

# Low-code graphical apps with Go

Edinburgh Gophers - 9 October 2024

# About Me

- Software Engineer, Entrepreneur, Author
- Enlightenment, Maven contributor
- Founder of Fyne project
- Go developer since 2018
- CEO Fyne Labs



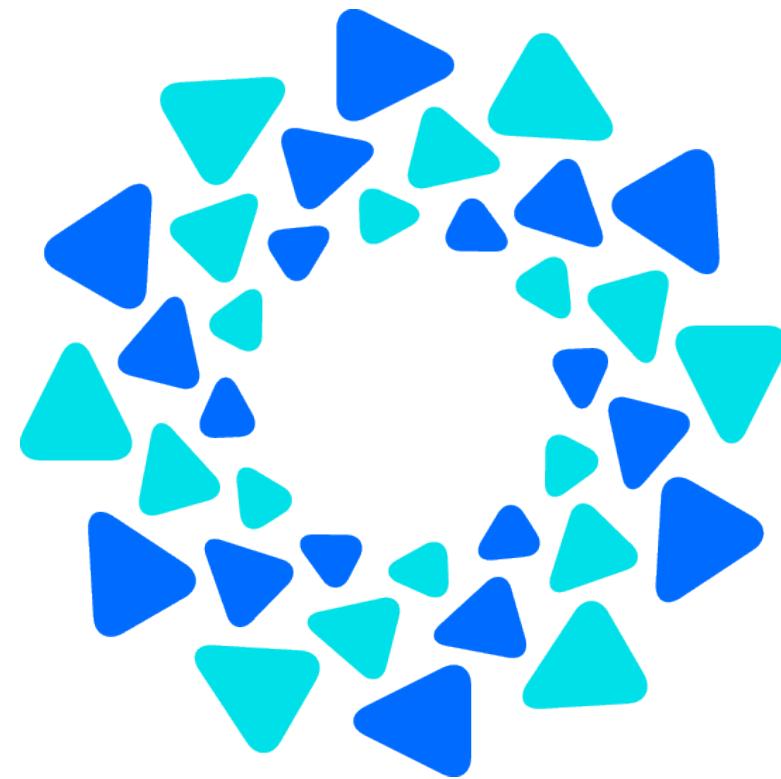
fyne  
labs

# Fyne Project

"

Fyne aims to be the simplest toolkit for  
developing beautiful and usable  
native graphical applications  
for desktop, mobile and beyond

"

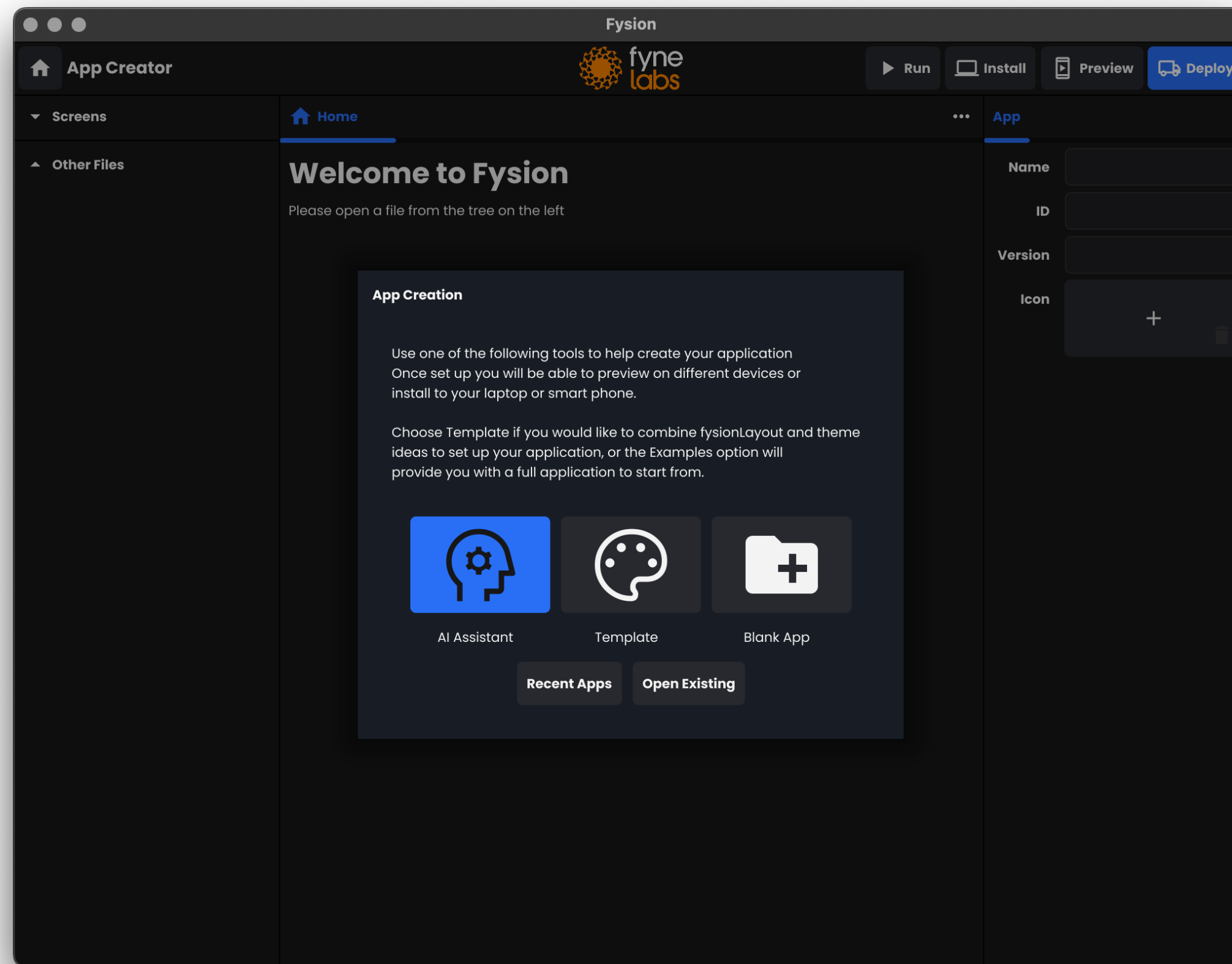


**fyne**

# Fyne Stats

- 6 years old
- Most popular GUI toolkit for Go
- Ranked 6th of all GUI tools by @OSSInsight
- Over 24750 GitHub stars!
- Community of >2350 on Slack, Discord, Matrix
- 15% popularity of Flutter, 20% of React Native

# Build apps without coding!



# Fysion Aims

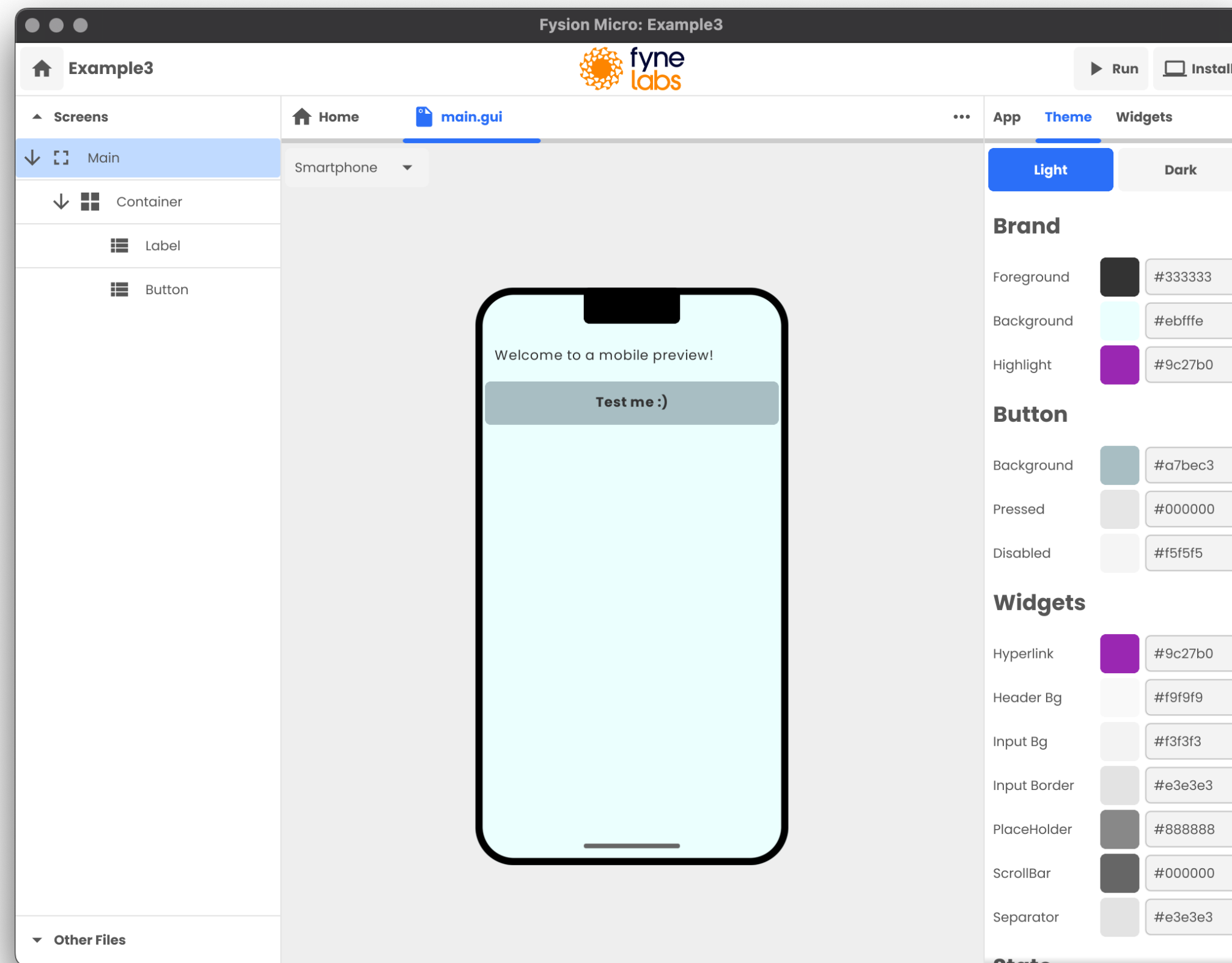
- Native app, runs everywhere
- Graphical editing of UI & theme
- Build on top of a real codebase
- Compile apps for all platforms
- Open source for local creation
- Business add-ons



# Files and source control

- Start from scratch or from templates
- Git to manage source control
- `go mod init` and `tidy`
- Metadata stored in repo
- All changes written to source code

# Theme handling



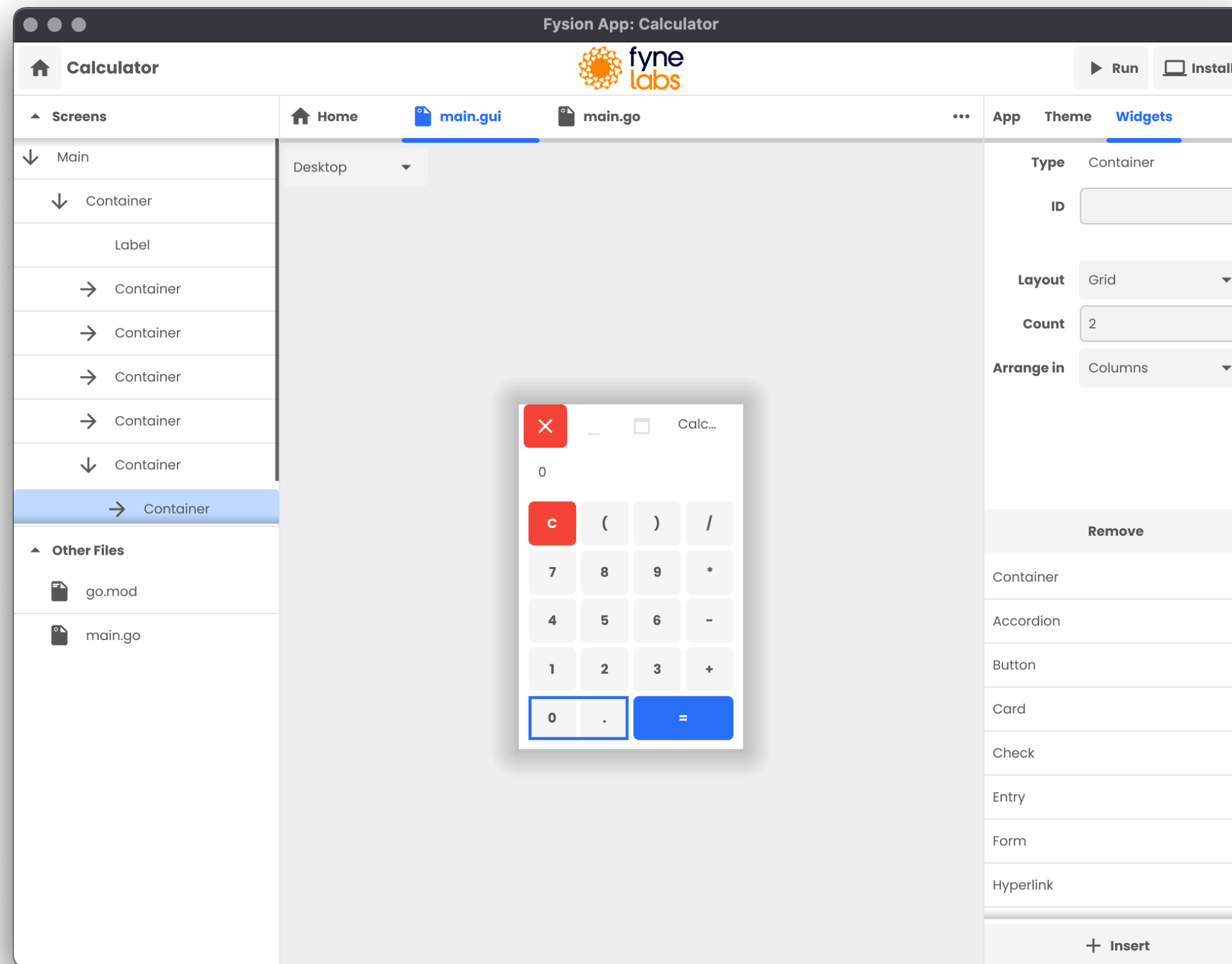


# Theme handling

- Theme data written to JSON
- Inserted with go:embed
- Loaded using theme.FromJSON
- Light/Dark colours
- Fonts/icons/sizes

```
{
  "Colors": {
    "foreground": "#ffffffff"
  },
  "Colors-dark": {
    "foreground": "#c0c0c0ff"
  },
  "Colors-light": {
    "background": "#303030ff",
    "hyperlink": "#3030c0ff"
  },
  "Sizes": {
    "iconInline": 10.0
  }
}
```

# Widget editing



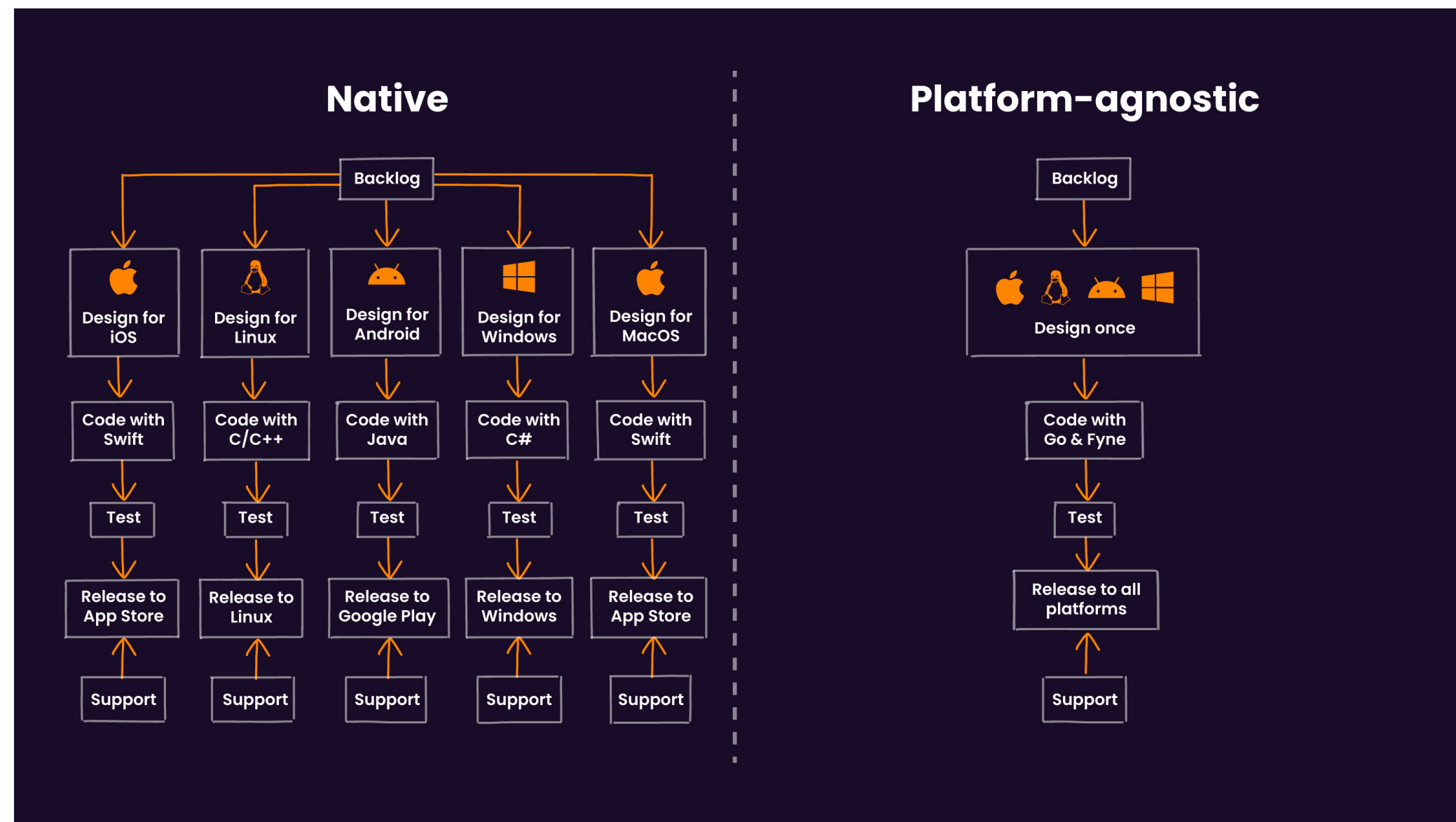
# Widget editing

- Serialise object tree to JSON
- Defyne lib for save/load
- [github.com/fyne-io/defyne](https://github.com/fyne-io/defyne)
- Code generated by GoString()
- Widget create / edit with defyne

```
"Object": {
  "Type": "*fyne.Container",
  "Layout": "Grid",
  "Name": "",
  "Objects": [
    {
      "Type": "*widget.Label",
      "Name": "out",
      "Struct": {
        "Hidden": false,
        "Text": "0",
        "Alignment": 0,
        "Wrapping": 0,
        "TextStyle": {
          "Bold": false,
          "Italic": false,
```

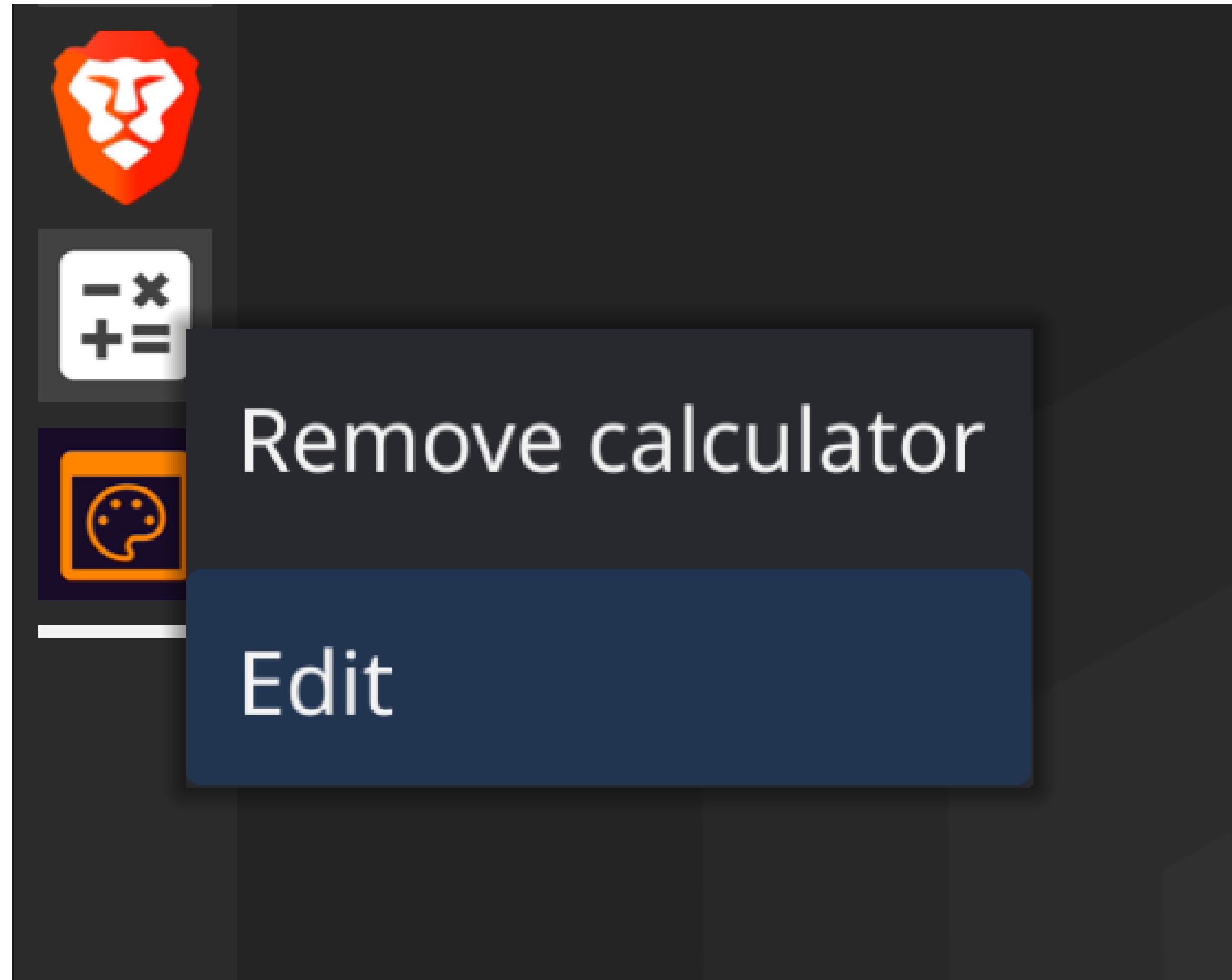
# Compiling (local or cloud)

- Developer tools for local
- Install to computer
- Deploy on Geoffrey CI
- Downloads for all platforms
- [fynelabs.com/geoffrey](https://fynelabs.com/geoffrey)



# FyshOS integration

- Desktop Linux with Fyne
- Apps created with Fysion
- Edit direct from app icons
- Install your modifications
- <https://fyshos.com>



**Live Demo**

# Learn more

- <https://fysion.app>
- Slack "Fysion"
- Demo video: <https://youtu.be/1wMPe9pb3-o>

## Open Source:

- Code Videos: <https://youtube.com/@fynelabs>
- Source: <https://github.com/fynelabs/fysion-tutorials/>

# Questions?

@andydotxyz / andy@fynelabs.com