## GoTalks - 21.05.2024 - Zagreb

Building TUI Apps with BubbleTea



#### **About Me**

- 3 years as Frontend engineer in Croatian Telekom
  - UI/UX expert for HT customer portal
  - Digital transformation
- 4 years as Go developer at Sartura
  - Started as frontend developer
  - Switched to Golang
  - Have not looked back since
  - Ended as backend team lead
- CEO of Turofield
  - Company specialized in Golang development



# Showcase: Agent Manager

Tool for managing IoT devices



### Charm.sh

- BubbleTea is a part of a family of libraries made by charm.sh
- Charm.sh raised \$6 Million USD of funding for development
- Other notable libraries
  - Lip gloss terminal style and layout
  - Glamour stylesheet driven markdown renderer
  - Bubbles BubbleTea component toolkit
  - Log Logger
  - Harmonica Physics based animation toolkit



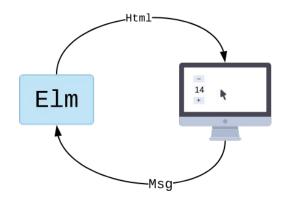
### **BubbleTea - Overview**

- TUI
- Library for building stateful terminal applications written in Go
  - 21.1K Github Stars
  - Open Source
  - MIT License
  - Used by AWS, NVIDIA, Microsoft Azure, etc.



## Inspired by

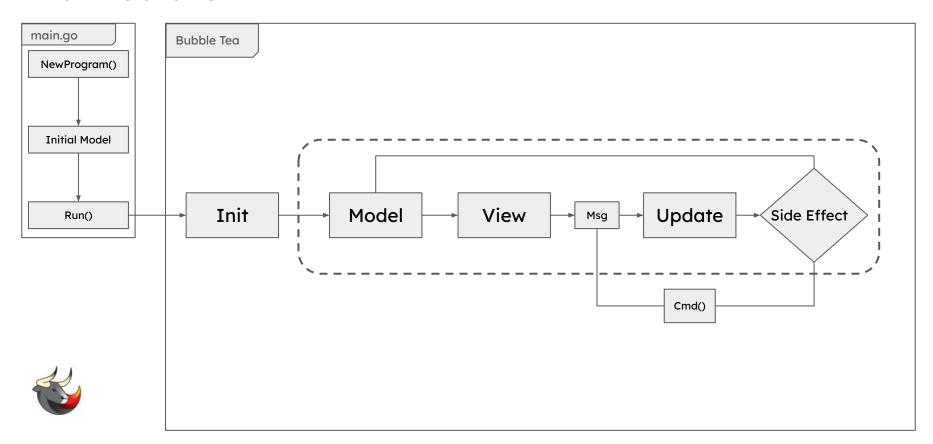
- Elm programming language
  - Functional language that compiles to JavaScript
  - For building websites and web apps
- The Elm Architecture
  - Model application state
  - View state into user interface
  - Update updating state based on messages



#### BubbleTea

- Model describes application state
  - Init Function that returns initial command for the application to run
  - Update Function that handles incoming events and updates the model
  - View Function that renders the UI based on the data in the model
- Initialization initializes the application default state
- Update method function that is called when "things happen"

## Architecture



# **Enough theory**

Let's see some examples.



## Thank you!

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