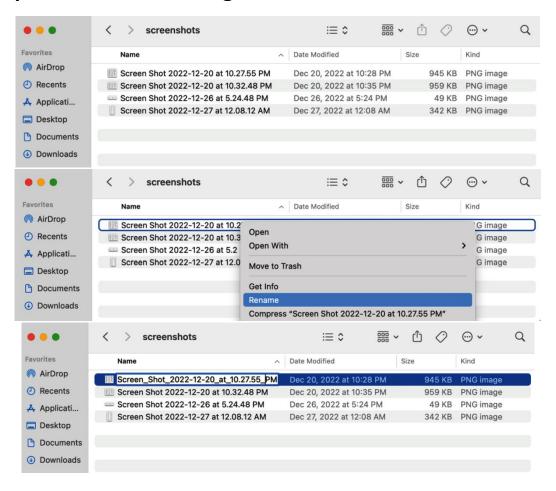
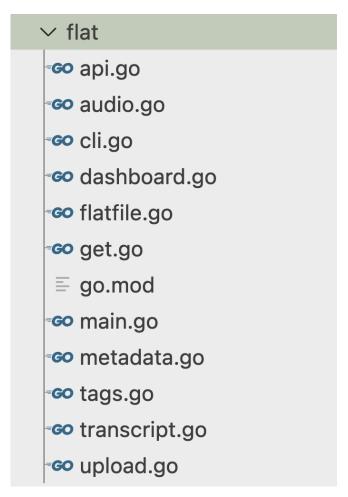
Chapter 1: Understanding CLI Standards



Chapter 2: Structuring Go Code for CLI Applications



Group by Function

Handlers	Extractors	Storage
Upload	AudioPeak	Flat file
Get	Mediainfo	MongoDB
List	VolumeDetect	ElasticSearch
Delete	Transcript	DynamoDB

```
✓ group-by-function

∨ cmd

√ api

   -co main.go

∨ cli

   -co main.go

√ dashboard

   -co main.go

∨ extractors

 -co tags.go
 transcript.go

    ✓ handlers

 handler_get.go
 → ••• handler_upload.go

∨ models

 -co tags.go
 -co transcript.go

✓ services/metadata

 -co metadata.go

    ✓ storage

 -co flatfile.go

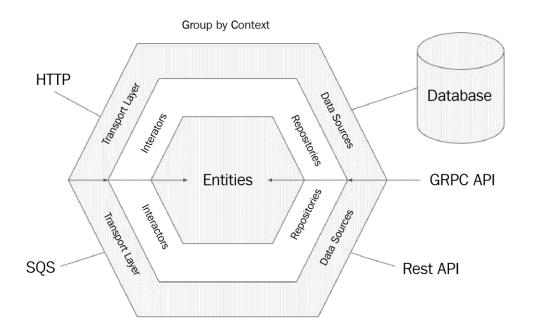
    ≡ go.mod

-co main.go
```

AudioPeak Implementation Data Access AudioPeak Pkg AudioPeak Pkg MediaInfo Implementation Data Access MediaInfo Pkg ElasticSearch Implementation ElasticSearch Pkg

```
∨ group-by-module
```

- ∨ cmd
 - √ api
 - **-co** main.go
 - √ cli
 - **⊸** main.go
 - √ dashboard
 - **-co** main.go
- ∨ internal
- extractors.go
- storage.go
- ∨ metadata
- handlers.go
- eo metadata.go
- **-co** models.go
- √ tags
- extractor.go
- storage.go
- **-co** tags.go
- ✓ transcript
- extractor.go
- storage.go
- transcript.go
- \equiv go.mod
- **- co** main.go



```
∨ group-by-context

 ∨ cmd

√ api

  -co main.go
  ∨ cli
  ∞ main.go

√ dashboard

  -co main.go

∨ models

 audio.go
 eo metadata.go
 ਫ tags.go
 transcript.go

    ✓ services

∨ eventlistener

  eventlistener.go

√ metadata

  eo metadata.go

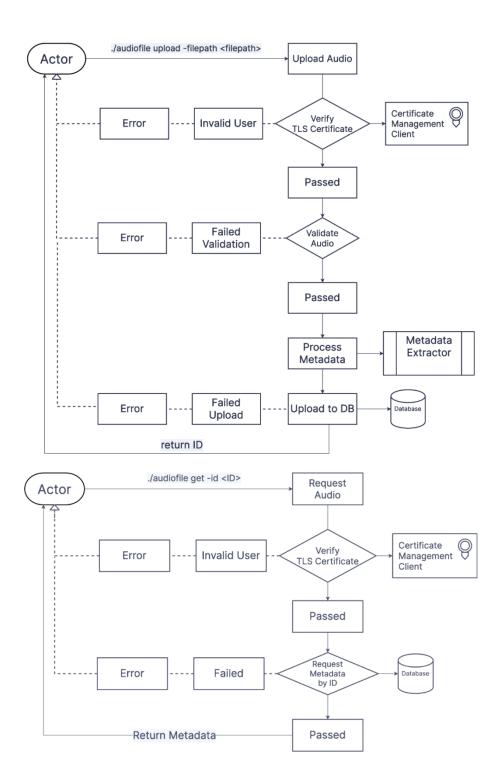
∨ transcriptreview

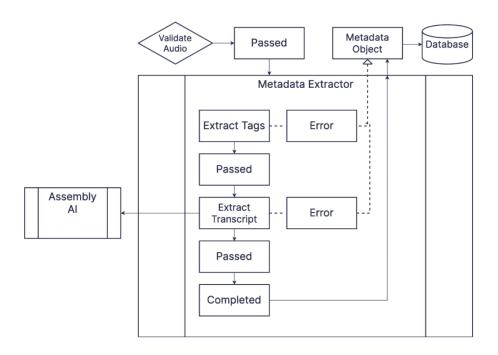
  transcriptreview.go
 services.go

    ✓ storage

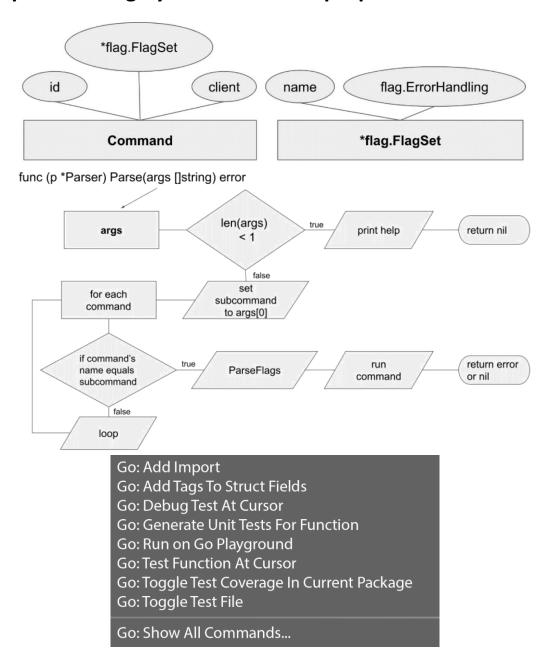
√ flatfile

  flatfile.go
 storage.go
 ≡ go.mod
```





Chapter 3: Design your tool and its purpose



Chapter 4: Popular frameworks in Go to speed up and enhance CLI development

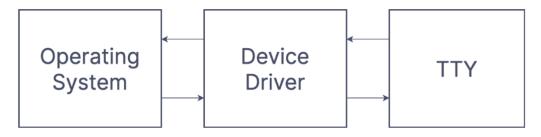
Chapter 5: Processing Different Types of Input via Arguments and Flags

Signal (Key Combination)	Description
SIGINT (Ctrl-C)	Interrupt application
SIGTSTP (Ctrl-Z)	Suspend application
SIGQUIT (Ctrl-\)	Quit application
SIGHUP	Hang up on controlling terminal or death of controlling process
SIGFPE	Illegal mathematical operation attempted
SIGKILL	Quit immediately with no cleanup process
SIGALRM	Alarm clock signal (for timers)
SIGTERM	Software termination signal (kill by default)

Chapter 6: Calling External Processes and API commands and Handle Timeouts, and Error Handling

Chapter 7: Developing for Different Platforms

Chapter 8: Being Clear, Concise and Consistent with CLIs



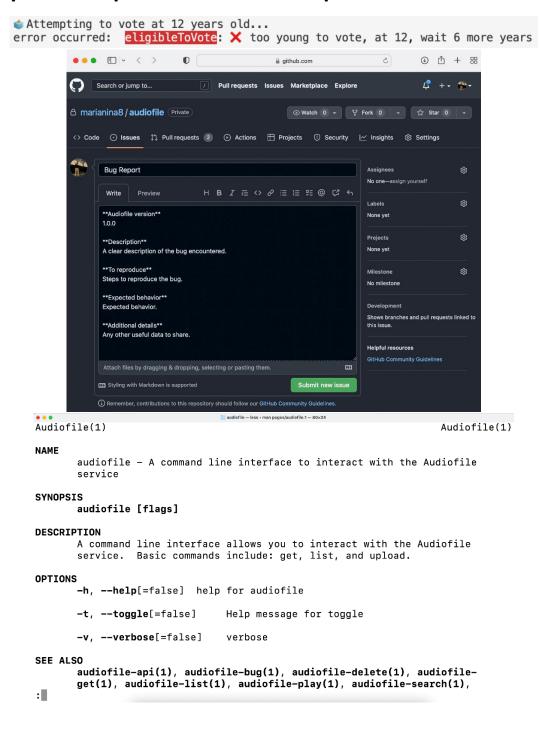
Input		Output
7	6	&
1	1	1
1	1	1
1	0	0

Is a TTY	
Code	Value
fileInfo.Mode()	Dcrww
os.ModeCharDevice	C
fileInfo.Mode() & os.ModeCharDevice	C
(fileInfo.Mode() & os.ModeCharDevice) != 0	TRUE

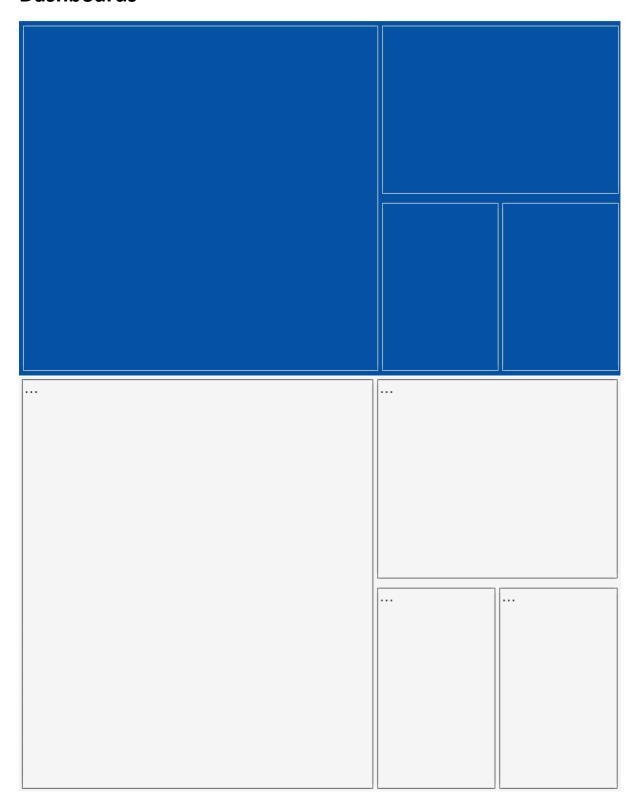
Is not a TTY		
Code	Value	
fileInfo.Mode()	prw-rw	
os.ModeCharDevice	C	
fileInfo.Mode() & os.ModeCharDevice		
(fileInfo.Mode() & os.ModeCharDevice) != 0	FALSE	

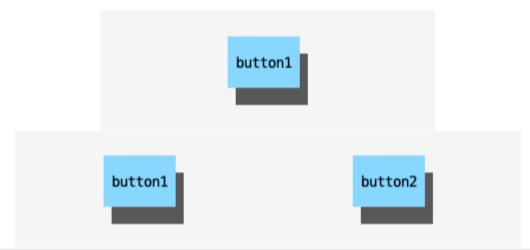
CLI Design		
Good	Bad	
Checks if outputting to a human versus another machine process	Outputs the same to human versus another machine process	
Allows user to change output format	No options to change output format	
Allows user to quiet unnecessary output	No silence options	
Uses conversational text for humans	Sends conversational text, emojis, and color output to another machine process	
Outputs plain text for machine processes	Sends no output at all	
Validates input early	No input validation	
Transparent with users	Local file modification and network requests without notifying the user	
Prioritizes response time over speed	Long response time	
Prompts for missing input	No prompts for required input	
Confirmation before irreversible deletions	No confirmation before major modifications	
Notify user of network requests	Unclear what is happening	
Empathic text	Unempathetic text	
Use of intentional visual language	Many colors used and meaning is lost	
Allows personalization	No personalization	
Pagination for long text output	No pagination on long text output	
Progress bars/spinners to show processing	No progress bar to indicate processing	
Importing information at the bottom	Importing information at the top of output or missing	

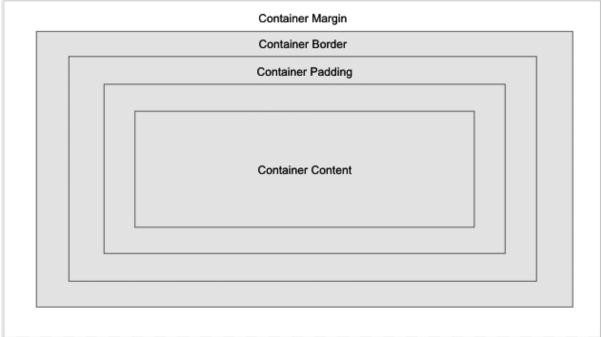
Chapter 9: Empathic Side of Development

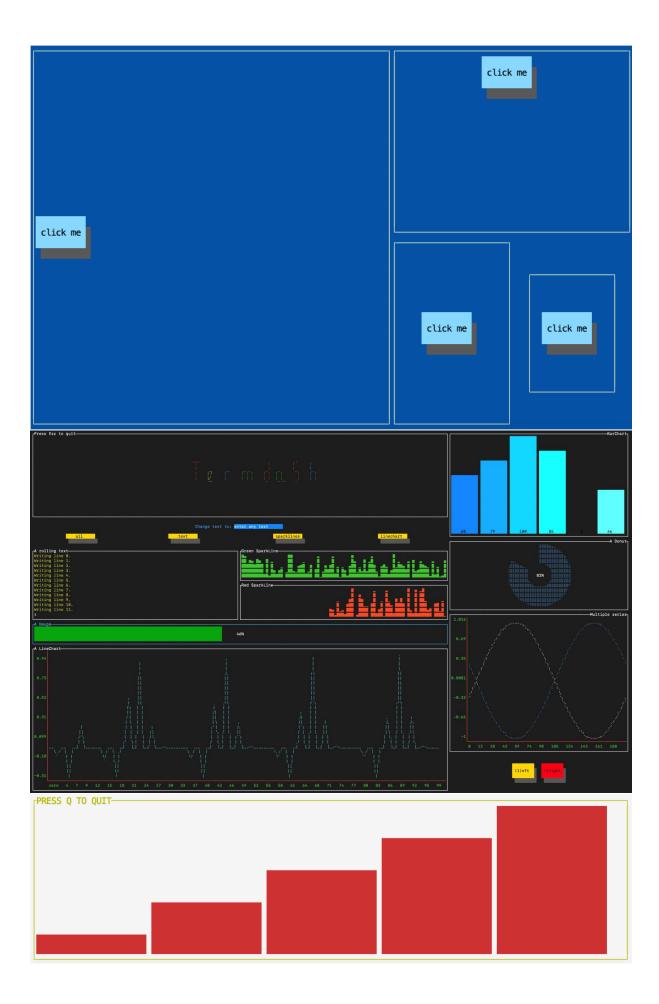


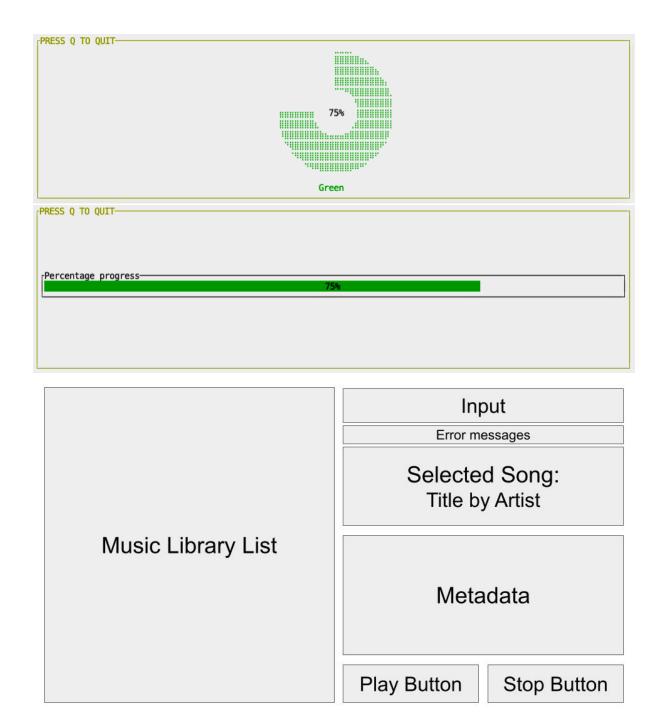
Chapter 10: Interactivity with Prompts and Terminal Dashboards









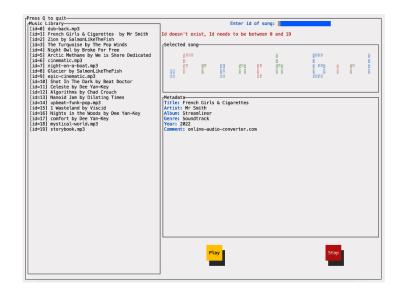


Vertical Split (Left) Default: 50%	Vertical Split (Right) Default: 50%
Vertical Split (Left) Default: 50%	Horizontal Split (Top) 30%
	Horizontal Split (Bottom) 70%

Vertical Split (Left) Default: 50% Vertical Split (Left) Default: 50%	Horizontal Split (Top) 30% Horizontal Split (Bottom) 70% Horizontal Split
	(Bottom) 70% Horizontal Split (Top) 60% Horizontal Split (Bottom) 40%
	Horizontal Split (Bottom) 70%
	Horizontal Split (Bottom) 70%

Vertical Split (Left) Default: 50%	Horizontal Split (Top) 60% Horizontal Split (Bottom) 40%
	Horizontal Split (Bottom) 70%
	Horizontal Split (Top) 80%
	Horizontal Split (Bottom) 20%

Vertical Split (Left) Default: 50%	Horizontal Split (Top) 60% Horizontal Split (Bottom) 40%
	Horizontal Split (Top) 70%
	Horizontal Split (Top) 80%
	Vertical Split (Left) Vertical Split (Right) Default: 50% Default: 50%



Chapter 11: Customizing Go Binaries with Build Tags

Chapter 12: Cross Compilation Across Different Platforms

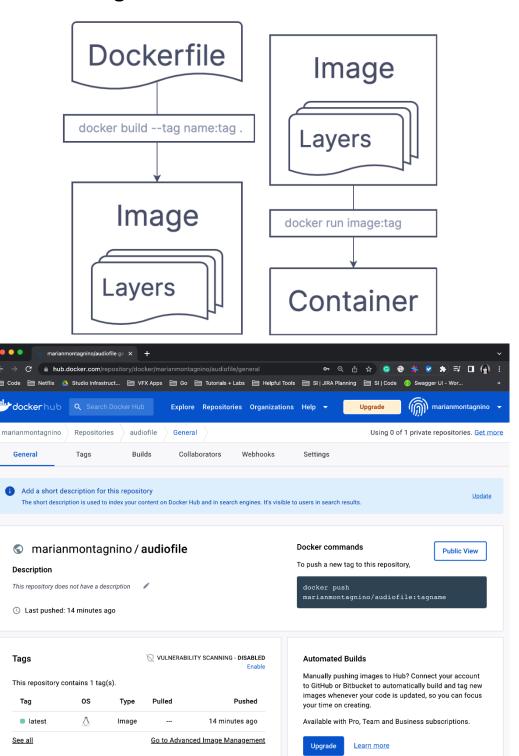
aix/ppc64 android/386 android/amd64 android/arm android/arm64 darwin/amd64 darwin/arm64 dragonfly/amd64 linux/mips64le freebsd/386 freebsd/amd64 freebsd/arm freebsd/arm64 illumos/amd64 ios/amd64 ios/arm64 js/wasm

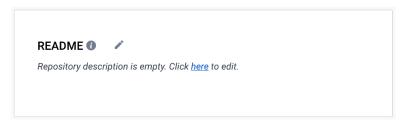
linux/386 linux/amd64 linux/arm linux/arm64 linux/loong64 linux/mips linux/mips64 linux/mipsle linux/ppc64 linux/ppc64le linux/riscv64 linux/s390x netbsd/386 netbsd/amd64 netbsd/arm

netbsd/arm64 openbsd/386 openbsd/amd64 openbsd/arm openbsd/arm64 openbsd/mips64 plan9/386 plan9/amd64 plan9/arm solaris/amd64 windows/386 windows/amd64 windows/arm windows/arm64



Chapter 13: Using Containers for Distribution



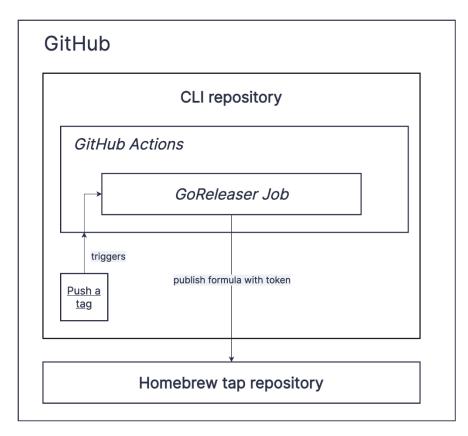


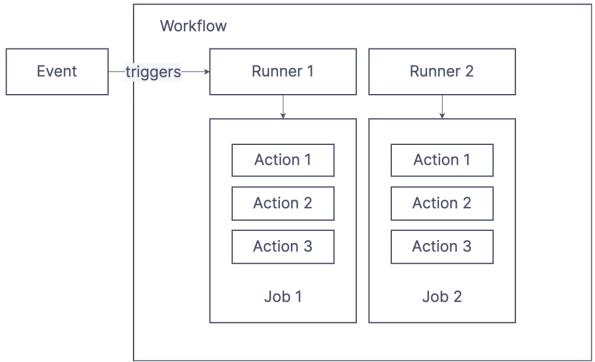
README ①

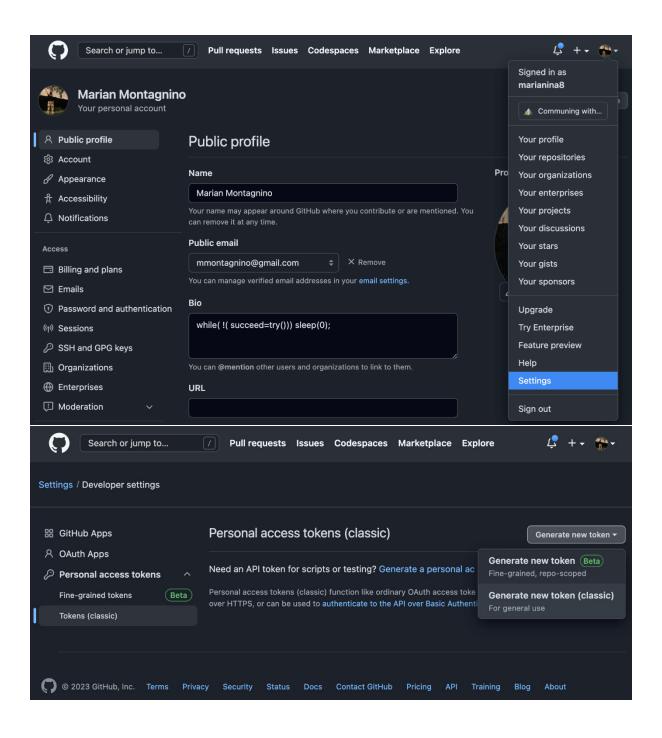
To run the audiofile CLI container, ensure that the audiofile API container is running first. Next, run the docker command:

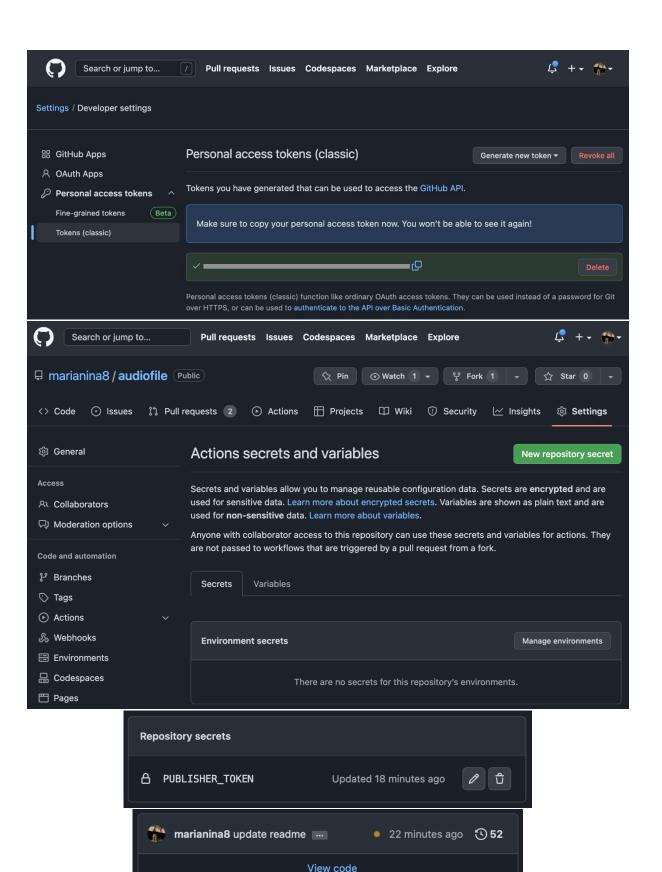
docker run --rm --network host -ti marianmontagnino/audiofile:latest help

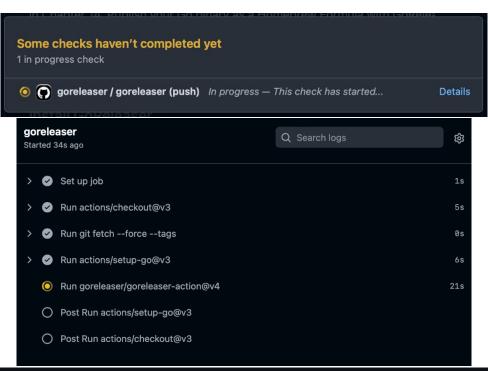
Chapter 14: Publish your Go binary as a Homebrew Formula with GoReleaser

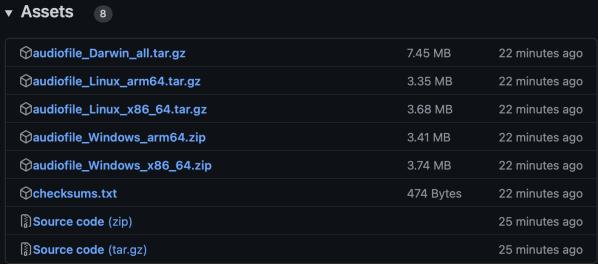












mmontagnino@Marians-MacBook-Pro audiofile % audiofile A command line interface allows you to interact with the Audiofile service. Basic commands include: get, list, and upload. Usage: audiofile [command] Available Commands: Start or stop the API required by the CLI ani bua Submit a bug completion Generate the autocompletion script for the specified shell delete Delete audiofile by id Get audio metadata get Help about any command help List all audio files list play Play audio file by id Launch player dashboard player Command to search for audiofiles by string search Upload an audio file upload Version of audiofile CLI version Flags: help for audiofile -h, --help -t, --toggle Help message for toggle −v, −−verbose verbose

