

Tauri with SolidJS Project Structure

Tauri with SolidJS for fine-grained reactivity. No virtual DOM, React-like syntax, tiny bundles.

#tauri #rust #desktop #solid #solidjs #reactive

PNG

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Project Directory

my-tauri-app/

- package.json
- vite.config.ts
- tsconfig.json
- index.html
- > **src/** SolidJS app
 - index.tsx App entry
 - App.tsx Root component
 - index.css
 - > **components/**
 - TitleBar.tsx
 - Sidebar.tsx
 - FileTree.tsx
 - > **pages/**
 - Home.tsx
 - Settings.tsx
 - > **stores/** Solid stores
 - app.ts createStore sta...
 - files.ts
 - > **lib/**
 - > **tauri/**
 - commands.ts
 - events.ts
 - utils.ts
 - public/**
 - > **src-tauri/**
 - Cargo.toml
 - tauri.conf.json
 - build.rs
 - > **src/**
 - main.rs
 - lib.rs
 - > **commands/**
 - mod.rs
 - app.rs
 - icons/**
 - capabilities/**

Why This Structure?

SolidJS compiles to direct DOM updates—no virtual DOM diffing. React-like JSX syntax with true reactivity. Smallest runtime of major frameworks. Perfect match for Tauri's performance focus. Signals and stores manage state efficiently.

Key Directories

- src/stores/** - Solid stores with createStore and createSignal
- src/components/** - Reactive components with JSX
- src/lib/tauri/** - Command wrappers using createResource
- src/pages/** - Route-level components

Getting Started

- npm create tauri-app@latest -- --template solid-ts
- cd my-tauri-app && npm install
- npm install @solidjs/router (optional)
- npm run tauri dev

Solid Store

```
// src/stores/files.ts
import { createStore } from 'solid-js/store';
import { invoke } from '@tauri-apps/api/core';

const [files, setFiles] = createStore<string[]>([]);

export async function loadFiles(path: string) {
  const result = await invoke<string[]>('list_files', { path });
  setFiles(result);
}

export { files };
```

When To Use This

- Performance-critical desktop apps
- Developers wanting React-like DX without vDOM
- Apps with complex reactive state
- Smallest possible frontend bundle

Trade-offs

- Smaller ecosystem** - Fewer component libraries available
- Different mental model** - Reactivity rules differ from React
- Learning curve** - Fine-grained reactivity takes practice