

# Fun Fyne Features



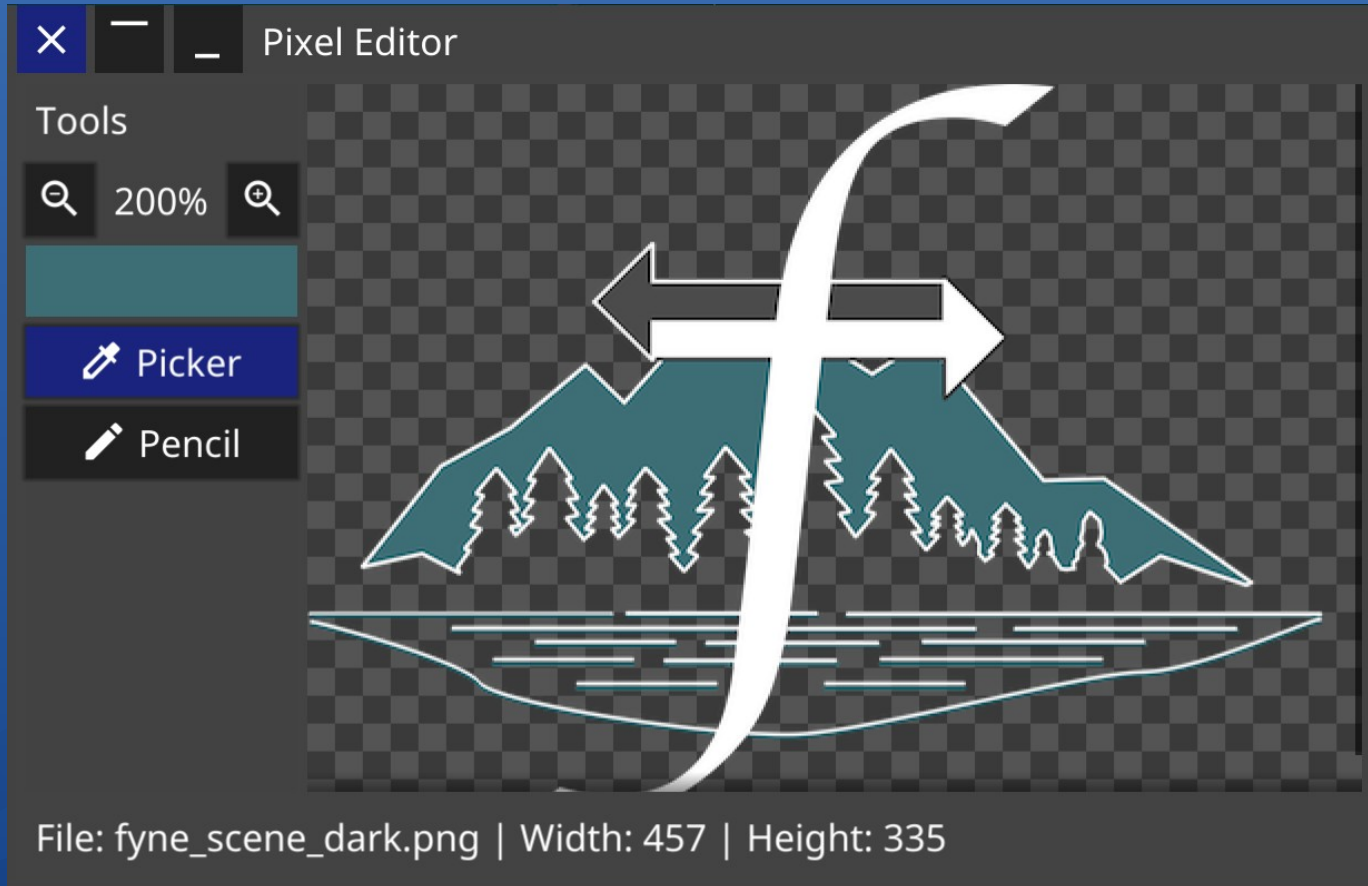
Andy Williams

FOSDEM 02/02/2020

# Lots built in

- Widget Library
  - Button, Hyperlink, Icon, Label, Menu, PopUp, ProgressBar, ProgressBarInfinite, Toolbar
  - Check, Entry, Radio, Select, Slider
  - Box, Form, Group, Scroller, TabContainer
- Unit test all the things
  - `test.Tap(myButton)`
  - `test.Type("this string", myInput)`
  - `img := playground.Render(myWidget)`

# Pixel Edit



# Playing with Pixels

- Image handling is great in Go!

```
myImage := Canvas.NewImageFromImage(myGoImage)
// edit bits
myImage.Refresh()
```

- Timers

```
c := time.Tick(time.Second / 60)
for range c {
    // do image update, then...
    myImage.Refresh()
}
```

# GameBoy (thanks HF04)



# Device API

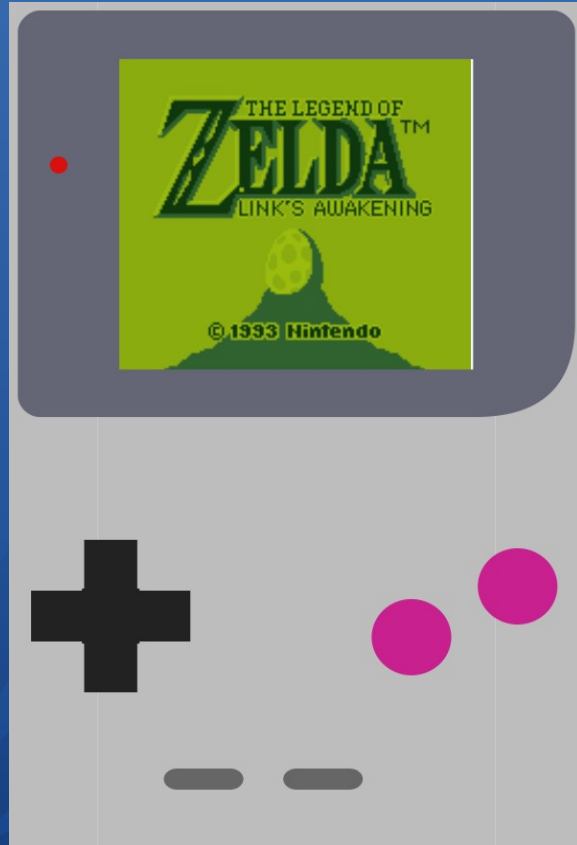
- Device capabilities

```
myDevice := fyne.CurrentDevice()
if myDevice.HasKeyboard() {
    // just show UI
} else {
    // add some touch controls
}
```

- Orientation etc

```
if myDevice.IsVertical() { ... }
```

# GameBoy on Mobile



# Themes

- Applications can override standard theme

```
import fyne.io/fyne/theme  
myApp.SetTheme(theme.LightTheme())
```

- Implement fyne.Theme
  - Custom colours, icons, fonts
  - `myApp.SetTheme(&myTheme{})`



# BBC Micro (thanks skx)



The image shows a screenshot of a BBC Emulator window. The window has a title bar that says "BBC Emulator" with a red close button on the right. The main area is a dark grey rectangle with a black border, containing white text. The text shows the emulator's boot sequence and a BASIC program being run. The program is a simple loop that prints "Hello " followed by the value of X (1, 2, and 3) and then "Fyne!".

```
BBC Computer 65184K  
Linux DFS  
BASIC  
  
>10 REM A simple program  
>20 FOR X=1 TO 3  
>30   PRINT "Hello " X  
>40 NEXT X  
>50 PRINT "Fyne!"  
>RUN  
Hello 1  
Hello 2  
Hello 3  
Fyne!  
>_
```

# All the Go Libraries!

- So many great open source libraries
  - Cross platform by default
- But also solid tools for platform specifics
  - Like...
  - System control?
  - Hardware access?
  - Window manager protocols?
- FyneDesk!

22:12pm

12 December

×

—

—

Fyne Demo

f

File

Edit

🏠

Welcome

📱

Widgets

🖋️

Graphics

📐

Windows

⚙️

Advanced

🔴

🔵

🟢

🟡

🟠

🟣

🟤

🟥

🟦

🟧

🟨

🟩

🟪

🟫

🟬

🟭

🟮

🟯

🟰

🟱

🟲

🟳

🟴

🟵

🟶

🟷

🟸

🟹

🟺

🟻

🟼

🟽

🟾

🟿

🟰

🟱

🟲

🟳

🟴

🟵

🟶

🟷

🟸

🟹

🟺

🟻

🟼

🟽

🟾

🟿

←

→

CancelIcon

🏠

📱

🖋️

📐

⚙️

×

—

—

Applications

🔍

libre

📄 LibreOffice Base

📊 LibreOffice Calc

📄 LibreOffice Draw

✕ Cancel

×

—

—

FyneDesk Settings

🖼️

⚙️

Appearance

—

App Bar

⚙️

Advanced

Scale 2.00

Theme dark

File

Edit

🏠

Welcome

📱

Widgets

🖋️

Graphics

📐

Windows

⚙️

Advanced

Buttons

Input

Progress

Form

Scroll

Entry

Entry (read only)

(Select one)

☐ Check

☐ Disabled check

☐ Radio Item 1

☐ Radio Item 2

☐ Disabled radio

Apply

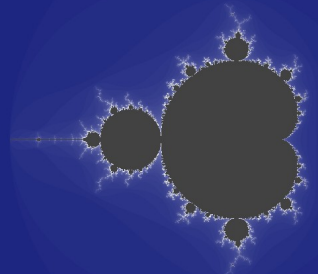
×

—

—

Fractal

🔍



×

—

—

Calculator

🔍

+

-

\*

/

7

8

9

C

4

5

6

(

1

2

3

)

0

.

=

🏠

📱

🖋️

📐

⚙️

🔍

🏠

📱

🖋️

📐

⚙️

🔍

🏠

📱

🖋️

📐

⚙️

🔍

🔍 Applications

🔋

100%

🖼️

15%

+

👤

andy

# Compiling for ...

- Running
  - `go run .`
- Install on my desktop
  - `go get fyne.io/fyne/cmd/fyne`
  - `fyne install`
- Distribute for desktop
  - `fyne package`
- For Mobile ...
  - `fyne package -os ios -appID com.example.myapp`

# Cross Compiling for ...

- macOS / Linux / Windows / BSD / RaspberryPi
  - Install all the toolchains!
- *Or*
- Fyne Cross
  - <https://github.com/lucor/fyne-cross>

# Thanks!

- Andy Williams
- <https://andy.xyz>
- @andydotxyz

<https://fyne.io>

<https://tour.fyne.io>

<https://fyne.io/develop/>

- #fyne on gophers Slack