



VueDC

(@vuejsdc)

Wifi: **WirelessNetwork**

Password: **ItThat Shall Not Be Named**

GitHub Repo: <https://github.com/VueDC/vuejs-101-the-essentials>

CodePen Collection: <https://codepen.io/collection/DmRKR/>

Slides: <https://slides.com/bencodezen/vuejs-101-the-essentials/>

Announcements

- VueConf.US - <http://vueconf.us>
- Next Meetup
 - Vue.js 201 - Mid-January 2018
- Interested in speaking?
 - Reach out to us at vuejsdc@gmail.com
- Sponsor - Politico

POLITICO

Gold Sponsor

(Food + Drinks + Venue)

Vue.js 101

The Essentials of Vue.js

December 6th, 2017

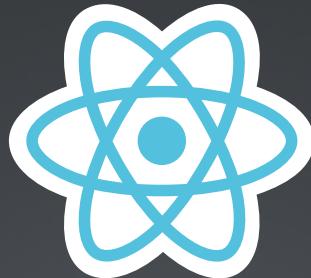
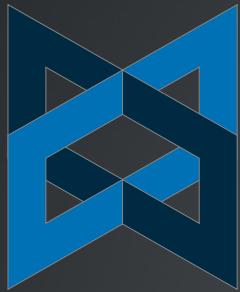
Ben Hong

Senior UI Engineer at Politico

@bencodezen

Slides: <https://slides.com/bencodezen/vuejs-101-the-essentials>

What is Vue.js?



jQuery
write less, do more.

The jQuery logo features a blue circular icon with concentric arcs on the left, followed by the word "jQuery" in a large, bold, white serif font. Below it, the tagline "write less, do more." is written in a smaller, italicized white sans-serif font.

ember[®]

The Ember logo is written in a large, red, cursive sans-serif font, with a registered trademark symbol (®) at the end.

Knockout.

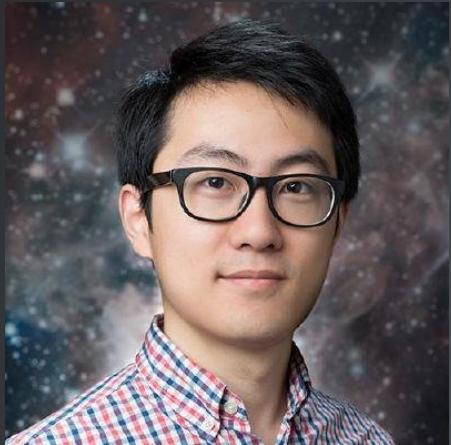
The Knockout logo is written in a large, red, cursive sans-serif font, with the word "Knockout." underlined.

NUMBER OF DAYS SINCE



THIS DEPARTMENT
HAS WORKED
[REDACTED] DAYS
WITHOUT
A LOST TIME
ACCIDENT
AVOID ACCIDENTS

LAST NEW JS FRAMEWORK



Evan You (@youyuxi)



" After hand-rolling many [UI prototypes] with vanilla JavaScript and using Angular 1 for a few, I wanted something that captured the declarative nature of Angular's data binding, but with a simpler, more approachable API.



Vue.js

HOW STANDARDS PROLIFERATE:

(SEE: A/C CHARGERS, CHARACTER ENCODINGS, INSTANT MESSAGING, ETC)

SITUATION:
THERE ARE
14 COMPETING
STANDARDS.

14?! RIDICULOUS!
WE NEED TO DEVELOP
ONE UNIVERSAL STANDARD
THAT COVERS EVERYONE'S
USE CASES.



SOON:

SITUATION:
THERE ARE
15 COMPETING
STANDARDS.

Credit - xkcd: Standards (<https://xkcd.com/927/>)

What makes Vue.js
so special?



Developed and maintained by Google



Easy to get something up and running pretty quickly



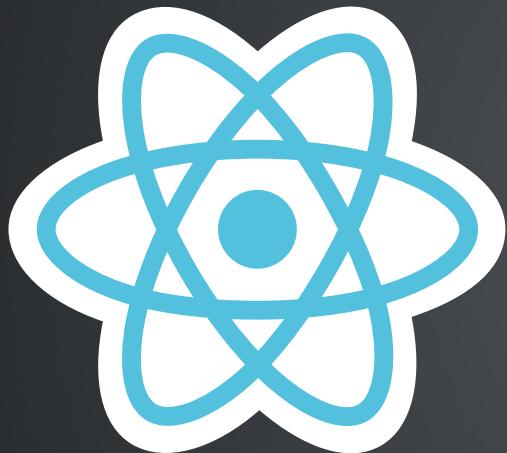
Most of what was happening seemed more like magic



Larger footprint in web performance



More opinionated on how you should build your app



Developed by Facebook and recently granted an MIT license



Great performance due to the use of the virtual DOM



You got a lot better at vanilla JavaScript very quickly



High learning curve even just to get started



Unfriendly to non-JavaScript developers (i.e., JSX)



High pace of development resulting in unexpected bugs



An open-source framework with no corporate influence



Takes the best of both worlds and brings them together



It does not alienate non-JavaScript developers



Great performance that is on par if not better than React.js



Flexible and accommodating to how you prefer to build apps



Smaller team and community compared to React / Angular

NO WAY!

TELL ME MORE!

The Essentials of Vue.js

Simple Vue.js Setup

It's as easy as adding jQuery

Start: <https://codepen.io/BenCodeZen/pen/rYgGdR>

Final: <https://codepen.io/BenCodeZen/pen/GOarKO>

Step 1: Initialize a Vue instance

```
const app = new Vue()
```

Let's pretend we're planning a new trip!

```
const adventure = new Trip()
```

Mapping Out the Important Details

```
const adventure = new Trip({
  destination: 'Diagon Alley',
  luggage: {
    name: 'Mr. B. Hong',
    house: 'Ravenclaw',
    wand: '12.5" larch wood w/ Dragon heartstring core',
    wallet: {
      galleons: 12,
      sickles: 38,
      knuts: 274
    }
  },
  thingsToDo: [
    visitGringotts,
    visitDiagonAlley,
    drinkButterbeer,
    eatAtTheLeakyCauldron
  ]
})
```

Step 2: Configure Your "Destination"

```
<!-- Start with an HTML element that will serve as  
the app's destination -->  
  
<div id="diagon-alley"></div>
```

```
// This is the most important configuration  
// Mistype this one and nothing will ever happen 🤦  
  
const adventure = new Vue({  
  el: '#diagon-alley'  
})
```

Step 3: Configure Your "Luggage"

```
// This where all your "luggage" items are stored

const adventure = new Vue({
  el: '#diagon-alley',
  data: {
    name: 'Mr. B. Hong',
    house: 'Ravenclaw',
    wand: '12.5" larch wood w/ Dragon heartstring core',
    wallet: {
      galleons: 12,
      sickles: 38,
      knuts: 274
    }
  }
})
```

Step 4: Configure Your "Things To Do"

```
// This where all your instructions are stored

const adventure = new Vue({
  el: '#diagon-alley',
  data: {
    name: 'Mr. B. Hong',
    house: 'Ravenclaw',
    wand: '12.5" larch wood w/ Dragon heartstring core',
    wallet: {
      galleons: 12,
      sickles: 38,
      knuts: 274
    }
  },
  methods: {
    visitGringotts() { ... },
    visitDiagonAlley() { ... },
    drinkButterbeer() { ... },
    eatAtTheLeakyCauldron() { ... }
  }
})
```

Let's see it in action!

Start: <https://codepen.io/BenCodeZen/pen/MOdOjN>

Final: <https://codepen.io/BenCodeZen/pen/MOdoQY>

Let's Talk About Directives



Directives are the part of
Vue.js that are a bit **magical...**

What are directives exactly?

They are **Vue specific methods** that allow you to accomplish common goals without worrying how it is implemented.

- v-if
- v-else
- v-else-if
- v-show
- v-for
- v-bind
- v-on
- v-model
- v-html
- v-text
- v-pre
- v-cloak
- v-once
- v-class
- v-style
- v-attr

v-if

v-else

v-else-if

“ It ensures that event listeners and child components inside the conditional block are properly destroyed and re-created during toggles.”

v-show

“ The element is always rendered regardless of initial condition, with CSS-based toggling.



Sam Saccone

@samccone

Following



99.7% of software development in one requirement

A user should be able to view a list of items.

10:36 AM - 1 Dec 2017

610 Retweets 1,834 Likes



26

610

1.8K



v-for

Allows us to "render a list of items based on an array [or object]."

```
<!-- Given the data model on the right -->
<ul>
  <li v-for="house in Hogwarts">
    {{ house }}
  </li>
</ul>

<!-- It will render to -->
<ul>
  <li>Ravenclaw</li>
  <li>Hufflepuff</li>
  <li>Slytherin</li>
  <li>Gryffindor</li>
</ul>
```

```
// Given this sample Vue instance
new Vue({
  ...
  data: {
    Hogwarts: [
      'Ravenclaw',
      'Hufflepuff',
      'Slytherin',
      'Gryffindor'
    ]
  }
})
```

v-bind

Allow us to manipulate
HTML attributes with
dynamic data

```
<!-- The long form -->
<div v-bind:class="{ active: isActive }">...</div>

<!-- The common shortcut -->
<div :class="{ active: isActive }">...</div>

<!-- If isActive is true, it will render -->
<div class="active">...</div>
```

v-on

Allow us to attach methods
to common events

```
<!-- The long form -->
<div v-on:click="alert('Alohomora!')">...</div>

<!-- The common shortcut -->
<div @click="alert('Alohomora!')">...</div>
```

v-model

Allows us to use two-way
data binding

```
<input v-model="name" type="text" id="name" />

<script>
new Vue({
  ...
  data: {
    name: 'Sirius Black'
  }
})</script>
```

Quick Break!

Final Coding Exercise

Start: <https://codepen.io/BenCodeZen/pen/YEbEgv>

Final: <https://codepen.io/BenCodeZen/pen/gXyjwj>

Enough talk.

Let's **write some code!**

Final Coding Exercise

Start: <https://codepen.io/BenCodeZen/pen/YEbEgv>

Final: <https://codepen.io/BenCodeZen/pen/gXyjwj>

Exercise 1: Dynamic Data

1. Replace 'Pickle' with the dynamic data property noun
2. Wire up `input#noun` to dynamically update noun
3. Wire up `input#background-image` to dynamically update imageUrl

Exercise 2:

Directives & Methods

1. Toggle `aside#side-menu`'s visibility when you click on `button#toggle-menu`
2. **Challenge:** Write a method so that `div#template-wrapper`'s position is dynamically updated when you click on `div#image-wrapper`.

*“ Gives me what I want when I
need it, and then it gets out of
my way.*

- Sarah Drasner (@sarah_edo)

Congratulations!

You've worked on
three different Vue applications!

But wait... there's more!

Concepts

- Computed Properties
- Filters
- Props
- Mixins
- Modifiers
- Lifecycle Methods
- State Management
- Custom Directives
- Routing
- Animations

Workflow

- App Architecture w/ Vue.js
- Testing with Vue.js
- Managing Styles w/ Vue.js
- Animate All Things w/ Vue.js
- Popular Vue.js Tools
 - vue-cli
 - vuex
 - vetur
 - Vue DevTools

Sneak Peak at
Vue.js 201

Additional Resources

- **Official Vue.js Docs**
 - <https://vuejs.org/>
- **FEM: Introduction to Vue.js**
 - <https://frontendmasters.com/courses/vue/>
- **Udemy: Vue.js Courses**
 - <https://www.udemy.com/courses/search/?q=vuejs>
- **Vue.js Discord Channel**
 - <https://vue-land.js.org/>

Footnotes

- **Evan You's GitHub Story**
 - <https://github.com/open-source/stories/yyx990803>

Thank you!

@bencodezen