

 WebComponents

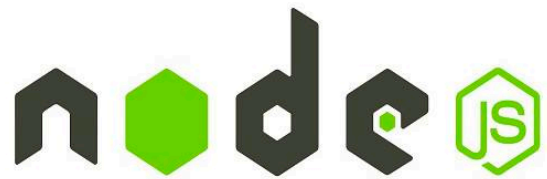
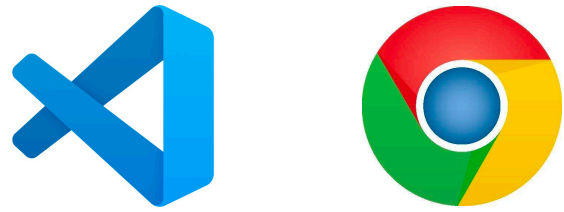
# 概述与开发测试环境

开发测试环境

关于WebComponents

Demos

# 开发环境



HTML5 / CSS3 / ES6 / Nodejs

JSX / less / Typescript   Nodejs

## VSCode 编程演练

新建demo.html，实现点击按钮改变按钮文案

## Chrome 编程演练

在Console中写一个闭包函数并调用

## NodeJS 编程演练

编写scaffold.js，通过 npm run 执行

<https://caniuse.com/>

<https://developer.mozilla.org/zh-CN/>

<https://webcomponents.dev/>

# Can I use webcomponents

4 results found

## # HTML Imports - WD

Deprecated method of including and reusing HTML documents in other HTML documents. Superseded by ES modules.

Current aligned Usage relative Date relative Filtered All

IE	Edge *	Firefox	Chrome	Safari	Opera	Safari on iOS *	Opera Mini *	Android Browser *	Opera Mobile
			4-29		10-16				
	12-18	2-31	30-35		17-22				
	79	32-55	36-79		23-66				
6-10	80-97	56-96	80-98	3.1-15.1	67-82	3.2-15.1		2.1-4.4.4	12-12
11	98	97	99	15.3	83	15.3	all	98	64
		98-99	100-102	15.4-TP		15.4			

### Settings Preferences

#### Appearance

Theme: System preference

Panel layout: auto

Color format: As authored

☐ Enable ⌘ + 1-9 shortcut to switch panels

Language: English (US) - English (US)

☐ Disable paused state overlay

☒ Show What's New after each update

#### Sources

☐ Search in anonymous and content scripts

☐ Automatically reveal files in sidebar

☒ Enable JavaScript source maps

☐ Enable tab moves focus

☒ Detect indentation

☒ Autocompletion

☒ Bracket matching

☐ Code folding

Show whitespace characters: None

☒ Display variable values inline while debugging

☒ Focus Sources panel when triggering a breakpoint

☒ Enable CSS source maps

☒ Allow scrolling past end of file

Default indentation: 4 spaces

#### Elements

☒ Show user agent shadow DOM

☒ Word wrap

☒ Show HTML comments

☒ Reveal DOM node on hover

☒ Show detailed inspect tooltip

☐ Show rulers on hover

#### Network

☐ Preserve log

☒ Record network log

☐ Enable network request blocking

☐ Disable cache (while DevTools is open)

☐ Color-code resource types

☐ Group network log by frame

☐ Force ad blocking on this site

#### Performance

☒ Show native functions in JS Profile

Flamechart mouse wheel action: Zoom

☐ Hide chrome frame in Layers view

#### Console

☐ Hide network messages

☐ Selected context only

☐ Log XMLHttpRequests

☐ Show timestamps

☒ Autocomplete from history

☒ Group similar messages in console

☒ Show CORS errors in console

☒ Eager evaluation

☒ Evaluate triggers user activation

☐ Preserve log upon navigation

☐ Enable custom formatters

#### Extension

Link handling: auto

#### Persistence

☐ Enable Local Overrides

#### Debugger

☐ Disable JavaScript

☐ Disable async stack traces

#### Global

☐ Auto-open DevTools for popups

#### Sync

关于



**Web Components**

Web Components是Web原生提供的封装组件的方式，提供了扩展Web自定义Element（元素）的可能。

主要包含custom elements、shadow dom、html templates等部分，用于注册自定义元素、提供shadow-dom接口，为自定义元素的样式和脚本提供一个隔离的环境，通过template和slot编写自定义元素的结构模板。



```
<video style="background-color: rgb(0, 0, 0); width: 100%; height: 100%; display: block; webkit-playsinline x-webkit-airplay preload="auto" data-role="txp_video_tag" src="https://apd-d75a81f...v.smtcdns.com/om.tc.qq.com...5B19256F02216ABF4D1EECAA54D0972B034493B1A0926508FED7D5738402FAAE4B21CE4D8A">
  #shadow-root (user-agent)
    <div pseudo="-webkit-media-controls" class="sizing-small phase-pre-ready state-no-source"> flex
      <div pseudo="-internal-media-controls-loading-panel" aria-label="buffering" aria-live="polite" style="display: none;">...</div>
      <div pseudo="-webkit-media-controls-overlay-enclosure">
        <input pseudo="-internal-media-controls-overlay-cast-button" type="button" aria-label="play on remote device" style="display: none;"> == $0
      </div>
      <div pseudo="-webkit-media-controls-enclosure"> flex
        <div pseudo="-webkit-media-controls-panel" class="transparent" style="display: none;">...</div>
        <div role="menu" aria-label="Options" pseudo="-internal-media-controls-text-track-list" style="display: none;"></div>
        <div role="menu" aria-label="Options" pseudo="-internal-media-controls-playback-speed-list" style="display: none;"></div>
        <div pseudo="-internal-media-controls-overflow-menu-list" role="menu" class="closed" style="display: none;">...</div>
      </div>
    </video>
```





```
var $box = document.getElementById('box')
var $head = document.createElement('h1')
var $content = document.createElement('div')
$head.innerText = '关注'
$content.innerText = 'CitiBank'
$box.append($head)
$box.append($content)
```



原生浏览器支持

<https://webcomponents.dev/blog/all-the-ways-to-make-a-web-component/>

原生语法支持

使用 Shadow DOM 封装样式

数据的双向绑定



## Lightning Web Components

LWC Playground and demos of 70 base components



## Adobe

Amazing showcase of Spectrum Web Components



## FAST

The adaptive interface system for modern web experiences.



## Open Web Components

50+ demos in LitElement and Haunted, from Basic to Advanced.



## VanillaWC

A Collection of Vanilla Web Components with no dependencies.



**HTML Element**  
0 dependencies



**Atomico**  
JSX



**Lit**  
TypeScript



**Omi**  
JSX



**FAST**  
TypeScript



**Haunted**  
JavaScript



**LWC**  
JavaScript



**Preact**  
custom-element



**Stencil**  
TSX



**Svelte 3**  
custom-element



**uCE**  
JavaScript



**Vue 3**  
Built-in wrapper



## Spectrum Web Components

A collection of 40+ components from Spectrum Web Components  
by Adobe's Spectrum team



## lit-html 2 (preview)

Explore the new capabilities of the upcoming lit-html 2  
by Westbrook



## lit-html by examples

Learn LitElement by examples  
by open-wc



## Haunted by examples

Learn Haunted by examples  
by open-wc

# Demos

```
<img is="my-img" />
```



<my-counter/>



## 内容回顾