





af

# Anthony Fu

Core team member of Nuxt, Vue, and Vite.

Creator of VueUse, Slidev, Vitest, UnoCSS.

Working at NuxtLabs.

 [antfu.me](https://antfu.me)  [antfu](https://github.com/antfu)  [antfu@webtoo.ls](mailto:antfu@webtoo.ls)  [antfu7](https://twitter.com/antfu7)



Anthony's Roads to Open Source <sup>2/n</sup>

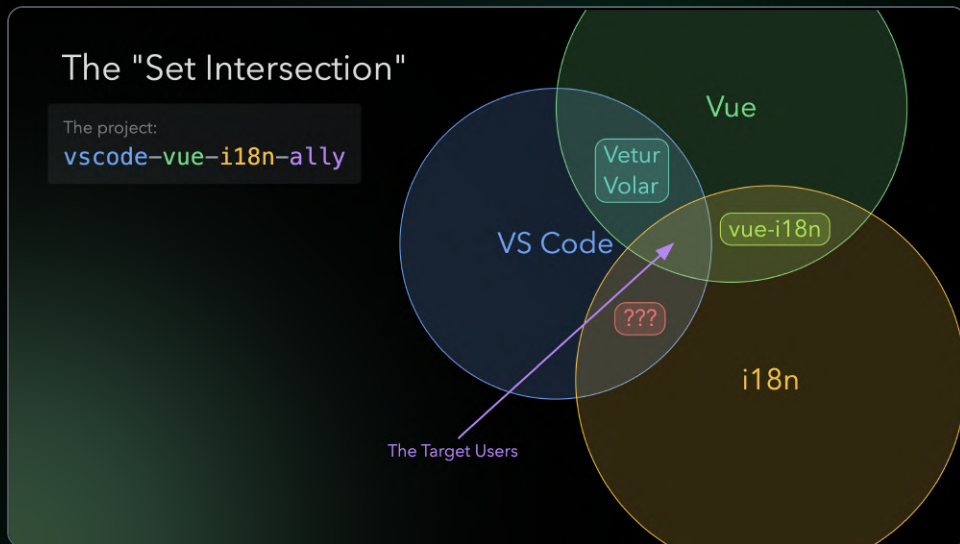
# The Progressive Path

Vue Amsterdam

Feb. 29th 2024

Previous Episode

# The Set Theory



Recordings on [antfu.me](https://antfu.me)



# What is a Tool?

A tool should help you get things done *faster* and/or *easier*

# What Makes a Good Tool?

*General & Useful*

COST  
OF  
LEARNING  
USING



COST  
OF  
DOING

# Make things *Easier!*

## Cost of Using a Tool

 Cost of Discovering

→ Common needs, easy to find

 Cost of Learning

→ Easy to understand and get started

 Price

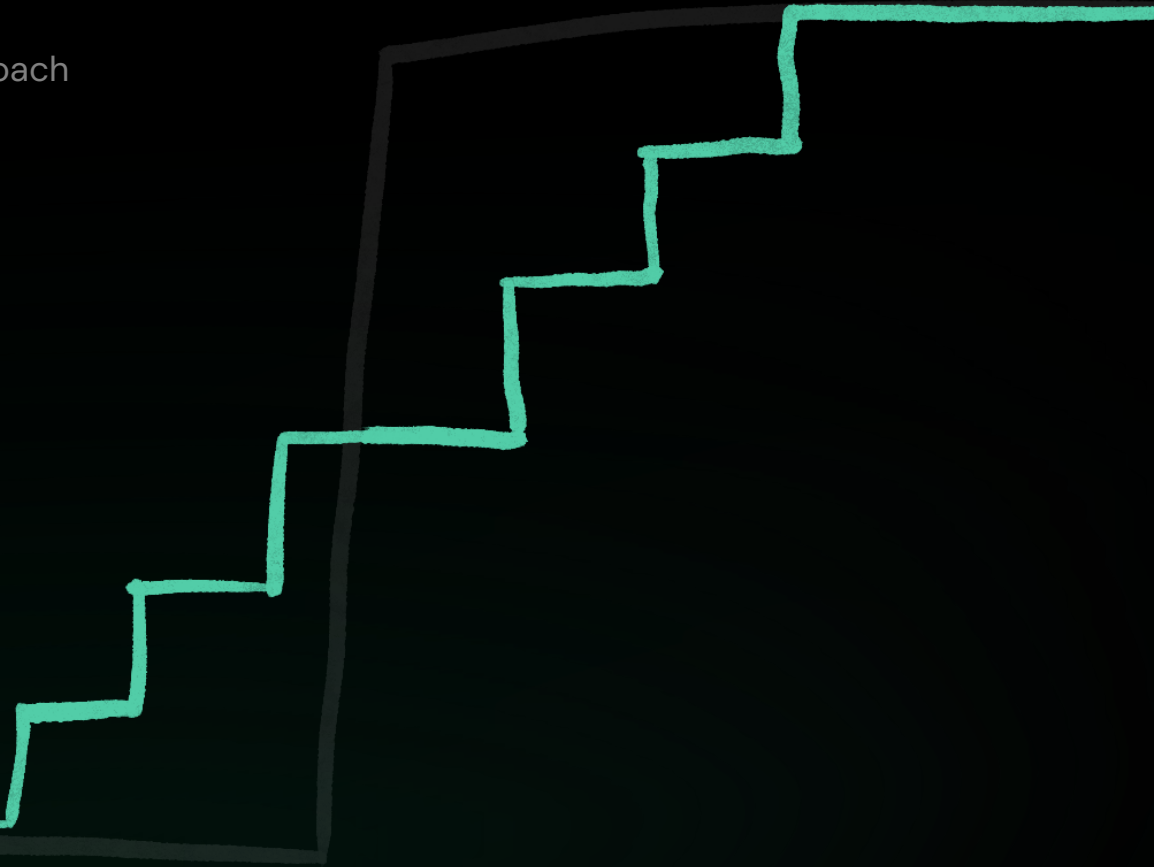
→ Usually free in Open Source! ❤️

 Cost of Adoption

→ Provide integrations, extensibility

# What is Progressive?

The "Stairs" to make things easier to approach







# The Progressive JavaScript Framework

"A framework that can grow with you and adapt to your needs."

<https://vuejs.org>

# Progressive on Integrations

Vue offers multiple ways to use, for different level of integrations:

- CDN without build tools
- As Web Components
- Single-page application (SPA)
- Static site generation (SSG)
- Server-side rendering (SSR)
- Native targeting
- Vue Vapor Mode *Coming soon*

# Levels of Integrations

Cover different scenarios, coexist with other techs, *easy to adopt*



# The Intuitive Vue Framework


"To make web development intuitive and performant with a great Developer Experience"

<https://nuxt.com>



# Progressive on Onboarding

This is **all you need** to start with Nuxt:

 package.json

```
{
  "scripts": {
    "dev": "nuxt dev",
    "build": "nuxt build",
  },
  "devDependencies": {
    "nuxt": "^3.10.0"
  }
}
```

 app.vue

```
<script setup>
const msg = ref('Hello, Nuxt!')
</script>

<template>
  <h1>{{ msg }}</h1>
</template>
```

**Intuitive** – Minimal knowledge required, and easy to discover new features

# Progressive on Features

Starts **minimal** and **grows** with users:

🔗 **Have some components?** Put them in `components/` and use anywhere

➡ **Need routing?** Create a `pages/` directory and Vue router is set up for you.

🔗 **Deploy your site?** It **Just works™** with zero-config powered by ⚡ Nitro

☁ **Need some server logic?** Create a `server/api/` directory to make serverless endpoints.

📄 **Want TypeScript?** Oh, you can just use it!

🧩 **PWA, SEO, i18n, RSS, etc?** We have great modules ecosystem to use in a few clicks.

🐱 **Curious about more?** We have [🏔 Nuxt DevTools](#) to inspect and analyze the internals

# Nuxt DevTools

Help features discovery  
and understanding

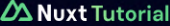
The screenshot displays the Nuxt DevTools interface. At the top, the Nuxt logo is followed by navigation links: Docs, Integrations, Resources, Showcase, Enterprise, and Blog. A search icon, a moon icon, and a user profile icon with '50.5K' are also present.

The left sidebar contains a list of navigation items: Overview, Pages, Components, Imports, Modules (highlighted), Assets, Runtime Configs, Payload, Open Graph, Plugins, Timeline, Server Routes, Storage, VS Code, Icônes, TailwindCSS, VueUse, and Settings.

The main content area features a grid of Nuxt modules:

- ui**: Fully styled and customizable components for Nuxt, powered by...  
Links: ui.nuxt.com, nuxt/ui, @nuxt/ui  
Stats: 2795 stars, 97841 downloads
- image**: Optimised images for Nuxt, with progressive processing, lazy-loading...  
Links: image.nuxt.com, nuxt/image, @nuxt/image  
Stats: 1193 stars, 424775 downloads
- plausible**: Nuxt module to natively integrate Plausible analytics  
Links: github.com/nuxt-modules/plausible, nuxt-modules/plausible, @nuxtjs/plausible  
Stats: 87 stars, 19021 downloads
- fontaine**: Automatically optimized font fallback based on font metrics  
Links: github.com/unjs/fontaine, nuxt-modules/fontaine, @nuxtjs/fontaine  
Stats: 289 stars, 43374 downloads
- google-fonts**: Google Fonts module for Nuxt  
Links: google-fonts.nuxtjs.org, nuxt-modules/google-fonts, @nuxtjs/google-fonts  
Stats: 438 stars, 244763 downloads
- turnstile**: Privacy-focused alternative to CAPTCHA from Cloudflare  
Links: github.com/nuxt-modules/turnstile, nuxt-modules/turnstile, @nuxtjs/turnstile  
Stats: 188 stars, 11405 downloads
- studio**: A new experience to build content-driven website with Nuxt.  
Link: nuxt.studio
- vueuse**: Collection of essential Vue Composition Utilities for Vue 2 and 3  
Link: vueuse.org

At the bottom of the interface, a status bar shows the Nuxt logo, a '122 ms' timer, and a refresh icon.

 Working in Progress

Guide

Welcome to Nuxt Tutorial!

Vue Basics


Nuxt Concepts

Nuxt is a free and **open-source framework** with an intuitive and extendable way to create type-safe, performant and production-grade full-stack web applications and websites with **Vue.js**. Nuxt has no vendor lock-in, allowing you to deploy your application **everywhere, even on the edge**.

## Getting Started


With this tutorial, we assume you are already familiar with the basic concept of HTML, CSS, JavaScript. Nuxt is a full-stack framework built on top of **Vue**, we also include a simple Vue tutorial to help you get started quickly.

Start learning by click the topics below:



### Vue Basics

If you are not familiar with Vue, we recommend you to learn the basics of Vue first.




### Nuxt Concepts

If you are not familiar with Vue, we recommend you to learn the basics of Vue first.

## Case Studies


Once you are already familiar the concepts of Vue and Nuxt, we provided some case studies to help you understand how to use Nuxt in real-world applications:



### GitHub Profile

Coming Soon

Build an website to generate custom user



### ECommerce

Coming Soon

Build a basic ECommerce site with product

app.vue

Show solution

```
1 <script setup lang="ts">
2 const msg = 'Welcome to Nuxt Tutorial!'
3 </script>
4
5 <template>
6   <h1>{{ msg }}</h1>
7 </template>
8
```

Preview

# Nuxt Tutorial

Help onboarding  
and learning



# Grow with Users

Expose concepts & powers *progressively*



# Next Generation Frontend Tooling

"We work closely with projects in the ecosystem to minimize regressions on each release"

<https://vitejs.dev>



**moonrepo**

@tothemoonrepo · [Follow](#)



Congrats to Vite on the  
examples repo with n  
[github.com/moonrepo](https://github.com/moonrepo)

 **Vite** ⚡ @vite\_js

⚡ Vite 3 is out!

The Vite Team, working c  
happy to announce the n  
involved in making this re  
[vitejs.dev/blog/announcin](https://vitejs.dev/blog/announcin)

7:08 PM · Jul 13, 2022



17



[Reply](#)



**Kilian Valkhof** 

@kilianvalkhof · [Follow](#)



Most painless full-version upgrade of a build system ever.

 **Vite** ⚡ @vite\_js

⚡ Vite 5 is out!

Performance improvements, big cleanups, and new features preparing  
the ground for even more innovation from the ecosystem!  
[vitejs.dev/blog/announcin...](https://vitejs.dev/blog/announcin)

4:41 PM · Nov 16, 2023



11




[Reply](#)



[Copy link to post](#)


[Read more on X](#)

# A Typical Vite Plugin

 package.json

```
{  
  // ...  
  "peerDependencies": {  
    "vite": "^2.9.0 || ^3.0.0 || ^4.0.0 || ^5.0.0"  
  },  
}
```

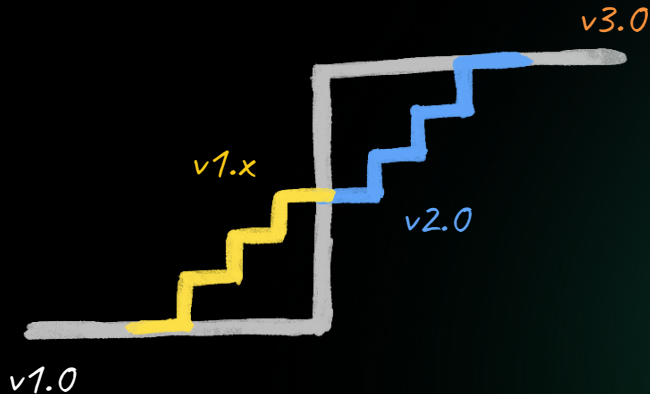
The plugin keeps working from Vite 2 to Vite 5

  
3 years in between!



# Progressive on Breaking Changes

Two ways of make breaking changes easier



## ↗ Backward Compatibility

- Compatible with the **previous** versions
- Deprecate first, print warnings, remove later
- (e.g. `@vue/compat` , `@nuxt/kit` )

## ↘ Forward Compatibility

- Compatible with the **future** versions
- Introduce the `experimental` or `future` flags
- Make future behavior opt-in today
- (e.g. `@vue/composition-api` , `vue v2.7` , `Nuxt Bridge`)

# Allow Coexistence

Provide "middle stages" for migration, coexist of legacy & new

# Recap

Progressive on 📖 Onboarding

↳ Making it easy to understand and get started

Progressive on 🧩 Integrations

↳ Fits in different scenarios, easy to adopt

Progressive on 💡 Features

↳ Starts minimal and grows with users

Progressive on ⚠️ Breaking Changes

↳ Provide middle stages for migration

# Progressive Paths

Enables users the capability of **"Divide and Conquer"**

# Thank you!

Slides on [antfu.me](https://antfu.me)