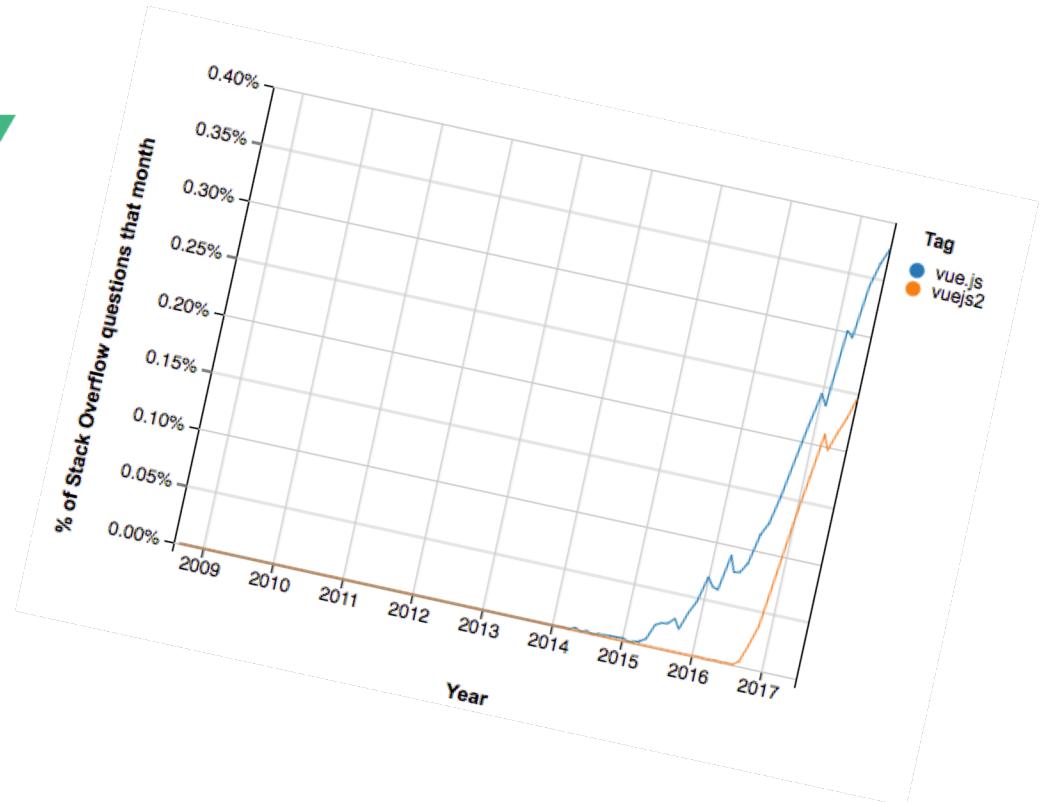


## Vue.js

- Started in late 2013
- First release Feb. 2014



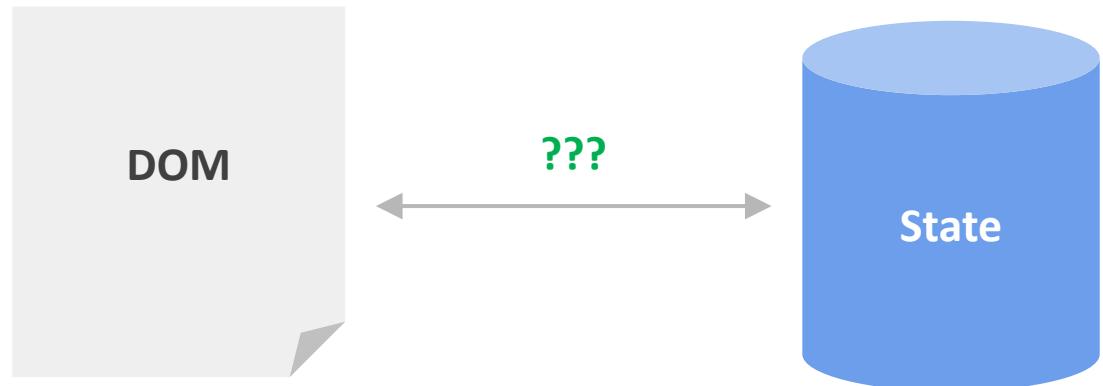
# Vue.js



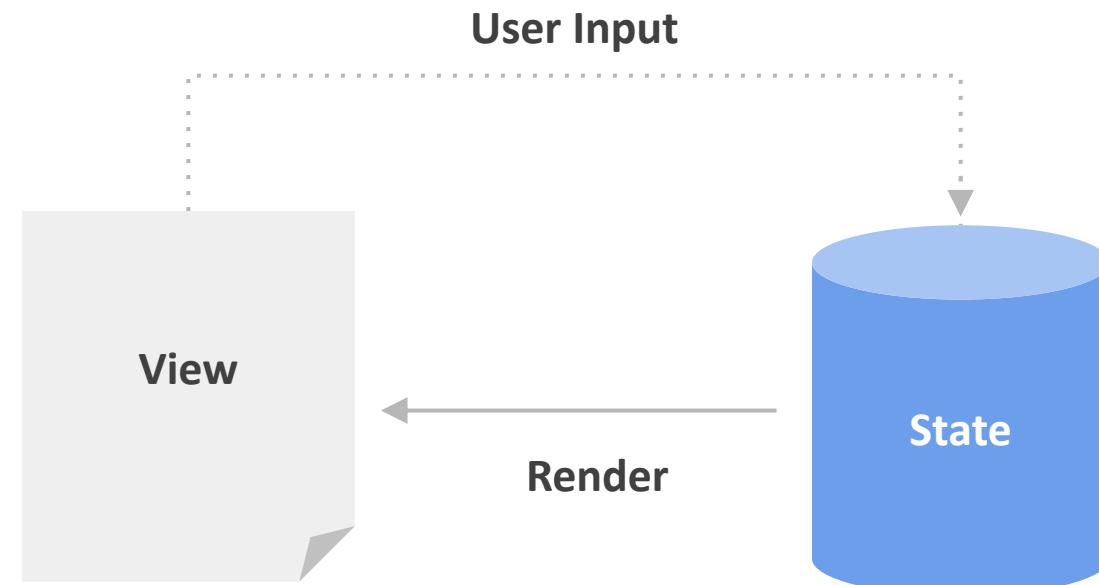


Make js great again!

1. Declarative & Reactive Rendering
2. Component Oriented Architecture



# Declarative & Reactive Rendering



**View is just a declarative mapping from the state**

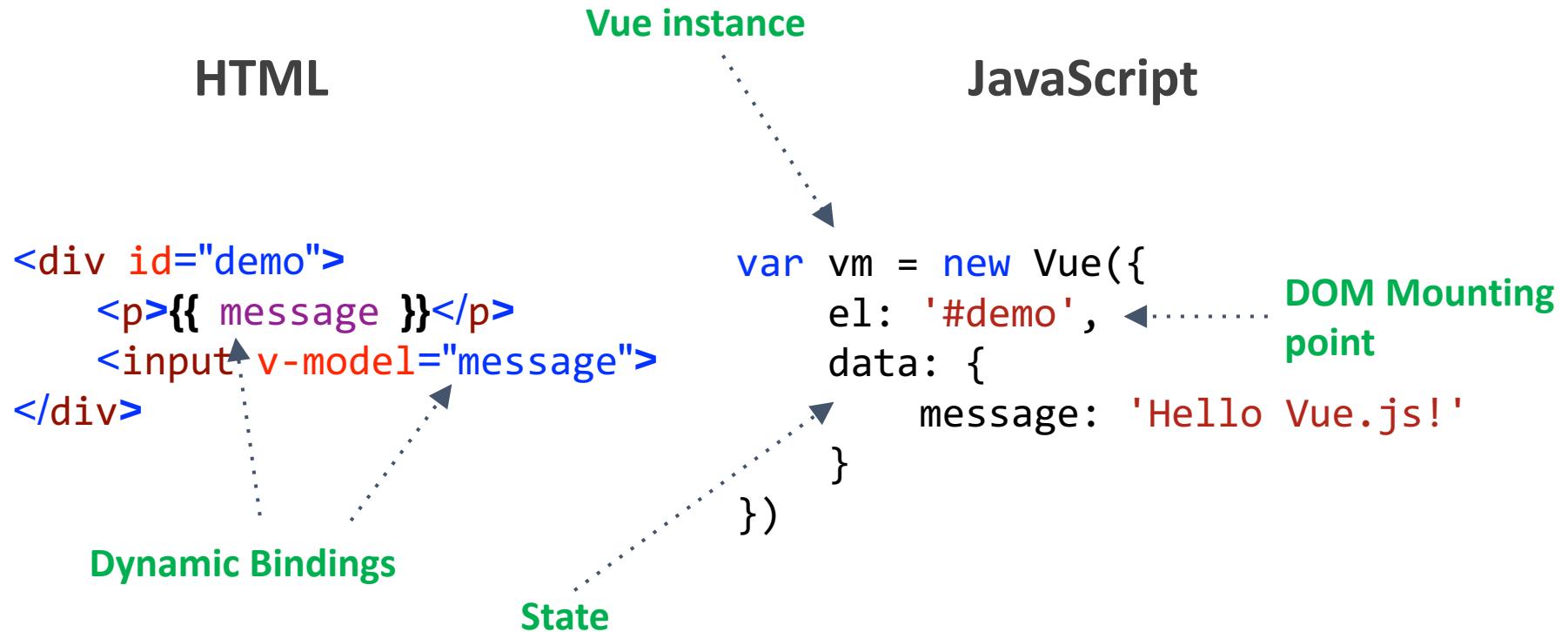
**State should be the single source of truth**

## HTML

```
<div id="demo">  
  <p>{{ message }}</p>  
  <input v-model="message">  
</div>
```

## JavaScript

```
var vm = new Vue({  
  el: '#demo',  
  data: {  
    message: 'Hello Vue.js!'  
  }  
})
```



# Registering a global component

```
Vue.component('my-component', {  
    props: ['message'],  
    template: '<p>{{message}}</p>'  
})
```

# Using the component

```
<my-component message="Hello!">  
</my-component>
```



my-component's template will be inserted into the container element

```
<p>{{message}}</p>
```



`message` will be passed in as data state.

```
<p>Hello!</p>
```

```
<template>
  <div id="demo">
    <p>{{ message }}</p>
  </div>
</template>
<script>
  export default {
    props: {
      message: {
        type: String,
        required: false
      }
    },
    data() { return {} }
  }
</script>
<style scoped>
  #demo {
    background-color: #fff;
  }
</style>
```

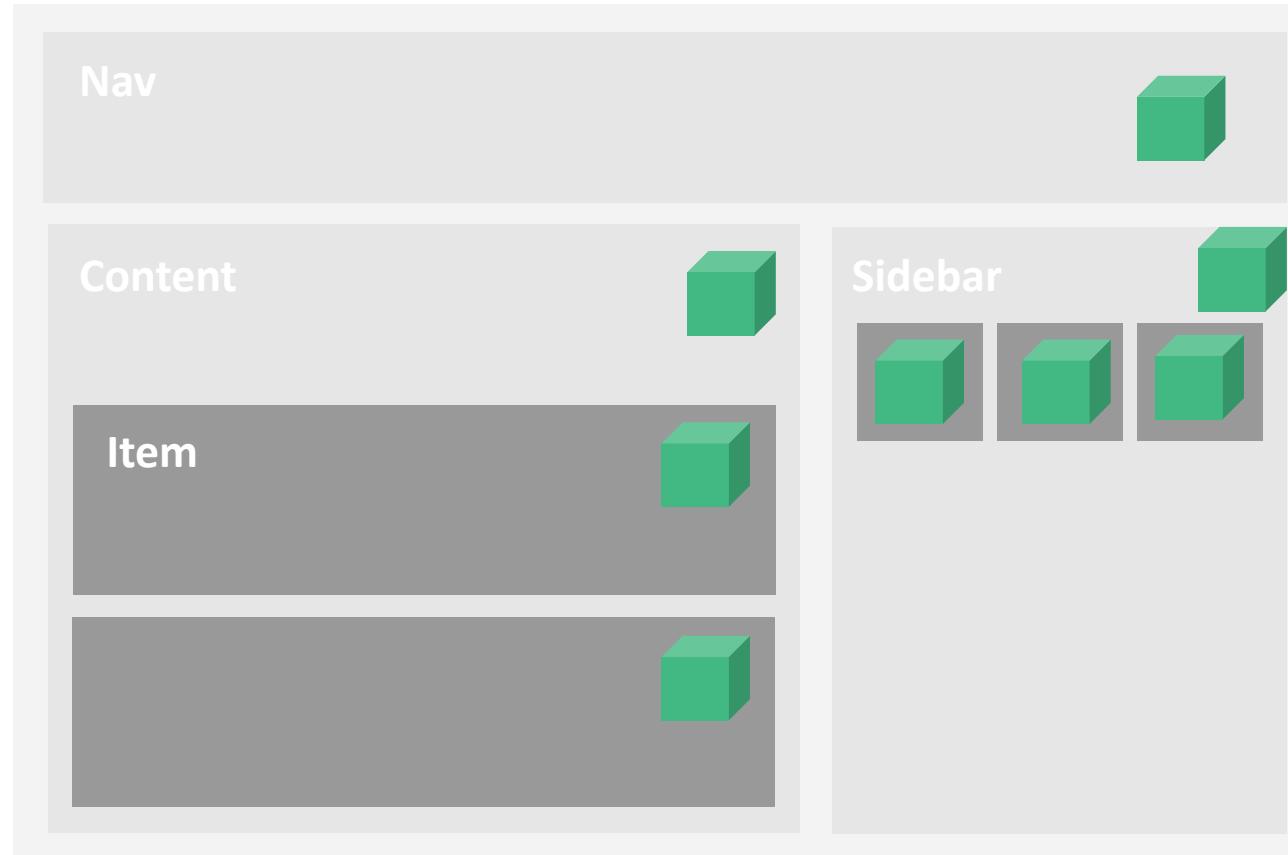


my-component.vue

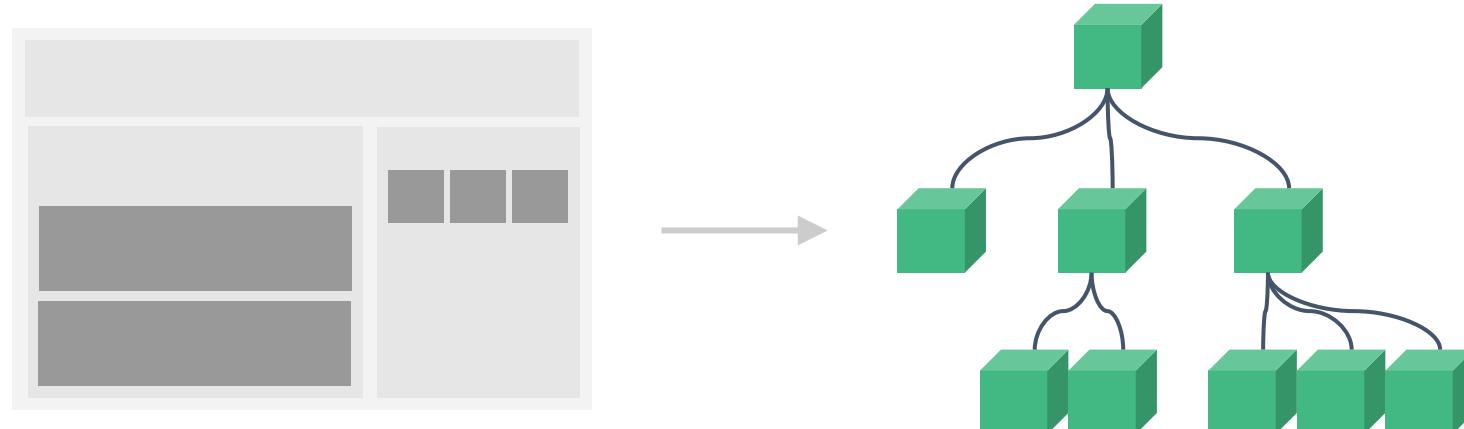
Most App UIs can be  
broken down into  
components



Every component is  
responsible for  
managing a piece of  
DOM

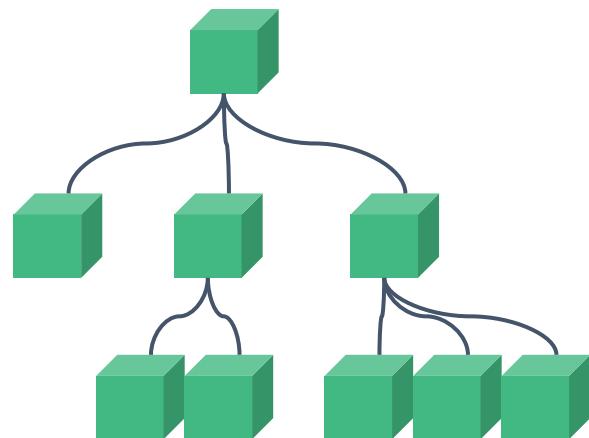


The entire UI can be  
abstracted into a tree of  
components



# Virtual DOM initial render

Virtual DOM Tree

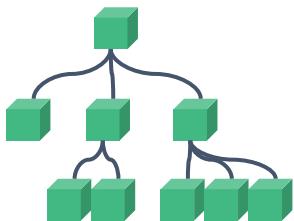


create

Actual  
DOM  
Tree

# Virtual DOM update

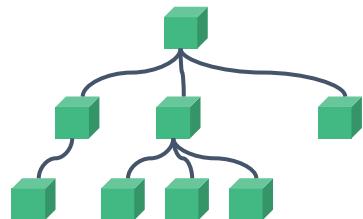
Old Virtual DOM Tree



diff + patch

Actual  
DOM  
Tree

New Virtual DOM Tree



# Lessons learned

It has been learning from the mistakes and successes of React & Angular:

- Binding facility like Angular
- Virtual DOM like React

```
<!DOCTYPE html>
<html>
<head>
  <title>Vue Hello World</title>
  <script src="https://vuejs.org/js/vue.min.js"></script>
</head>
<body>
  <div id="app">
    {{ message }}
  </div>
  <script>
    new Vue({
      el: '#app',
      data: {
        message: 'Hello from Vue'
      }
    });
  </script>
</body>
</html>

  );
</script>
</body>
</html>
```

# Ease of usage

you to structure your  
application in a way you  
wish to be

# The best of both worlds

## Angular Syntax:

- bindings:
  - `v-if` vs `ng-if`
  - `v-repeat` vs `ng-repeat`
  - `v-show` vs `ng-show`
  - ...
- templating: `{{ var }}`
- filters
- directives

## React utilities:

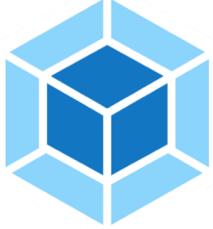
- mixins
- `vue-route` vs `react-router`
- `vuex` vs `redux`
- Virtual DOM
- Plugins

# Speed and performance

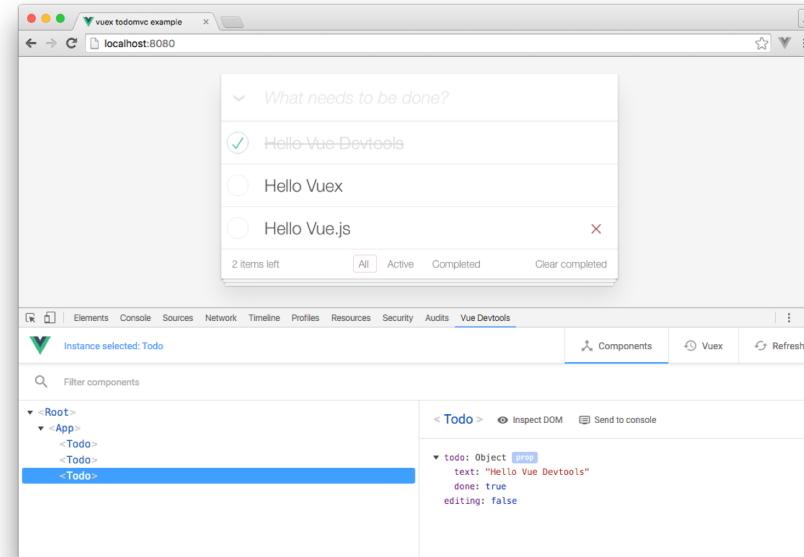
<https://rawgit.com/krausest/js-framework-benchmark/master/webdriver-ts/table.html>

<http://stefankrause.net/js-frameworks-benchmark4/webdriver-ts/table.html>

# Tooling



# webpack



 **Vue.js Pack 2017**  
**Mads Kristensen** |  102,100 installs |  (5)  
Contains HTML Intellisense and code snippets for the Vue.js JavaScript library

 **Vue.js Extension Pack**  
**Muhammad Ubaid Raza** |  22,178 installs |   
Collection of popular VS Code extensions for Vue.js development providing Syntax highlighting, Code format, Code snippets, IntelliSense, Linting support, npm & node tools.



Make js great again!

# That's it

Thank you for your time and attention!

東京' **TOKIOTA**