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# THE VUE.JS CHEAT SHEET

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## DIRECTIVES

Directives are attributes identified by the `v-` prefix.

Directive	Description
<code>v-text</code>	uses the property as the text value of the element
<code>v-html</code>	uses the property as the text value of the element, interpreting HTML
<code>v-if</code>	show an element only if the conditional is true
<code>v-else</code>	shows an alternative element if the preceding <code>v-if</code> is false

Directive	Description
<code>v-else-if</code> <code>v-if</code>	adds an else if block for a <code>v-if</code> construct
<code>v-show</code>	similar to <code>v-if</code> , but adds the element to the DOM even if falsy. Just sets it to <code>display: none</code> .
<code>v-for</code>	iterates over an array or iterable object
<code>v-on</code>	listen to DOM events
<code>v-bind</code>	reactively update an HTML attribute
<code>v-model</code>	sets up a two-way binding for form inputs. used in form elements, updates the model when the user changes the form field value
<code>v-once</code>	applies the property just once, and never refreshes it even if the data passed changes

`v-bind` and `v-on` have a shorthand format:

```
<a v-bind:href="url">...</a>  
<a :href="url">...</a>
```

```
<a v-on:click="doSomething">...</a>  
<a @click="doSomething">...</a>
```

Example of `v-if` / `v-else` / `v-else-if`:

```
<div v-if="type === 'A'">  
  it's A  
</div>  
<div v-else-if="type === 'B'">  
  it's B
```

```
</div>
<div v-else-if="type === 'C'">
  it's C
</div>
<div v-else>
  it's neither one
</div>
```

## CONDITIONALS

You can embed a conditional in an expression using the ternary operator:

```
{{ isTrue ? 'yes' : 'no' }}
```

## WORKING WITH FORM ELEMENTS

To make the model update when the change event occurs, and not any time the user presses a key, you can use `v-model.lazy` instead of just `v.model`.

Working with input fields, `v-model.trim` is useful because it automatically removes whitespace.

And if you accept a number instead than a string, make sure you use `v-model.number`.

## MODIFYING EVENTS

I use `click` as an example, but applies to all possible events

- `v-on:click.native` trigger a native DOM event instead of a Vue event
- `v-on:click.stop` stop the click event propagation
- `v-on:click.passive` makes use of the passive option of `addEventListener`
- `v-on:click.capture` use event capturing instead of event bubbling
- `v-on:click.self` make sure the click event was not bubbled from a child event, but directly happened on that element
- `v-on:click.once` the event will only be triggered exactly once
- `v-on:submit.prevent: call event.preventDefault()` on the triggered submit event, used to avoid a form submit to reload the page

## MOUSE EVENT MODIFIERS

- `v-on:click.left` triggers only on left mouse button click
- `v-on:click.right` triggers only on right mouse button click
- `v-on:click.middle` triggers only on middle mouse button click

## SUBMIT AN EVENT ONLY IF A PARTICULAR KEY IS PRESSED

- `v-on:keyup.enter`

- `v-on:keyup.tab`
- `v-on:keyup.delete`
- `v-on:keyup.esc`
- `v-on:keyup.up`
- `v-on:keyup.down`
- `v-on:keyup.left`
- `v-on:keyup.right`

## KEYBOARD EVENT MODIFIERS

Only trigger the event if a particular keyboard key is also pressed:

- `.ctrl`
- `.alt`
- `.shift`
- `.meta` (cmd on Mac, windows key on Win)

### v-bind

- `v-bind .prop` bind a prop instead of an attribute
- `v-bind .camel` use camelCase for the attribute name
- `v-bind .sync` a syntax sugar that expands into a `v-on` handler for updating the bound value.

## LIFECYCLE HOOKS

- `beforeCreate` called before the app is created

- `created` called after the app is created
- `beforeMount` called before the app is mounted on the DOM
- `mounted` called after the app is mounted on the DOM
- `beforeDestroy` called before the app is destroyed
- `destroyed` called after the app is destroyed
- `beforeUpdate` called before a property is updated
- `updated` called after a property is updated
- `activated` called when a kept-alive component is activated
- `deactivated` called when a kept-alive component is deactivated

## BUILT-IN COMPONENTS

Vue provides 5 built-in components:

- `<component>`
- `<transition>`
- `<transition-group>`
- `<keep-alive>`
- `<slot>`

## GLOBAL CONFIGURATION OF THE VUE OBJECT

The `vue.config` object has these properties, which you can modify when you create the instance:

Property	Description
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Property	Description
<code>silent</code>	defaults to false, if true suppress logs and warnings
<code>optionMergeStrategies</code>	allows to define a custom merging strategy for options
<code>devtools</code>	defaults to true in development, and false in production. You can override those values.
<code>errorHandler</code>	allows to set an error handler function. Useful to hook Sentry and other similar services
<code>warnHandler</code>	allows to set a warning handler function, similar to <code>errorHandler</code> , but for warnings instead of errors
<code>ignoredElements</code>	used to let Vue ignore custom elements defined outside of it, like <i>Web Components</i> .
<code>keyCodes</code>	let you define custom key aliases for <code>v-on</code>
<code>performance</code>	defaults to false. If set to true, traces the performance of Vue components in the Browser DevTools.
<code>productionTip</code>	defaults to true. Set to false to disable the warning "you're in development mode" during development in the console.

## METHODS OF THE VUE OBJECT

Method	Description
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Method	Description
<code>Vue.extend</code>	allows to subclass the Vue object, to create a custom profile
<code>Vue.nextTick</code>	defers the callback to be executed after the next DOM update cycle
<code>Vue.set</code>	add a property to the object
<code>Vue.delete</code>	delete a property from the object
<code>Vue.directive</code>	set (or get) a global directive
<code>Vue.filter</code>	set (or get) a global filter
<code>Vue.component</code>	set (or get) a global component
<code>Vue.use</code>	install a Vue.js plugin
<code>Vue.mixin</code>	set a global mixin
<code>Vue.compile</code>	compile a template string into a render function
<code>Vue.version</code>	returns the currently installed version of Vue

## OPTIONS PASSED TO A VUE OBJECT

When initializing a Vue object, you pass in an object:

```
const vm = new Vue({
})
```

This object accepts a number of properties.

Property	Description
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Property	Description
data	allows to pass a set of reactive data that will be used by the Vue app. All reactive properties must be added at initialization time, you can't add new ones later.
props	it's a set of attributes that are exposed to parent components as input data.
propsData	default data for props. Only useful during testing
methods	a set of methods that are defined on the Vue instance
computed	like methods, but cached internally
watch	allows to watch properties, and call a function when they change

Example of defining data, methods and computed properties:

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

```
console.log(vm.reverseMessageAsMethod) // => 'olleH'
vm.message = 'Goodbye'
console.log(vm.reversedMessage) // => 'eybdooG'
```

## DOM

- `el` sets the DOM element where the instance mounts on. It can be a CSS Selector, or an HTMLElement
- `template` is a template, represented as a string, that will replace the mounted element
- `render` alternatively to define the template, you can define a template using a render function
- `renderError` set an alternative output when the function attached to `render` fails

## VUE INSTANCE ASSETS

- `directives` the set of directives to associate to the Vue instance
- `filters` the set of filters to associate to the Vue instance
- `components` the set of components to associate to the Vue instance

## VUE COMPOSITION OPTIONS

- `parent` specifies the parent instance
- `mixins` sets an array of mixin objects

- `extends` extend another component

## OTHER VUE OBJECT OPTIONS

- `name` setting a name to the component lets you invoke it, useful in debugging or when you need to recursively add a component in its template
- `functional` if true, sets the component to be stateless (no `data`) and instanceless (no `this`), making it more lightweight
- `model` allows to customize the property used in events, useful for example when interacting with forms
- `comments` defaults to false. If set to true, retains the HTML comments that are put in templates

## INSTANCE PROPERTIES

Given an instance of Vue, stored into a variable `const vm = new Vue( /* ... */ )`, you can inspect and interact with it.

### PROPERTIES OF A VUE INSTANCE

- `vm.$data` the data object associated to the instance
- `vm.$props` the props the instance has received
- `vm.$el` the DOM element to which the instance is bound
- `vm.$options` the object used to instantiate the Vue instance
- `vm.$parent` the parent instance

- `vm.$root` the root instance (if this is the root instance, this points to itself)
- `vm.$children` an array of children instances
- `vm.$slots` an array of the associated slots contained in the template
- `vm.$scopedSlots` an array of the associated scoped slots
- `vm.$refs` an object that contains a property for each element pointed by a `ref` attribute defined in the template
- `vm.$isServer` true if the Vue instance is running on the server (useful in server-side rendering)
- `vm.$attrs` an object of attributes that are provided to the component but not defined as props
- `vm.$listeners` an object of `v-on` event listeners assigned to the component

### METHODS DATA

- `vm.$watch` set up a watcher for property changes in the Vue data. It can also watch for value changes inside objects
- `vm.$set` set a property
- `vm.$delete` delete a property

### EVENTS

- `vm.$emit` triggers a custom event on the `vm` Vue instance
- `vm.$on` listen for a custom event on the `vm` Vue instance
- `vm.$once` like `$on`, but listens only once

- `vm.$off` removes an event listener from the Vue instance

## LIFECYCLE METHODS

- `vm.$mount` mount a Vue instance on a DOM element, in case it was not mounted yet
- `vm.$forceUpdate` force the `vm` Vue instance to re-render. Does not force child components to rerender.
- `vm.$nextTick` accepts a callback and schedules that for the next DOM update cycle
- `vm.$destroy` destroys the application and remove all child components, observers and listeners