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Vue.js

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VUE.JS

Learn Vue.js

PROGRAM

- ❑ Introduction
- ❑ The essentials of view.js
- ❑ Advanced aspects
- ❑ More: Exploiting an API (REST)
- ❑ Conclusion

WELCOME : Roundtable

Who are you, your job?

What are your professional goals?

What are your knowledge on the subject?

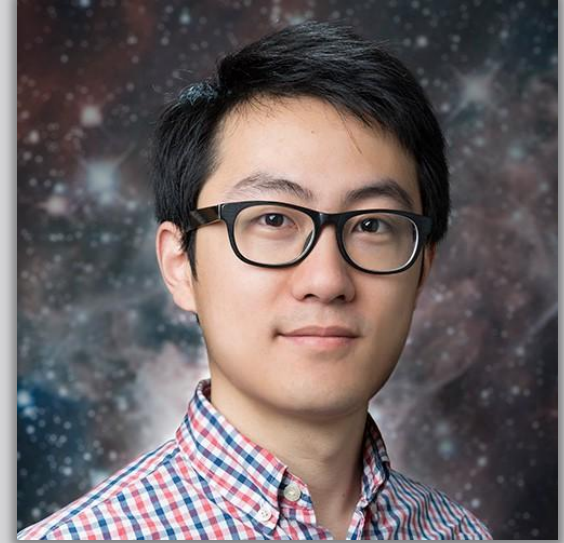# INTRODUCTION

Vue.js : Introduction

Vue.js (also called simply View), is an open-source JavaScript framework used to build user interfaces.

The library is used by Adobe, Alibaba and Gitlab.

Vue was created by Evan You after working for Google using AngularJS in several projects.

Vue.js : Introduction

o   Creator : Evan You (尤 雨 溪)

o   First version : February 11, 2014

o   Latest Version : 2.6.10 (March 20, 2019)

o   Deposit : https://github.com/vuejs/view

o   Written in Javascript

o   Type : JavaScript Framework

o   License : MIT License

o   Website : https://vuejs.org

Vue.js : Installation

```html
<!DOCTYPE html>
<html>
<meta charset="utf-8"/>
<script src="https://unpkg.com/vue@next"></script>
<body>
</body>
</html>
```

Vue.js : Instance

```html
<!DOCTYPE html>
<html>
<meta charset="utf-8"/>
<script src="https://unpkg.com/vue@next"></script>
<body>
<div id="app">
    {{ message }}
</div>

<script>
const app = Vue.createApp({
    data() {
        return {
            message: 'Hello World!'
        }
    }
}).mount('#app')
</script>
</body>
</html>
```

Vue.js : Data (attribute) : Array

```html
<!DOCTYPE html>
<html>
<meta charset="utf-8"/>
<script src="https://unpkg.com/vue@next"></script>
<body>
<div id="app">
    {{ cars[0] }}
    {{ cars[1] }}
    {{ cars[2] }}
</div>
<script>
const app = Vue.createApp({
    data() {
        return {
            cars : ['BMW','RENAULT','PEUGEOT']

        }
    }
}).mount('#app')
</script>
</body>
</html>
```

Vue.js : Data (attribute) : Object

```html
<!DOCTYPE html>
<html>
<meta charset="utf-8"/>
<script src="https://unpkg.com/vue@next"></script>
<body>
<div id="app">
    {{ cars.v1 }}
    {{ cars.v2 }}
    {{ cars.v3 }}
</div>
<script>
const app = Vue.createApp({
    data() {
        return {
            cars: { v1:'BMW', v2: 'RENAULT', v3: 'PEUGEOT'}
        }
    }
}).mount('#app')
</script>

</body>
</html>
```

Vue.js : Exercise 1

Create an instance containing the name, age and occupation of a person.

Display information using expressions ({{ }}).

Example:

Hello Bahri, you are 32 years old and you are web trainer.

Vue.js : Exercise 2

Transform the table below into Vuejs data and then display it using bootsrap4.

Email informations

SNI	NAME	SPECIALITY	AVG	MENTION
S123	ALLON	TIN	15	Good
S321	BACARD	CDI	14	Good
S323	ALAIN	IPS	16	Very good

Vue.js : Function (Method)

```html
<!DOCTYPE html>
<html>
<meta charset="utf-8"/>
<script src="https://unpkg.com/vue@next"></script>
<body>
<div id="app">
    <p>{{ message }}</p>
    <button v-on:click="reverseMessage">Reverse Message</button>
</div>
<script>
const app = Vue.createApp({
    data() {
        return {
            message: 'Hello World!'
        }

    },
    methods: {
        reverseMessage: function () {
            this.message = this.message.split('').reverse().join('')
        }
    }
}).mount('#app')
</script>
</body>
</html>
```

Vue.js : Function (Method) with {{ ... }}

```html
<!DOCTYPE html>
<html>
<meta charset="utf-8"/>
<script src="https://unpkg.com/vue@next"></script>
<body>
<div id="app">
    <p>{{ hello('Daniel') }}</p>
</div>
<script>
const app = Vue.createApp({
    methods: {
        hello: function (name) {
            return 'Hello ' + name
        }
    }
}).mount('#app')
</script>
</body>
</html>
```

Vue.js : Exercise 3

Create a method taking the name, age and occupation of a person as parameter and then returns them.

Call the method using expressions ({{ }}).

Example:

Hello Bahri, you are 32 years old and you are web trainer.

Vue.js : Exercise 4

Create an instance containing the name, age and occupation of a person.

Create a method (named constructor ()) to initialize the attributes of the instance.

Create a method (named display ()) to display the instance data.

Test the methods using expressions ({{ }}).

Example:

Hello Bahri, you are 32 years old and you are web trainer.

Vue.js : Exercise 5

Create an instance containing methods to do:

The addition, subtraction, multiplication and division of two parameters.

Test the methods using expressions ({{ }}).

Example:
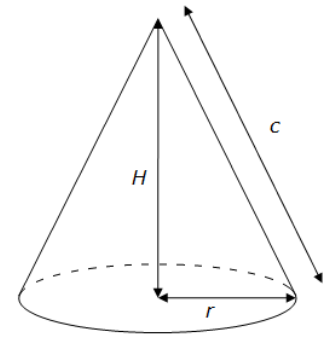
$$12 + 3 = 15$$
$$12 - 3 = 9$$
$$12 * 3 = 36$$
$$12 / 3 = 4$$
$$12 \wedge 3 = 1728$$

Vue.js : Exercise 6

Write a parameterized function that calculates the volume of a cone.

Rule: Volume = (Radius² * Height * Π) / 3

Vue.js : Exercise 7

Create an instance containing methods for formatting a string in :

Upper, Lower and capitalize case.

Test the methods using expressions ({{ }}).

Example:

Vue.js : V-Bind

```html
<!DOCTYPE html>
<html>
<meta charset="utf-8"/>
<script src="https://unpkg.com/vue@next"></script>
<body>
<div id="app">
    <p v-bind:title="message">
        Hover your mouse over me for a few seconds to see my dynamically bound title!
    </p>
</div>
<script>
const app = Vue.createApp({
    data(){
        return {
            message: 'You loaded this page on ' + new Date().toLocaleString()
        }
    }
}).mount('#app')
</script>
</body>
</html>
```

Vue.js : Bind (Shortcuts)

```html
<!DOCTYPE html>
<html>
<meta charset="utf-8"/>
<script src="https://unpkg.com/vue@next"></script>
<body>
<div id="app">
    <p :title="message">
        Hover your mouse over me for a few seconds to see my dynamically bound title!
    </p>
</div>
<script>
const app = Vue.createApp({
    data(){
        return {
            message: 'You loaded this page on ' + new Date().toLocaleString()
        }
    }
}).mount('#app')
</script>
</body>
</html>
```

Vue.js : Loop

```html
<!DOCTYPE html>
<html>
<meta charset="utf-8"/>
<script src="https://unpkg.com/vue@next"></script>
<body>
<div id="app">
    <span v-for="n in 10"> {{ n }} </span>
</div>
<script>
const app = Vue.createApp({

}).mount('#app')
</script>
</body>
</html>
```

Vue.js : Loop

```html
<!DOCTYPE html>
<html>
<meta charset="utf-8"/>
<script src="https://unpkg.com/vue@next"></script>
<body>
<ul id="app">
    <li v-for="item in items">
        {{ item }}
    </li>
</ul>
<script>
const app = Vue.createApp({
    data(){
        return {
            items: ['BMW', 'Renault']
        }
    }
}).mount('#app')
</script>
</body>
</html>
```

Vue.js : Loop

```html
<!DOCTYPE html>
<html>
<meta charset="utf-8"/>
<script src="https://unpkg.com/vue@next"></script>
<body>
<ul id="app">
    <li v-for="(item, index) in items">
        {{ index }} - {{ item }}
    </li>
</ul>
<script>
const app = Vue.createApp({
    data(){
        return {
            items: ['BMW', 'Renault']
        }
    }
}).mount('#app')
</script>
</body>
</html>
```

Vue.js : Exercise 8

```
items:
[
    { Sender:'Nicolas Elbaz', Recipient:'Christel Lavaut' },
    { Sender: 'Jérôme Claustre', Recipient: 'Mohammed Bahri' }
]
```

Email informations

Email : 1
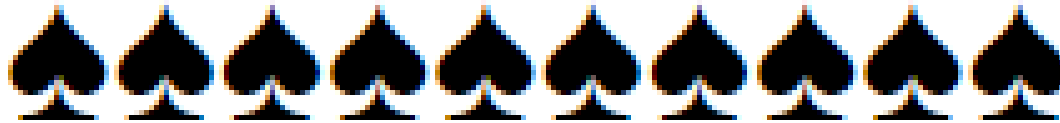- Sender - Nicolas Elbaz
- Recipient - Christel Lavaut

Email : 2
- Sender - Jérôme Claustre
- Recipient - Mohammed Bahri

Create a loop producing a horizontal line of 10 hearts.

Example:

Use the loops to produce the rendering below :