

### Vue JS 3 Tutorial

Introduction

## What is Vue?

### What is Vue?

- Front-end, JavaScript / TypeScript framework
- Used to create dynamic & data-driven websites (SPA's)
- Can also be used to create stand-alone widgets

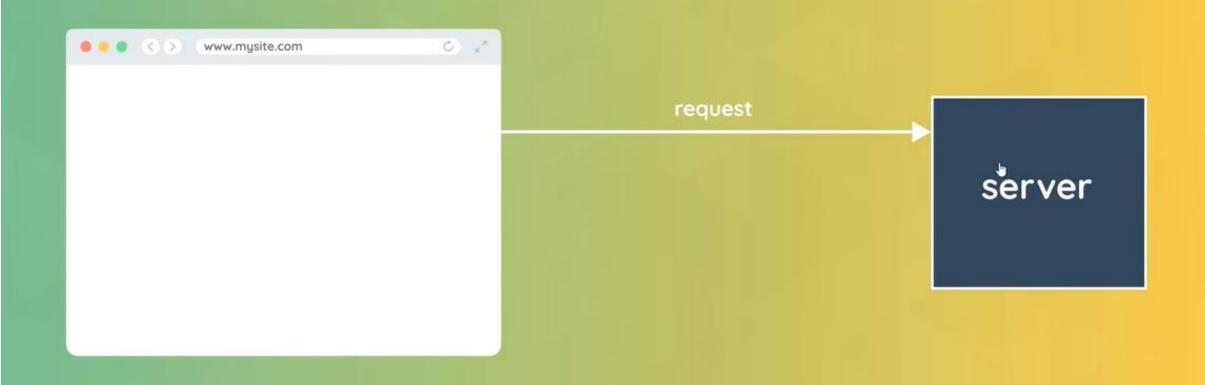


## Vue Widgets

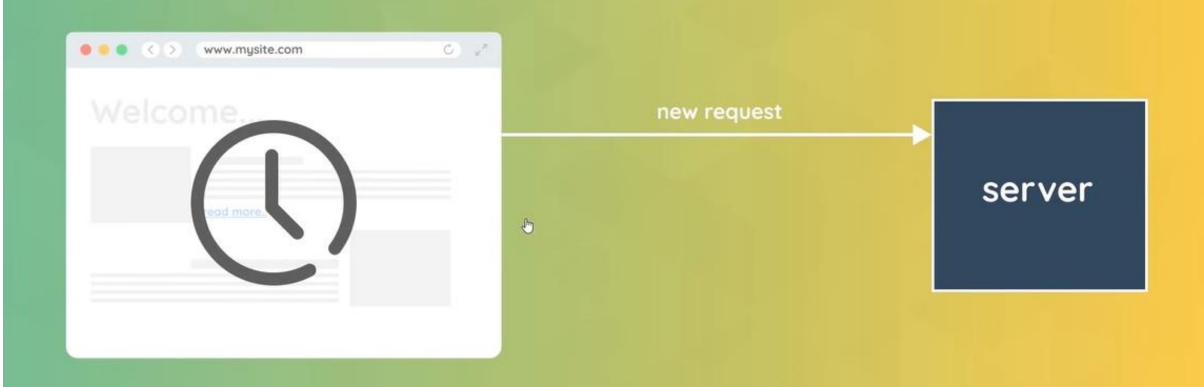


- Vue is used to create a whole website with multiple pages & components
- These websites are normally called Single Page Applications
- All routing is done in the browser & not on the server



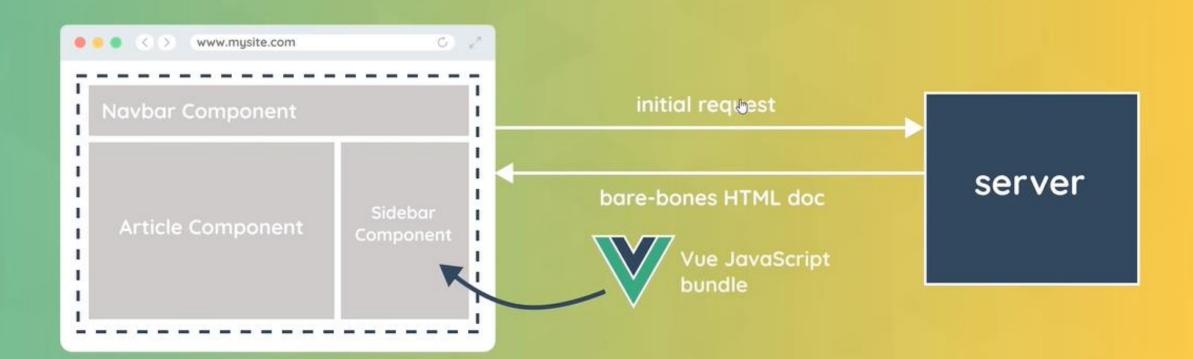


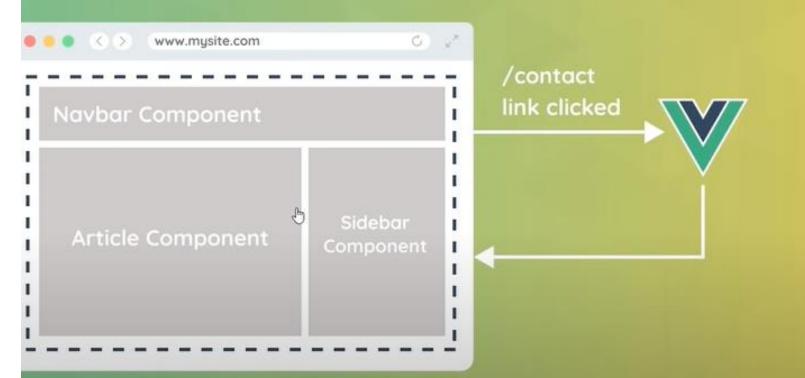




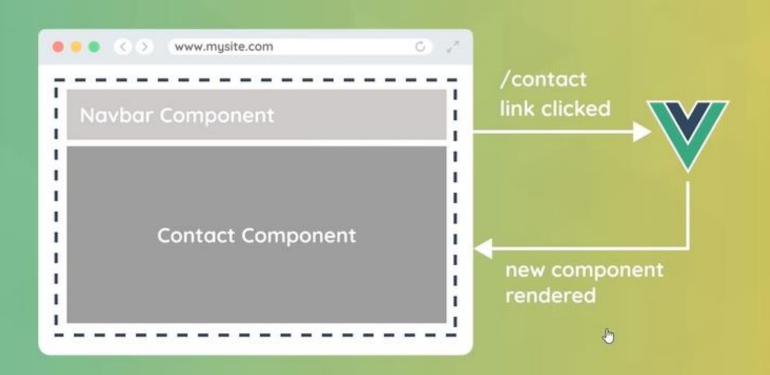








server



server

## Single Page Application (SPA)

- Only a single HTML page sent (initially) to the browser
- Vue intercepts subsequent requests and handles "page" changes in the browser by swapping what components are shown on the page
- Results in a much faster and smoother website experience

# New Features in Vue 3

Vue 3 New Features

### The Composition API

- Improves on reusability, organization & readability
- It does this by giving us a new setup( ) function

### **Multiple Root Elements**

- Can have many root elements side-by-side in a component

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### **Teleport Component**

- Render content from one component in a different place in the DOM
- Useful for things like modals

### Suspense Component

- Used to handle asynchronous components easily
- Can provide fall-back content (e.g. a spinner) until data is loaded

### TypeScript Support

- Can now write Vue applications using TypeScript

### **More Changes**

- Multiple v-models for custom components
- Improved Reactivity
- Performance gains

# Environment Setup

ID 0

Version 1.50 is now available! Read about the new features and fixes from September.

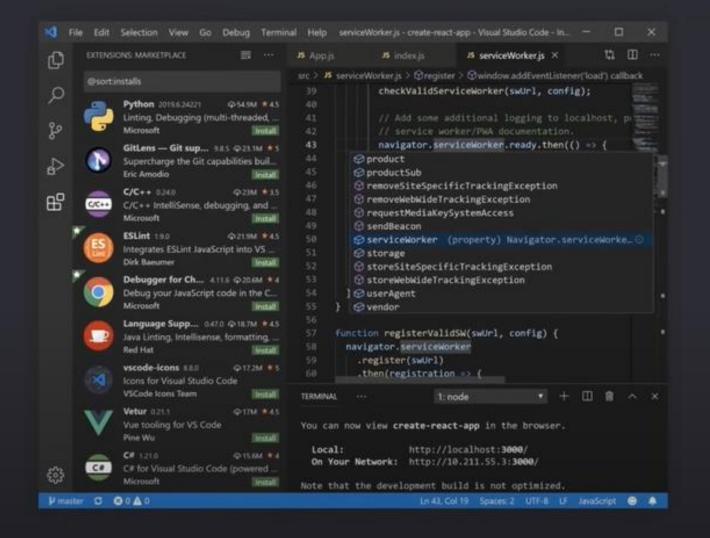
### Code editing. Redefined.

Free. Built on open source. Runs everywhere.

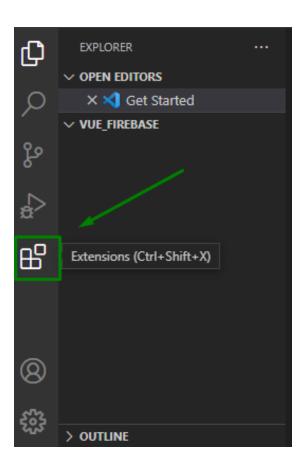
Download for Windows Stable Build

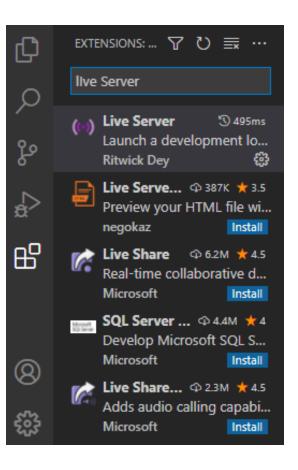
Other platforms and Insiders Edition

By using VS Code, you agree to its



- Click on the Extensions
- Install Live Server





#### Create new file index.html

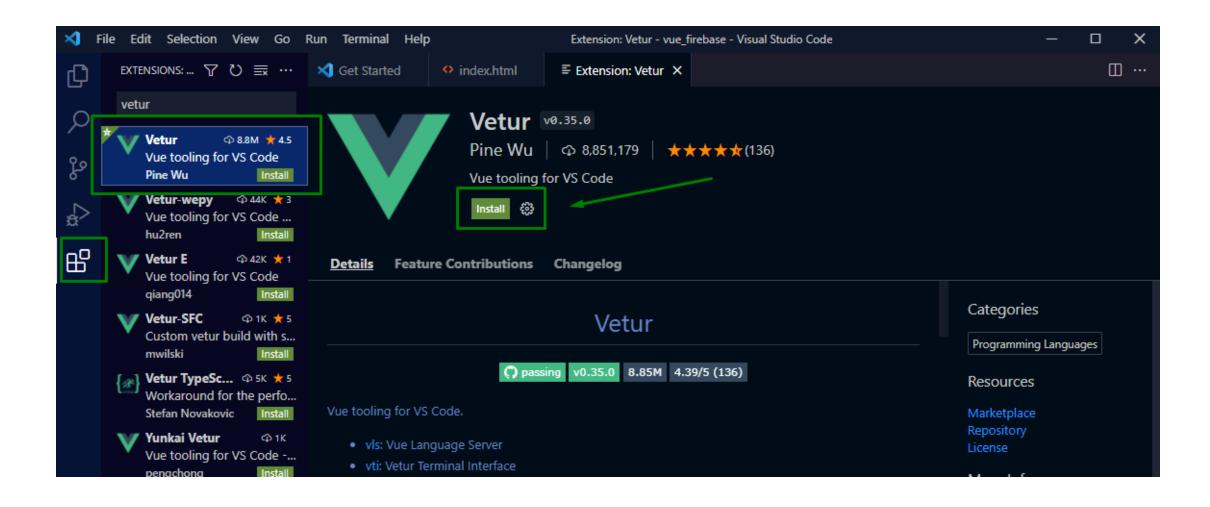
### Typing 'doc' and press 'tab' on the keyboard

index.html

```
<html lang="en">
<head>
   <meta charset="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
   <title>Learning Vue</title>
</head>
<body>
   <h1>Hello Vue :)</h1>
</body>
</html>
```

Right click
Click 'Open with Live Server'

### Install Vetur



### Install Material Icon Theme

