

Playing Videos With Fyne

Using gstreamer for fun and profit

Simon Dassow

Consult With Simon

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Motivation

- New client in the transport industry
- Driving assistance software
- Interaction with vehicle
- Show video when turning or going backward



Challenges

- Gstreamer pipelines are sensitive
- Still some issues, probably references
- Framerate/synchronization



Some Simple Code

```
package main

import (
    "fyne.io/fyne/v2"
    "fyne.io/fyne/v2/app"

    "codeberg.org/sdassow/fyne-gstreamer"
)

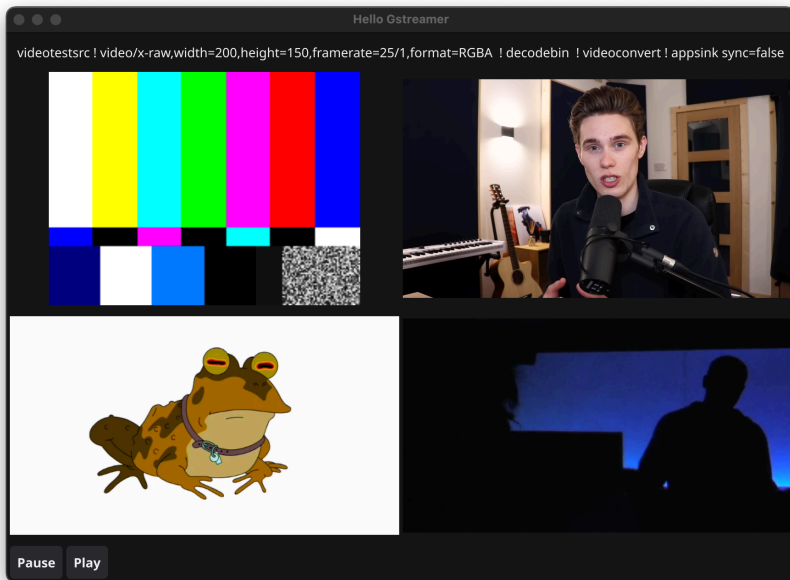
func main() {
    a := app.NewWithID("example")
    w := a.NewWindow("example")

    gstreamer.InitGstreamer()

    s := "videotestsrc ! video/x-raw,format=RGBA,width=200,height=150,framerate=
        " ! decodebin ! videoconvert ! appsink sync=false"
    v, _ := gstreamer.NewMovingPictureFromGstreamerString(s)
    v.Play()

    w.SetContent(v)
    w.Resize(fyne.NewSize(200, 150))
    w.ShowAndRun()
}
```

More Complex Example



Optimizations

- Started out serializing to PNG
- Needless overhead
- Gstreamer supports many formats
- Go image can do RGBA
- Copy image data directly



- Nothing official yet
- Gstreamer is heavy
- Might need predefined pipelines
- Coordination with other multimedia parts?
- Audio handling?

API

Questions

- Ask now
- Or later
- Community chat



Thanks To

- Client for agreeing to open code
- Andy for mentioning lightning talks
- You for listening

