us through different design patterns such as MVC, MVP and MVVM. On this road we will discuss services and singletons, encapsulation, inheritance vs composition and much more. Even though these concepts can sometimes be hard to grasp or even boring, we will explain them in a simple and fun way.

We all know that you never write the perfect code the first time, there are always iterations. So, your goals should be: write code that is easy to understand, easy to refactor and easy to test! Also, it should often be easy to reuse but only when necessary (not all components need to be reusable but we will see more about that in our talk). We want to help you achieve this.

Speaker Bio



Ana Cidre is a frontend developer currently starting up a software development agency (codestrand). She is not your usual software developer, as she has a degree in Fine Arts and a Master in International Business Economics and Management. She has been named Women Techmaker Lead by Google, is the founder of "GalsTech", a local group for women in tech in Galicia (Spain), and an organiser of the GDG Vigo chapter.

Web Component Architecture and Patterns

- Separation of concerns
- MVC, MVP, MVVM
- MVVM: two-way data bindings
- React, Vue, Angular already do encapsulations (e.g. Vue Components)
- based on 4 specifications: Custom Elements, Shadow DOM, HTML Imports, Template
- Shadow DOM =
 - encapsulate WC-tree
 - no styling side-effects possible
 - “slot” = placeholder for mark-up generated outside the shadow DOM (user-defined stuff)

Web Component Architecture and Patterns

- Getting started with Web Components: <https://www.webcomponents.org/introduction>
- Libraries for creating custom components, e.g. [Polymer](#)
- Emoji Rain: <https://github.com/notwaldorf/emoji-rain>

```
<link rel="import" href="../emoji-rain/emoji-rain.html">
...
<emoji-rain active></emoji-rain>
```

Browser support



CHROME



OPERA



SAFARI



FIREFOX



EDGE



HTML TEMPLATES



STABLE



STABLE



STABLE



STABLE



STABLE



CUSTOM ELEMENTS



STABLE



STABLE



STABLE



POLYFILL



DEVELOPING



POLYFILL



CONSIDERING



SHADOW DOM



STABLE



STABLE



STABLE



POLYFILL



DEVELOPING



POLYFILL



CONSIDERING



ES MODULES



STABLE



STABLE



STABLE



STABLE



STABLE

talk before



HTML IMPORTS



STABLE



STABLE



POLYFILL



POLYFILL



POLYFILL

<https://www.webcomponents.org/>

⌚ Time on Stage
17:30 - 18:00

📍 Stage
F2

📁 Session category
Frontend

☰ Expert (incl. Code)

Session Info

Greenfield projects are a luxury, one very often does not have. Most times there is an existing tech stack, and it's about time to introduce a new UI Library to the stack. Vue is an excellent choice. Introduce it small and start scaling from there. In this talk I will share experience, tricks and solutions to add Vue to an existing customer serving app, and be victorious.

We'll look at special tricks on how to use Vue and scale it in the stack. No matter what's the underlying tech, there is ways we can leverage Vue. Maybe even replace a lot of things that are there with the new tech.

Speaker Bio



After finishing university in 2012 Roman Kuba went all in to be self employed as a full stack webdeveloper and soon started to work with international clients. On this journey he met the startup Codeship and joined the team in 2014. At the beginning of 2018 Codeship got acquired and Roman is still working on delivering the best frontend possible for Codeship.

SCALING VUE IN AN EXISTING STACK

Adding Vue.js To an Existing Stack and Make It Scale

Roman Kuba (Codeship)

[Slides](#)



Adding Vue.js To an Existing Stack and Make It Scale

- SPA is mostly not possible
- choose a replaceable target
- define clear entry point
- load vue from CDN
- use VUEX for state management (see talk before)

After Party



Day 3



Time on Stage	09:30 - 10:15
Stage	D
Company	Google
Session category	AI / ML / NLP
●● Intermediate (incl. Code)	

Session Info

"Data gives us insights into how people build software, and the activities of open source communities on GitHub represent one of the richest datasets ever created of people working together at scale." —GitHub Universe 2016

With Google BigQuery anyone can easily analyze the more than five years of GitHub metadata and 42+ terabytes of open source code. Felipe Hoffa explains how to leverage this data to understand the community and code related to any language or project. Relevant for open source creators, users, and choosers, this is data that you can leverage to make better choices.

Speaker Bio

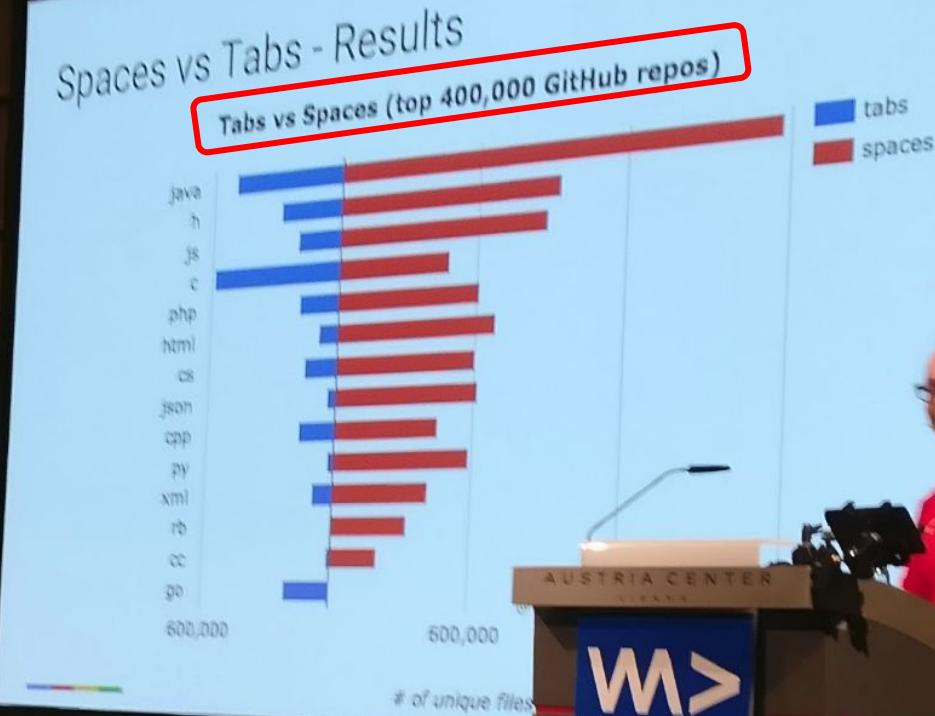


Developer Advocate @Google. From Chile to San Francisco to the world. In 2011 Felipe Hoffa moved from Chile to San Francisco to join Google as a Software Engineer. Since 2013 he's been a Developer Advocate on big data to inspire developers around the world to leverage the Google Cloud Platform tools to analyze and understand their data in ways they could never before.

What Can We Learn From 1.1 billion GitHub Events and 42 TB of Code?

Felipe Hoffa (Google) Talk: <https://youtu.be/-VLIMI5zK3k>

<https://www.youtube.com/watch?v=SsoOG6ZeyUI>



The image shows a speaker on stage at a conference. The stage has a large blue background with white text. On the left, it says 'WE ARE' in large red letters. In the center, it says 'DEV' in large red letters. On the right, it says 'WE ARE' in smaller red letters. The main title 'Pushing The Limits of the Web with Angular' is displayed in large white font. Below it, 'WeAreDevelopers 2018' is written in smaller white font. A small circular portrait of the speaker, Stephen Fluin, is on the left. The speaker is a man with long hair, wearing a dark jacket and light pants, gesturing with his hands. Another man stands behind a podium on the right. The top right corner of the image shows a screenshot of a session details page from the conference website.

Pushing the Limits Of the Web with Angular
Stephen Fluin

Time on Stage
11:15 - 12:00

Stage
A

Company
Google

Session category
Frontend

Intermediate (incl. Code)

Session Info

The web is an awesome place for building rich experiences, but there are limits today that developers have to face. Learn about the ways Angular is making applications that better leverage the network, take advantage of new APIs, and how Angular adopts and promotes standards.

This talk will include a live coding demo showing off some of the newest capabilities of Angular.

Speaker Bio

Stephen is a Developer Advocate on the Angular Team at Google. Stephen works to solve real world problems faced by developers and businesses, and to represent the needs of the community within the Angular team.

Pushing the Limits Of the Web with Angular

Stephen Fluin (Google)



What is Work and What is Human – In a Superhuman Future

Martin Wezowski (Futurist, SAP)

What is Work and What is Human – In a Superhuman Future
Martin Wezowski

Time on Stage
12:00 - 12:45

Stage
A

Company
SAP Innovation Center

Session category
Stories

Intermediate

Session Info
Lets talk about the 4 dimensions of an innovation vision of work. All four will affect every aspect of work-life and the software that will support it. Why will you be relevant in 10 years from now? Why will your offering to the world be needed, and maybe loved, if you can't articulate a great answer, you might not be... relevant. The dimensions are: The self running enterprise, the self-organizing business ecosystems, the augmented-ME, and the purpose led new markets and business ecosystems.

Speaker Bio
 Martin has been loving and living design and tech his whole career, as musician, as visual designer. Right now he maps, builds and inspires a future we want to live in, as Chief Designer for SAP's Innovation Center. Design is transforming faster than before, from classic styling of the superficial to system design of everything, including social and political systems, deeply rooted in a space of challenges and promises between cutting edge tech and humanity. In an exponential, digital change, we design a relationship, a behavior, the product will follow. This exponential change is our most important design brief and the stakes are high. It is just too important to be left only to designers.

AI can predict if you'll die soon by examining your organs

The algorithms predicted patient mortality 69 percent of the time.

Healthcare

8

Comments

3256

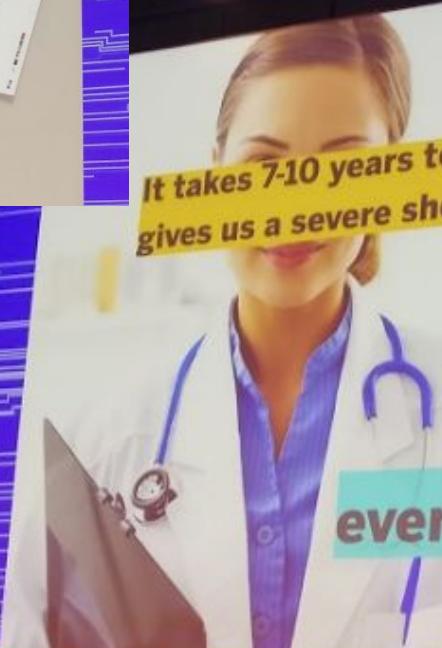
Shares



When not stealing blue collar jobs, robots are becoming Dr. House, diagnosing maladies like breast and skin cancer with aplomb. Scientists at the University of Adelaide have pushed it to a morbid new level, however, with an AI system that can tell if you're going to die. By analyzing CT scans from 48 patients, the deep learning algorithms could predict whether they'd die within five years with 69 percent accuracy -- "broadly similar" to scores from human diagnosticians, the paper says.

It takes 7-10 years to make a doctor, which gives us a severe shortage of doctors.

With soon future AI, medical help is in infinite amount everywhere, all the time for everyone



WE ARE DOCTORS

AUSTRIA CENTER
W+
Webb Developers

Building Cooperate Chatbots with Open Source Technology

Gregor Jarisch

⌚ Time on Stage
13:45 - 14:15

📍 Stage
F2

📅 Session category
AI / ML / NLP

Session Info

Introduction into the Open Source Framework "E.D.D.I.", that has been developed for creating and maintaining multiple Chatbot-Products in a Cooperate Environment. This talk will cover the architecture, how it can be used and how it has been used, based on an example with the Norwegian Company "differ.chat".

Speaker Bio



Chatbot development since 2006 (industries such as ecommerce, first-level-support, quality management, education).
Chatbot Lead @ DIFFER.CHAT
Dev Lead of Enterprise-Ready Open Source Chatbot Platform "E.D.D.I.". Agile and Innovation Coaching
10+ years work experience in Software Development, in particular Web Services.

Building Cooperate Chatbots with Open Source Technology

Gregor Jarisch (DIFFER.CHAT)

Building Cooperate Chatbots with Open Source Technology

- E.D.D.I is an open source chatbot platform ([on github](#))
- Enterprise-focused, for integration into an existing environment
- RESTful interface for administering all chatbot logic and data, see [first chatbot example](#)

Building Cooperate Chatbots with Open Source Technology

Top questions (9)

Stage F2

Alex
I've developed a medical chatbot using vue.js and a RESTful API (symptoma.com). What motivation do you give to switch to E.D.D.I. ?

Sebastian
Does E.D.D.I. have any features related to context and/or pragmatics?

Anonymous
Doe EDDI run on premise?

Latest question

Anonymous
How does the subscription model work, given eddi is open source? How is the revenue distributed?

Join at slido.com

#WeAreDevs



AUSTRIA CENTER VIENNA

- Switch only if you're not satisfied with your current solution
- Use a lightweight solution, E.D.D.I is targeting enterprises, which want to integrate a chatbot easily

Code Reviews – Establishing a Quality Culture

Jayesh Kawli (Wayfair)



Code Reviews – Establishing a Quality Culture
Jayesh Kawli

Time on Stage
14:30 - 15:00

Stage
E1

Session category
Testing

●●○ Intermediate (incl. Code)

Session Info

Writing code is a combination of creativity and logic. Every developer wants to make sure their work is feature-perfect, bug-free, and provides a delightful experience to the end user. But how do they make sure that their code maintains the quality they consistently strive for? How can they write code that is maintainable, stable, and offers a learning opportunity to other team members? In this presentation, Jayesh Kawli will describe the process of reviewing code and how it helps to write high quality, crash-free code that is confidently written and thoroughly assessed.

When asking "When should my code go through code review?", the answer should be "Every time you change the codebase!". A change to even one line of code can cause catastrophic effects to app quality and customer satisfaction, which has a direct impact on company revenue. "What is the process for code review?" There are many answers to this question and we will discuss some of the more successful strategies that have been used to date.

Speaker Bio



Hello, I am Jayesh Kawli. I live in Boston, Massachusetts. Currently, I am working at Wayfair as a Senior iOS developer. I have been writing iOS apps for more than 4 years. At Wayfair, I work with checkout and shipping team which is responsible for handling cart, payments, loyalty and gift cards in the application. Previously at Wayfair, I worked on the Platforms team which handles core architecture, network/data layer and general performance optimization of the application.



Joel on Software
Joel Spolsky

Time on Stage 16:15 - 17:00 Stage A

Company Stack Overflow

Session category Stories

● Beginner

Session Info

Joel Spolsky, CEO and co-founder of Stack Overflow, is a globally recognized expert on software development. He is known by developers around the world for his website, Joel on Software, which has been translated into over 30 languages. In 2000, he founded his first company, Fog Creek Software, which creates project management tools for software developers, including Trello, which was recently acquired by Atlassian. Previously, Joel worked at Microsoft, where he designed VBA as a member of the Excel team, and at Juno Online Services, where he developed an Internet client used by millions. In his talk, Joel will discuss how he built and grew Stack Overflow, and more broadly on the software industry today

Speaker Bio



Spolsky, who holds a B.S in Computer Science from Yale University, is the author of *Joel on Software*, one of the most popular software development blogs, and the sitting CEO of the Stack Exchange Network. As a software engineer himself he led the Microsoft Excel team as a project manager in the '90s. He later on founded Stack Overflow, the Mecca of Devs, and Trello, the popular project management software, which was acquired by Atlassian in early 2017 for \$425 million. He is the sitting CEO of the Stack Exchange Network.

End