

# Web Application Development

2019



# Vue.js

Part III



# Components

Form Input Bindings



v-model

# v-model

You can use the `v-model` directive 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.

```
<input v-model="message" placeholder="edit me">
```

```
<p>Message is: {{ message }}</p>
```



My message

Message is: My message

# v-model

v-model internally uses different properties and emits different events for different input elements:

- text and textarea elements use value property and input event

```
<span>Multiline message is:</span>
```

```
<p style="white-space: pre-line;">{{ message }}</p>
```

```
<textarea v-model="message" placeholder="add multiple lines"></textarea>
```

Multiline message is:

Line One

Line Two

Line One  
Line Two

# v-model

`v-model` internally uses different properties and emits different events for different input elements:

- checkboxes and radio buttons use `checked` property and `change` event

```
<input type="checkbox" id="checkbox" v-model="checked">
```

```
<label for="checkbox">{{ checked }}</label>
```

 false true

`v-model` will ignore the initial `value`, `checked` or `selected` attributes found on any form elements. It will always treat the Vue instance data as the source of truth. You should declare the initial value on the JavaScript side, inside the `data` option of your component.

# v-model

`v-model` internally uses different properties and emits different events for different input elements:

- checkboxes and radio buttons use `checked` property and `change` event

```
<div id='example-3'>
  <input type="checkbox" id="jack" value="Jack" v-model="checkedNames">
  <label for="jack">Jack</label>
  <input type="checkbox" id="john" value="John" v-model="checkedNames">
  <label for="john">John</label>
  <input type="checkbox" id="mike" value="Mike" v-model="checkedNames">
  <label for="mike">Mike</label>
  <span>Checked names: {{ checkedNames }}</span>
</div>
```

```
new Vue({
  el: '#example-3',
  data: {
    checkedNames: []
  }
})
```

Jack  John  Mike  
Checked names: ["John", "Mike"]



# v-model

`v-model` internally uses different properties and emits different events for different input elements:

- checkboxes and radio buttons use `checked` property and `change` event

```
<input type="radio" id="one" value="One" v-model="picked">
<label for="one">One</label>
<br>
<input type="radio" id="two" value="Two" v-model="picked">
<label for="two">Two</label>
<br>
<span>Picked: {{ picked }}</span>
```

One  
 Two  
Picked: Two

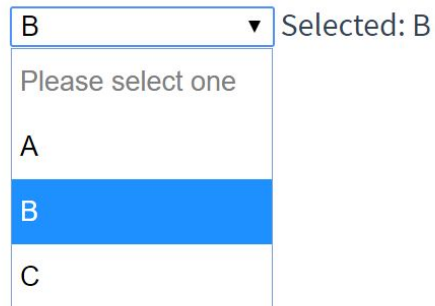
# v-model

`v-model` internally uses different properties and emits different events for different input elements:

- select fields use `value` as a prop and `change` as an event.

```
<select v-model="selected">
  <option disabled value="">Please select one</option>
  <option>A</option>
  <option>B</option>
  <option>C</option>
</select>
<span>Selected: {{ selected }}</span>
```

```
new Vue({
  el: '...',
  data: {
    selected: ''
  }
})
```



The image shows a browser window with a dropdown menu. The dropdown is open, showing three options: 'A', 'B', and 'C'. Option 'B' is highlighted in blue. To the right of the dropdown, the text 'Selected: B' is displayed.

Filters

# Filters

Vue.js allows you to define filters that can be used to apply common text formatting.

Filters are usable in two places: mustache interpolations and **v-bind** expressions.

Filters should be appended to the end of the JavaScript expression, denoted by the “pipe” symbol:

```
<!-- in mustaches -->
{{ message | capitalize }}
```

```
<!-- in v-bind -->
<div v-bind:message="message | capitalize"></div>
```

# Filters

```
filters: {  
  capitalize: function (value) {  
    if (!value) return ''  
    value = value.toString()  
    return value.charAt(0).toUpperCase() + value.slice(1)  
  }  
}
```

John

The filter's function always receives the expression's value (the result of the former chain) as its first argument. In the above example, the `capitalize` filter function will receive the value of `message` as its argument.

Filters can be chained:

```
{{ message | filterA | filterB }}
```

Filters are JavaScript functions, therefore they can take arguments:

```
{{ message | filterA('arg1', arg2) }}
```

computed

# computed

```
var vm = new Vue({
  el: '#example',
  data: {
    message: 'Hello'
  },
  computed: {
    // a computed getter
    reversedMessage: function () {
      // `this` points to the vm instance
      return this.message.split('').reverse().join('')
    }
  }
})
```

```
<div id="example">
  <p>Original message: "{{ message }}"</p>
  <p>Reversed message: "{{ reversedMessage }}"</p>
</div>
```

Original message: "Hello"

Reversed message: "olleH"



# computed vs method

```
var vm = new Vue({
  el: '#example',
  data: {
    message: 'Hello'
  },
  methods: {
    reverseMessage: function () {
      return this.message.split('').reverse().join('')
    }
  }
})
```

```
<div id="example">
  <p>Original message: "{{ message }}"</p>
  <p>Reversed message: "{{ reversedMessage() }}"</p>
</div>
```

Original message: "Hello"

Reversed message: "olleH"

# References

<https://vuejs.org/v2/api/>

# Questions?

Next: Backend - Node.js I

