Vue.js

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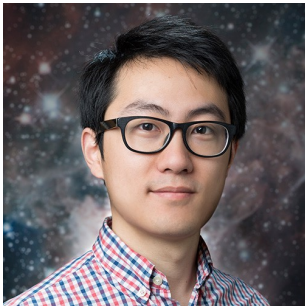Department of Computer Science Engineering

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OVERVIEW

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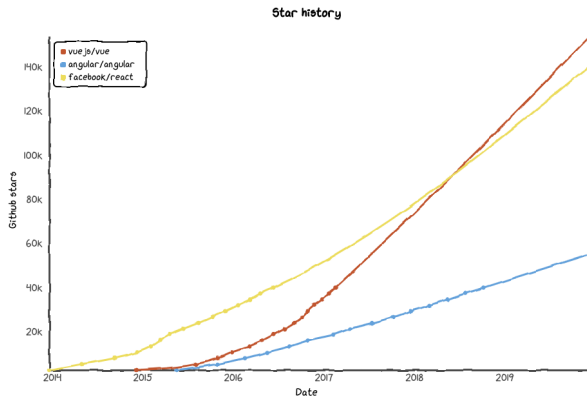- LIVE DEMO
- CONCLUSION

INTRODUCTION

- Vue is a progressive framework for building user interfaces.

- The core library is focused on the view layer only, and is easy to pick up and integrate with other libraries or existing projects.

- Vue is also perfectly capable of powering complex Single-Page Applications.

- Vue is more simple and flexible.

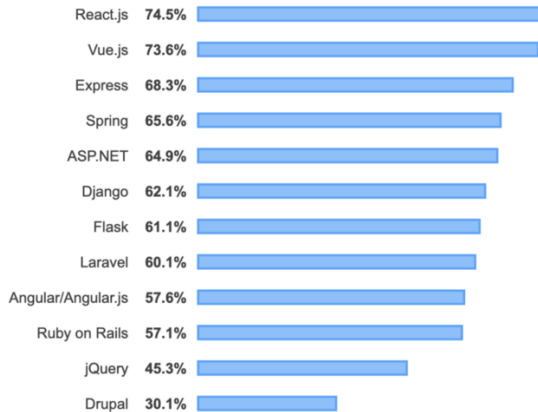- Vue allows to make just a specific part of the application

EVAN YOU

- Vue.js was created by Evan You, and is maintained by him and the rest of the active core team members coming from various companies such as Netlify and Netguru.

VUE POPULARITY

Star history

VUE POPULARITY CONTD.

React.js	**74.5%**
Vue.js	**73.6%**
Express	**68.3%**
Spring	**65.6%**
ASP.NET	**64.9%**
Django	**62.1%**
Flask	**61.1%**
Laravel	**60.1%**
Angular/Angular.js	**57.6%**
Ruby on Rails	**57.1%**
jQuery	**45.3%**
Drupal	**30.1%**

MAJOR VUE USERS
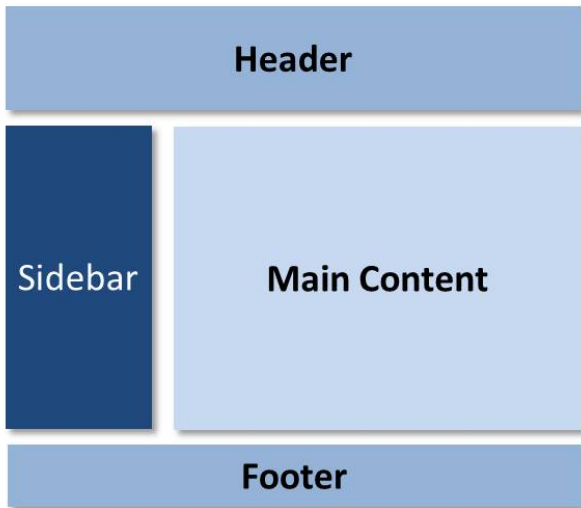
VUE FEATURES

Virtual DOM

- Vue.js makes the use of virtual DOM.

- The changes are not made to the DOM, instead a replica of the DOM is created.

- Whenever any changes are to be made, they are made to the Virtual DOM and later it is compared with the original DOM. The final changes are then updated to the real DOM

Components

- Components are one of the important features of Vue.js that helps create custom elements, which can be reused in HTML.

VUE FEATURES CONTD.

Event Handling

- v-on is the attribute added to the DOM elements to listen to the events in Vue.js.

Directives

- Vue.js has built-in directives such as v-if, v-else, v-show, v-on, v-bind, and v-model, which are used to perform various actions on the frontend

Animation/Transition

- Vue provides various ways to apply transition to HTML elements when they are added/updated or removed from the DOM

Templates

- Vue provides HTML-based templates

- Vue uses html, js and css separately.

- It is very easy for a beginner to understand and adopt the VueJS style.

HOW TO INCLUDE VUE JS IN A PROJECT

- Include Vue CDN in link in a script tag

```
https://cdn.jsdelivr.net/npm/vue@2.6.12
```

```html
<!DOCTYPE html>
<html lang="en">
<head>

    <!--Linking Vue-->
    <script src="https://cdn.jsdelivr.net/npm/vue@2.6.12" defer></script>
    <script src="eg1.js" defer></script>
    <link rel="stylesheet" href="eg1.css">
    <title>Hello world</title>
</head>
<body>

</body>
</html>
```

HELLO WORLD IN VUE.JS

- Html part

```
<!DOCTYPE html>
<html lang="en">
<head>

    <!--Linking Vue-->
    <script src="https://cdn.jsdelivr.net/npm/vue@2.6.12" defer></script>
    <script src="eg1.js" defer></script>
    <link rel="stylesheet" href="eg1.css">
    <title>Hello world</title>
</head>
<body>
    <div id="app">
        {{message}}
    </div>
</body>
</html>
```

- Js Part

```js
var app = new Vue({
    el: '#app',
    data: {
      message: 'Hello World!'
    }
  })
```

VUE DIRECTIVES

v-if

- The directive v-if is used to conditionally render a block.
- The block will only be rendered if the directive's expression returns a truthy value.

v-for

- The directive v-for to render a list of items based on an array

v-on

- v-on directive is used to listen DOM events and run some JavaScript when they're triggered.

v-model

- The v-model directive is used to create two-way data bindings on form input, textarea, and select elements.
- It automatically picks the correct way to update the element based on the input type.

ADVANTAGES

- Small size
- Good documentation
- Easy to understand
- Simple integration

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DISADVANTAGES

- Less Resources
- No tech-giants for backing up vue

http://127.0.0.1:5500/index.html

CONCLUSION

- Vue is a simple progressive framework for front end development

- Vue is easy to learn

- Easy to integrate with an existing project

- virtual DOM concepts helps to improve the speed of the application

- Concepts of web components helps to reuse the code

REFERENCE

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3 https://en.wikipedia.org/wiki/Vue.js

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Thank You

for Listening.