Low-code graphical apps with Go

FOSDEM - 3 February 2024

About Me

- Software Engineer, Entrepreneur, Author

- Enlightenment, Maven contributor

- Founder of Fyne project
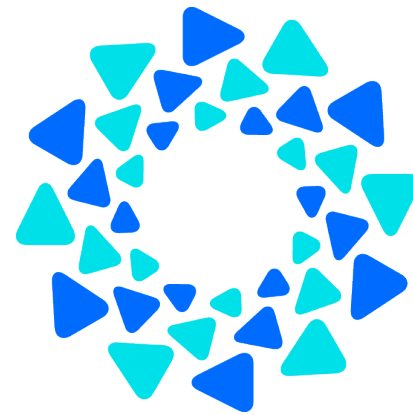
- Go developer since 2018

- 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
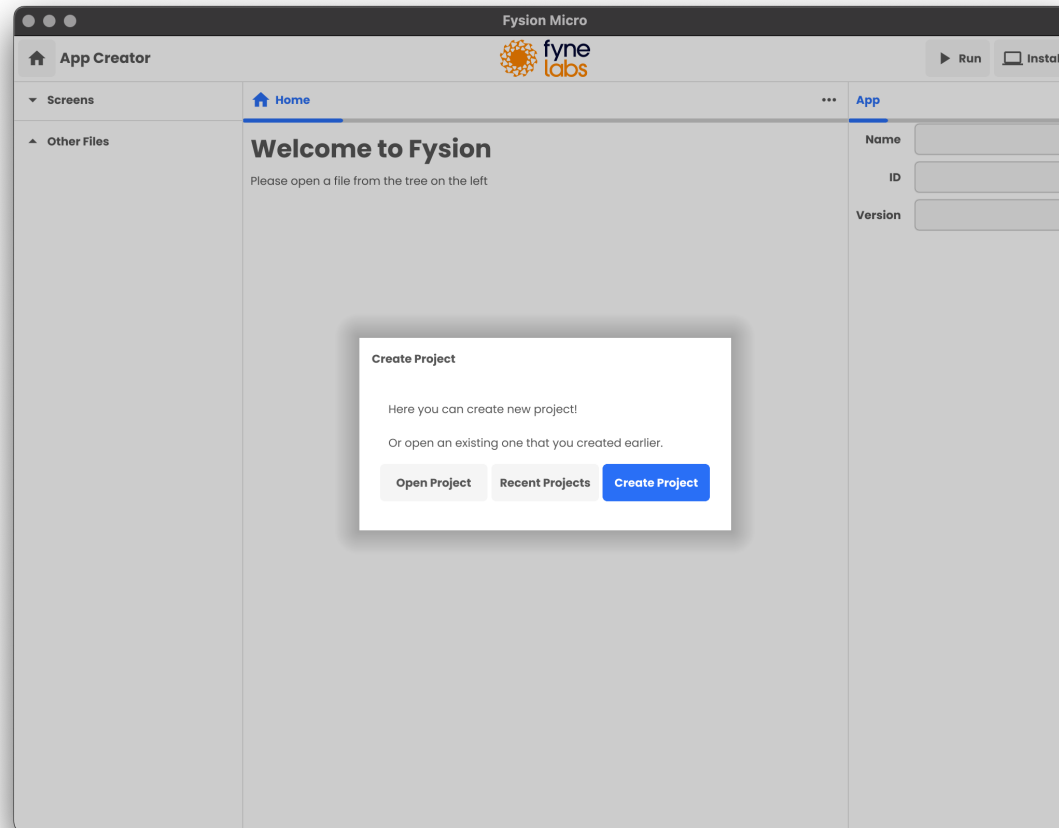
"

Fyne Stats

- 6 years old

- Ranked 6th of all cross-platform GUI tools by @OSSInsight

- In GitHub 1000 most popular repositories

- 8 core contributors

- Community of >2000 on Slack, Discord, Matrix
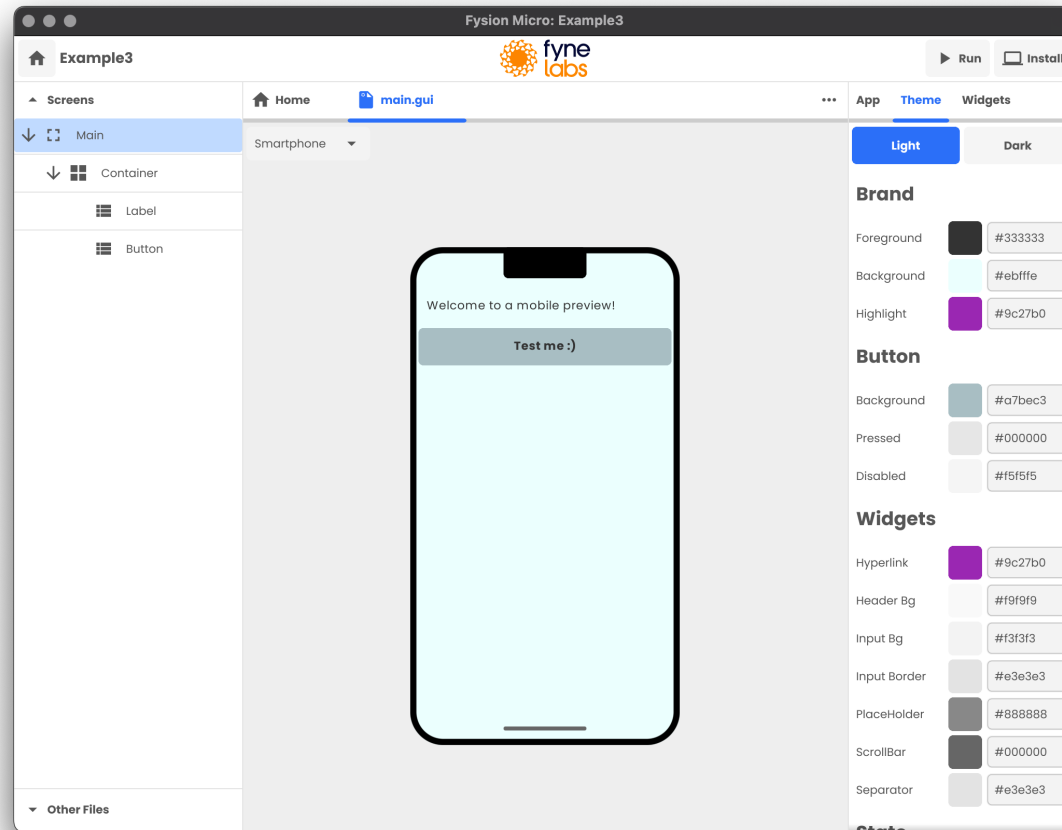
Build apps without coding!

Aims

- Native app, runs everywhere

- Graphical editing of UI & theme

- Build on top of a real codebase

- Compile apps for all platforms

- Open source core

- 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

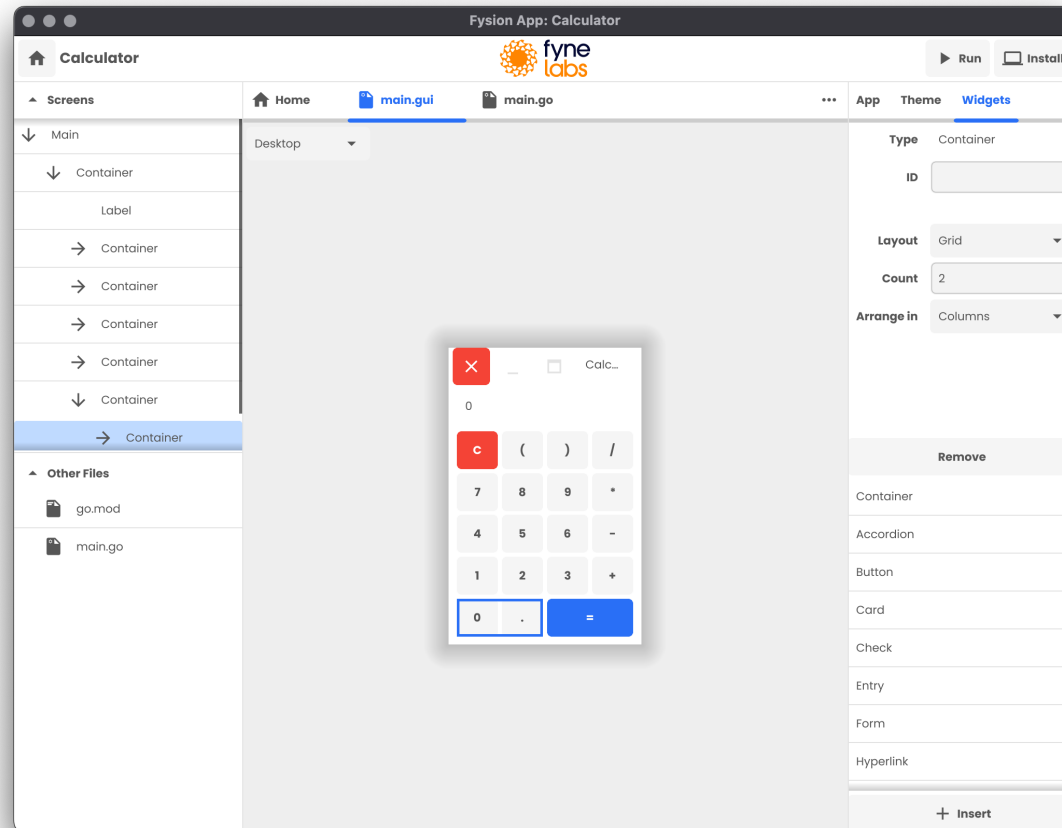- All changes written to source code

Theme handling

Theme handling

- Theme data written to JSON

- Inserted with go:embed

- Loaded using theme.FromJSON

- Light/Dark colours

- Fonts/icons/sizes

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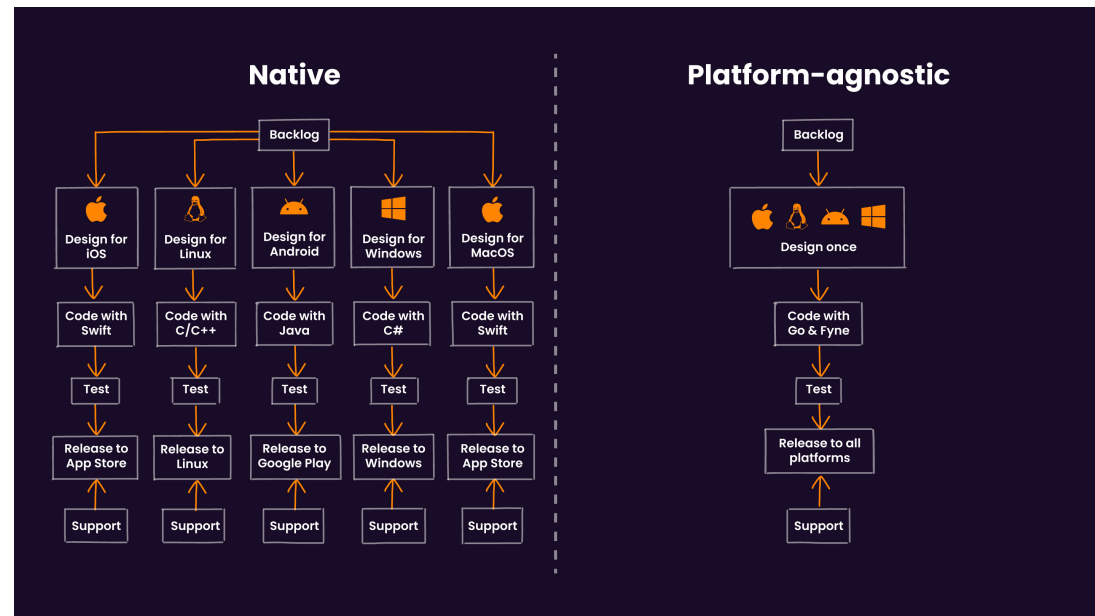
Widget editing

Widget editing

- Serialise object tree to JSON

- Defyne lib for save/load

- github.com/fyne-io/defyne

- Code generated by GoString()

- Widget create / edit with defyne

```json
"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,
```
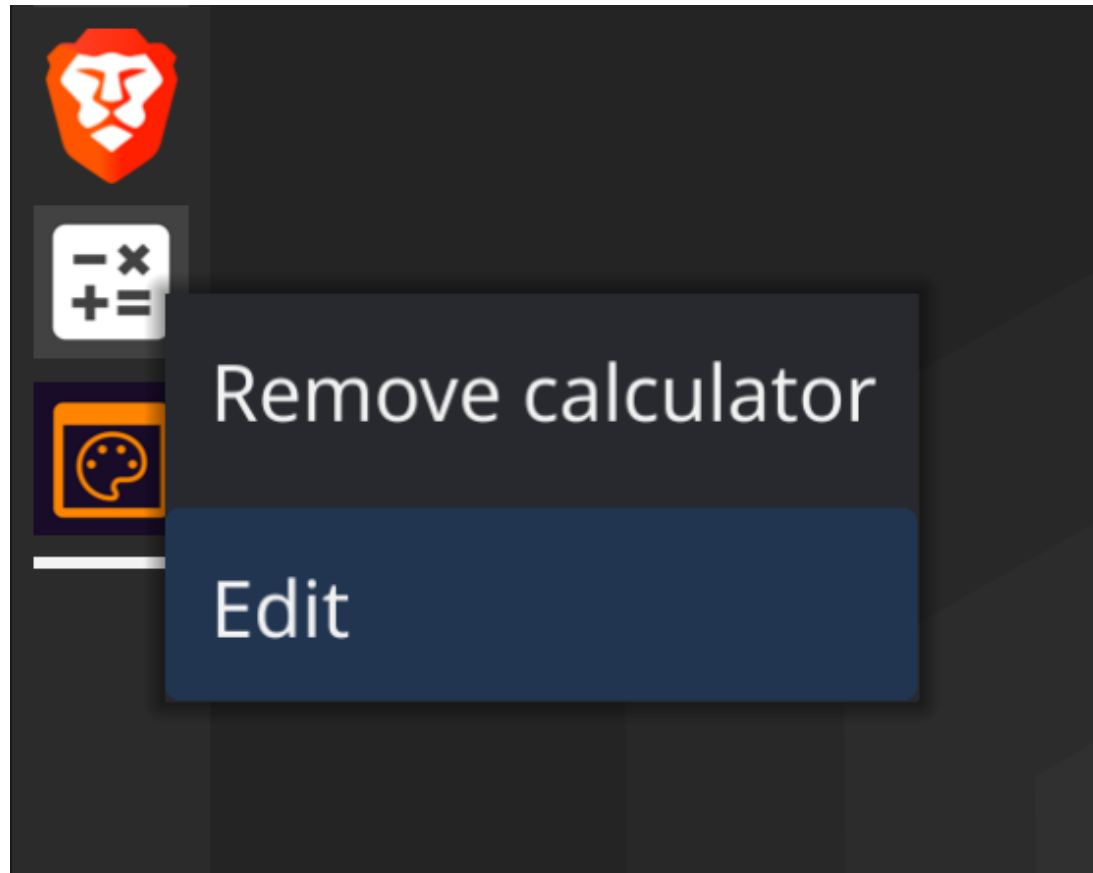
Compiling (local or cloud)

- Developer tools for local

- Install to computer

- Cross compiling with Docker

- Build on Geoffrey cloud

- 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

- https://fynelabs.com/low-code-app-builder-feedback/

Open Core:

- Code Videos: https://youtube.com/@fynelabs

- Source: https://github.com/fynelabs/fysion-tutorials/

Questions?

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