



CREATING YOUR APP WITH VITE

Quick Vue3 development environment

```
npm init vite-app <project-name>
cd <project-name>
npm install
npm run dev
```

TEMPLATE SYNTAX

Text Interpolation Options

```
<span> {{ msg }} </span>
<span v-text='msg'></span>
```

Setting Inner HTML

```
<span v-html='rawHTML'></span>
```

Can use JS Expressions; NOT JS Statements

```
✓ <span> {{ msg.reverse() }} </span>
✗ <span> {{ let msg = 'hi' }} </span>
```

DIRECTIVES

v-if	Puts el in DOM if true
v-else-if	Like a usual conditional
v-else	Like a usual conditional
v-show	Toggles display CSS value
v-text	Sets the inner text
v-html	Sets the inner HTML
v-for	Loop through an array/obj
v-on or @	Listens to DOM events
v-bind or :	Reactive updates attribute
v-model	Two way data binding
v-once	Sets val once; Never update

CONDITIONAL RENDERING

Add/Remove Element from DOM w/ Boolean

```
<div v-if='date == today'>...</div>
<div v-else-if='!done'>...</div>
<div v-else>...</div>
```

Toggles display CSS instead of editing DOM

```
<div v-show='date == today'>...</div>
```

HANDLING EVENTS

Capture and event and call a method

```
<div v-on:click='count'>Increase</div>
<!-- SHORTHAND -->
<div @click='count'>Increase</div>
```

Method is passed a Native DOM Cvent

```
const count = (event) => {
  console.log(event.target)
}
```

Event modifiers (usage: v-on:click.stop)

.stop	Stops event propagation
.once	Can only trigger event once
.prevent	Calls evt.preventDefault
.self	Don't send if target = child

LIST RENDERING

Basic Loop Over Array

```
<li v-for='item in items' :key='item'>
  {{ item }}
</li>
```

Loop and Track Index

```
<li v-for='(item, index) in items'>
  {{ index }} : {{ item }}
</li>
```

Loop Values in Object

```
<li v-for='obj in objects'>
  {{ obj }}
</li>
```



BINDING DATA

Simple Binding

```
<div v-bind:id='objectID'>...</div>
<!-- SHORTHAND -->
<div :id='objectID'>...</div>
```

Two way binding with data and input

```
<input v-model='email' />
```

Input Modifiers

<code>.lazy</code>	updates on change event
<code>.trim</code>	removes extra whitespace

Use Objects to Bind Class/Styles

```
<input :class='{error: hasError}' />
<input :style='{margin: space+"px"}' />
```

BIND DATA BETWEEN CHILD & PARENT

Use v-bind to pass data from parent to child and emit a custom event to send data back.

In Parent, Bind Data & Set Listener to Update

```
<custom :msg='s' @update='s = $event' />
```

In Child, Send Back Using emit(event, data)

```
context.emit('update', 'hello world')
```

SLOTS

Slots allow for content injection from a parent component to a child component.

BASIC SLOTS

Child Component (MyButton.vue)

```
<div>
  Hello World
  <slot></slot>
</div>
```

Parent Component

```
<my-button>
  This content will replace the slot
</my-button>
```

NAMED SLOTS

Useful when you have multiple slots. If unnamed, name is 'default'.

Child Component (MyButton.vue)

```
<div>
  <slot name='top'></slot>
  <slot name='bottom'></slot>
</div>
```

Name Slots in the Parent Component

```
<my-button>
  <template v-slot:top> // ...
</template>
  <template v-slot:bottom> // ...
</template>
</my-button>
```

SCOPED SLOTS

Give parent component access to child data.

Child Component (MyButton.vue)

```
<div>
  <slot v-bind:post='post'>
    {{ post.title }}
  </slot>
</div>
```

Parent Has Access to MyButton post data

```
<my-button>
  <template v-slot:default='slotData'>
    {{ post.author }}
  </template>
</my-button>
```



DYNAMIC COMPONENTS

Changes the rendered component - finds a registered component with the given name.

```
<component :is='componentName' />
```

KEEP-ALIVE ELEMENTS

Stores a cached version of dynamic components when not visible. Avoids having to create a new component whenever toggled.

```
<keep-alive>
  <component :is='componentName' />
</keep-alive>
```

COMPOSITION API

Everything returned by `setup()` is exposed to the template.

```
import { ref, reactive } from 'vue'
export default {
  setup(props, context) {
    const val = ref('example')
    const obj = reactive({ count: 0 })

    const evtHandler = () => { /*...*/ }

    return {
      val, obj, evtHandler
    }
  }
}
```

SETUP() CONTEXT OBJECT PROPERTIES

<code>attrs</code>	Has component's attributes
<code>slots</code>	Has component's slots
<code>emit</code>	Function to emit events

VUEJS LIFECYCLE HOOKS

<code>*beforeCreate</code>	Use <code>setup()</code> instead
<code>*created</code>	Use <code>setup()</code> instead
<code>onBeforeMount</code>	Before mounting DOM
<code>onMounted</code>	DOM can be accessed
<code>onBeforeUpdate</code>	Reactive data changes
<code>onUpdated</code>	DOM has been updated
<code>onBeforeUnmount</code>	Component still complete
<code>onUnmounted</code>	Teardown complete

EXAMPLE LIFECYCLE HOOK CODE

```
import { onMounted } from 'vue'
// ...
setup() {
  onMounted(() => {
    console.log('component mounted!')
  })
}
```

VUE GLOBAL METHODS

<code>mount()</code>	Mount component to DOM
<code>forceUpdate()</code>	Force re-render
<code>nextTick()</code>	Runs func next update
<code>destroy()</code>	Destroy component/app

COMPUTED PROPERTIES

A computed property is a value that is calculated using one or more other properties.

```
setup() {
  const a = ref(1)
  const b = computed(() => a.value * 2)

  return { a, b }
}
```

WATCHEFFECT()

Listens to reactive dependencies and runs a method when one changes. Also runs on init.

```
setup() {
  const site = ref('learnvue.co')

  watchEffect(() => {
    console.log(site.value)
  })

  return { site }
}
```

Vue Cheat Sheet

Fuente: learnvue.co



TEMPLATE REFS

Give access to DOM elements.

```
// template
<div ref='example'> Example Div </div>
// script
setup() {
  const example = ref('learnvue.co')
  // wait for DOM to mount
  onMounted(() => {
    console.log(example.value)
  })

  return { example }
}
```

VUE OBJECT API OPTIONS

If you decide not to use the Composition API, your components will look similar to Vue2 with the Options API.

<code>data()</code>	Init reactive data
<code>props</code>	Data visible by parent
<code>mixins</code>	Declares mixins
<code>components</code>	Registers children
<code>methods</code>	Set of Vue methods
<code>watchers</code>	Watch values for change
<code>computed</code>	Cached reactive methods

TOP VUE LIBRARIES

<code>vue-cli</code>	Command Line Interface
<code>vue-router</code>	Handles Routing for SPAs
<code>vuex</code>	State Management Library

GREAT VUE UI RESOURCES

Vuetify	Bootstrap Vue	UIV
VueStrap	Vue Material	Mint UI
Element UI	Vuexidity	iView
Buefy	DeepReader	KeenUI
Quasar	AT UI	Bulma
Fish-UI	Muse UI	Vue Blu

LIFE CYCLE

