

Vite Project File Structure Explained

Basic Vite Project Structure

```
my-vite-project/
├── node_modules/      # Dependencies (auto-generated, don't touch)
├── public/            # Static assets (served as-is)
│   ├── favicon.ico
│   └── images/
├── src/              # Your source code (main workspace)
│   ├── assets/       # Images, fonts used in components
│   ├── components/   # Reusable components (optional)
│   ├── styles/       # CSS files
│   │   └── main.css
│   ├── main.js       # Entry point JavaScript
│   └── index.html    # HTML entry (sometimes in root)
├── .gitignore        # Files to ignore in git
├── index.html        # Main HTML file (entry point)
├── package.json      # Project info & dependencies
├── package-lock.json # Locked dependency versions
├── vite.config.js    # Vite configuration
└── README.md         # Project documentation
```

Detailed Breakdown

1. `index.html` (Root Level)

- **Purpose:** Main entry point of your app
- **Key Point:** Unlike other bundlers, Vite puts this in the ROOT, not in `public/`
- **Example:**

```
html
```

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8" />
  <meta name="viewport" content="width=device-width, initial-scale=1.0" />
  <title>My Vite App</title>
</head>
<body>
  <div id="app"></div>
  <script type="module" src="/src/main.js"></script>
</body>
</html>
```

2. `src/` Folder (Your Main Workspace)

This is where you write all your code!

`src/main.js`

- Entry point JavaScript file
- Links everything together
- Example:

```
javascript

import './styles/main.css'

console.log('Hello Vite!')
```

`src/styles/`

- All your CSS files
- For Tailwind, you'll have:

```
CSS

/* main.css */
@tailwind base;
@tailwind components;
@tailwind utilities;
```

`src/components/` (Optional)

- Reusable HTML/JS components
- Example: `Navbar.js`, `Card.js`

`src/assets/`

- Images, fonts, icons used IN your code
 - These get processed by Vite
-

3. `public/` Folder

- Static files served AS-IS
 - Not processed by Vite
 - Use for: favicons, robots.txt, static images
 - **Access:** Direct URL like `/favicon.ico`
-

4. `package.json`

- Project metadata
- Scripts and dependencies
- Example:

```
json
{
  "name": "my-vite-project",
  "version": "1.0.0",
  "scripts": {
    "dev": "vite",
    "build": "vite build",
    "preview": "vite preview"
  },
  "devDependencies": {
    "vite": "^5.0.0",
    "tailwindcss": "^3.4.0"
  }
}
```

5. vite.config.js

- Vite settings and plugins
- Example with Tailwind:

javascript

```
import { defineConfig } from 'vite'

export default defineConfig({
  // Your config here
})
```

6. node_modules/

- All installed packages
- **Never edit manually!**
- Auto-generated by `npm install`
- Add to `.gitignore`

Vite + Tailwind Structure

```
my-tailwind-project/
├── public/
│   └── logo.png
├── src/
│   ├── assets/
│   │   └── hero.jpg
│   ├── styles/
│   │   └── main.css      # Tailwind directives
│   └── js/
│       ├── app.js       # Your custom JS
│       └── main.js       # Import styles here
├── index.html            # Main HTML
├── tailwind.config.js    # Tailwind settings
├── postcss.config.js     # PostCSS config
├── package.json
└── vite.config.js
```

Key Differences from Other Tools

Feature	Vite	Traditional (Webpack)
HTML Location	Root folder	Inside <code>src/</code> or <code>public/</code>
Speed	Super fast ⚡	Slower
Config	Minimal	Complex
Hot Reload	Instant	Slower

Quick Start Commands

```
bash

# Create project
npm create vite@latest my-project

# Install dependencies
cd my-project
npm install

# Run dev server
npm run dev

# Build for production
npm run build

# Preview production build
npm run preview
```

Pro Tips for Freelancing

1. **Keep `src/` organized** - Use folders like `components/`, `pages/`, `utils/`
 2. **Use `public/` wisely** - Only for files that don't need processing
 3. **`.gitignore`** - Always ignore `node_modules/` and `dist/`
 4. **Environment variables** - Use `.env` files for API keys
 5. **Clean structure** - Clients appreciate organized code!
-

File Relationships

```
index.html → links to → src/main.js
      ↓
imports → src/styles/main.css (Tailwind)
      ↓
imports → src/components/*.js
```

✓ What You Actually Need to Touch

Daily Work:

- ✓ `index.html` - Your HTML
- ✓ `src/main.js` - JavaScript entry
- ✓ `src/styles/` - Your styles
- ✓ `src/components/` - Your components

Occasionally:

- ⚙️ `vite.config.js` - Project settings
- ⚙️ `tailwind.config.js` - Tailwind customization
- ⚙️ `package.json` - Add dependencies

Never Touch:

- ✗ `node_modules/`
- ✗ `dist/` (build output)
- ✗ `package-lock.json` (unless fixing conflicts)