bit.ly/esd-wails

or

github.com/sebivenlo/esd-2024-wailsvue

Wails & Vue

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Our Goals

LEARN SOME VUE.JS

BRING WEB-TECHNOLOGY TO THE DESKTOP

HAVE IT BUNDLED IN A SINGLE EXECUTABLE

Wails Framework

- Builds desktop apps using Go

- Has quick start templates (for Svelte, React, Vue, Preact, Lit & Vanilla)

- Uses native elements for an OS appropriate look and feel

- Go & JS interoperability helps connecting frontend

Wails Framework

Provides runtime library to handle eventing, logging, dialogs etc.

Live development – automatic rebuilds and reloads

Allows developing in a browser (auto-refresh when assets change on disk)

Competition – Electron 1/2

Category	Electron	Wails
Footprint	>100MB	<10MB
Architecture	Bundled Chromium/Node.js Engine	Relies on System's Webview
Stack	JavaScript/TypeScript + any Frontend	GoLang + any Frontend
Community	Large, Matured Community	Growing radidly among Go developers

Competition – Electron 2/2

Category	Electron	Wails
Performance	Resource intensive	Lower resource usage
Complexity	Higher degree of customization + control over underlying system	Designed to be more accessible and easier to use

Competition - Tauri

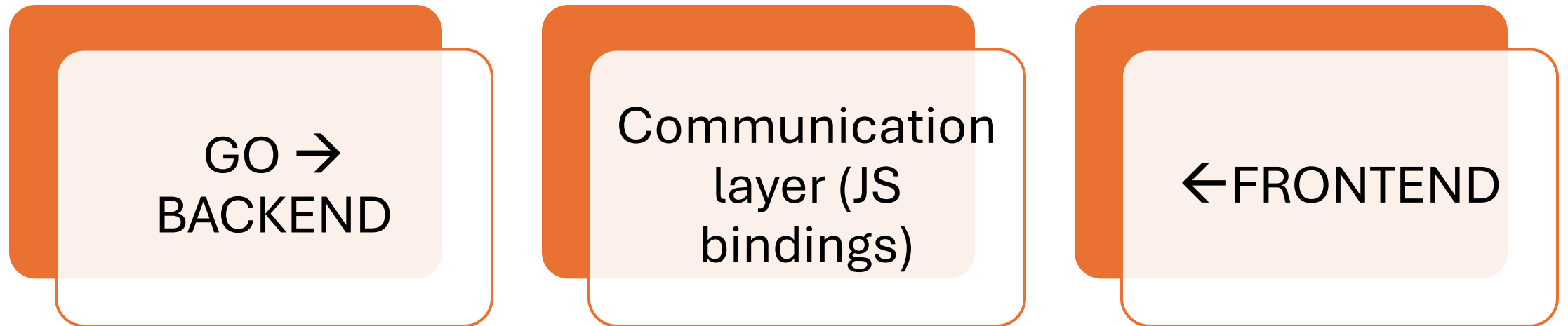| Category	Tauri	Wails
Language	Rust	Go
Community support	Larger and rapidly growing	Smaller but rapidly growing
Package	Installer Only*	Single Executable
Trade-offs	Steeper learning curve, but more secure	Easier to use, but lacks some advanced features

Why choose Wails?

Advantages compared to other frameworks:

- Startup & Execution Speed

- Go backend

- Small Footprint

- No Node.js runtime
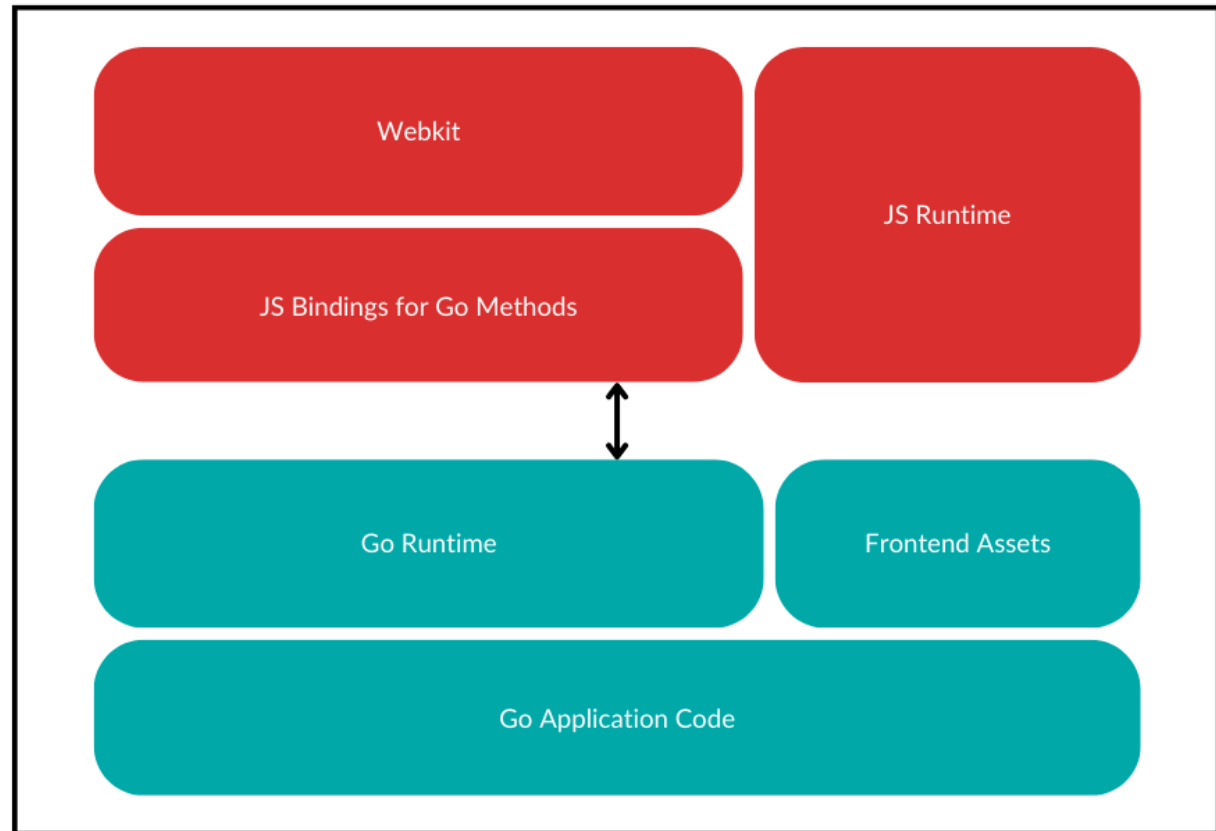
- Wails build → single executable

Architecture

GO →
BACKEND

Communication
layer (JS
bindings)

←FRONTEND

Architecture

Components of a Wails App

Webkit	JS Runtime
JS Bindings for Go Methods	

Go Runtime	Frontend Assets
Go Application Code	

Vue – one of the frontend options

- JS framework used for building UIs
- Created by Evan You in 2014
- Builds on top of HTML CSS & JS

Vue – Key Features

Reactive Components

Declarative Rendering

Template Syntax

Reusable Components

Vue – Benefits of use

- Easy to learn – gentle learning curve
- Can be used for small to large scale apps
- Can be progressively added to apps
- Single file components
- Already large community
- Lightweight

Vue - Basic Concepts You'll Learn

1. **Templating**

2. **Components**

3. **Data Binding**

4. **Event Handling**

5. **Conditional Rendering**

Thank you for your attention!

Let's start with the workshop!

Sources

wails.io/docs/introduction

vuejs.org/guide/introduction