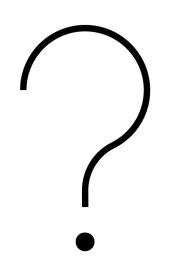
Kotlog

A static site generator to speed up my content creation

Noob Edition!



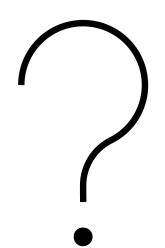
Why?



I'm a software engineer, I'm a nerd, I'm a maker!

If something does not feed my needs, I'll build it!

Why?



- I wanna have a project that does not remind me at my day job
- I wanna understand what our Kotlin developers code
- I wanna get back to the roots to build what you need
- I wanna start low but have the possibility to add new features
- I wanna have a pet project that is possible to complete

I just wanna have fun! *sing*

What?

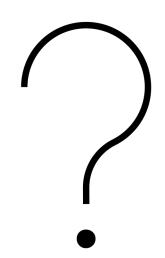
Simple static blog generator

- Markdown based no more databases!
- Easy templating using drop-in css files
- Speed up other content creation flows
- Creates social media preview images

Jekyll but in simple and !Ruby

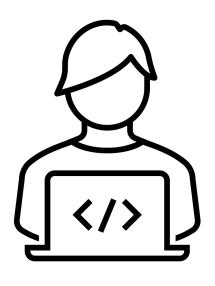


Constraints



- Free of charge hosting on Guthabe (must be static)
- I'm not a web dev and I do not like it
- No custom JavaScript or CSS files
- No fancy build scripts, transpilers, etc
- Shall be completed in 4 weeks time

How?



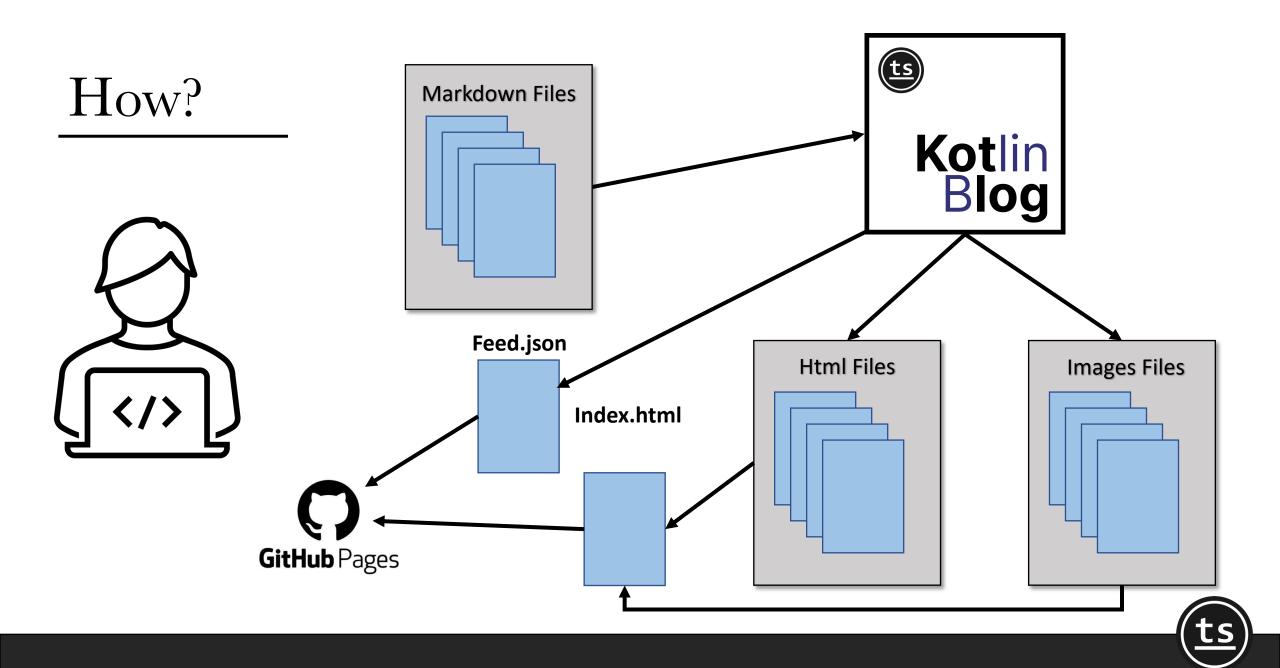
All the way Kotlin!

Console application

Just a few dependencies

- org.jetbrains.kotlinx JSON deserializion
- org.commonmark:commonmark Markdown and Frontmatter parser
- *org.jsoup:jsoup* HTML DOM parser
- com.lordcodes.turtle:turtle Terminal utility





Result

~/.kotlog | Config file

```
() .kotlog ×

1 {
2     "baseUrl": "https://tscholze.github.io/blog",
3     "titleText": "Tobias Scholze | The Stuttering Nerd",
4     "footerText": "Made with ❤ without JavaScript| Kotlog | Tobias Scholze",
5     "outputDirectoryName": "docs"

6 }

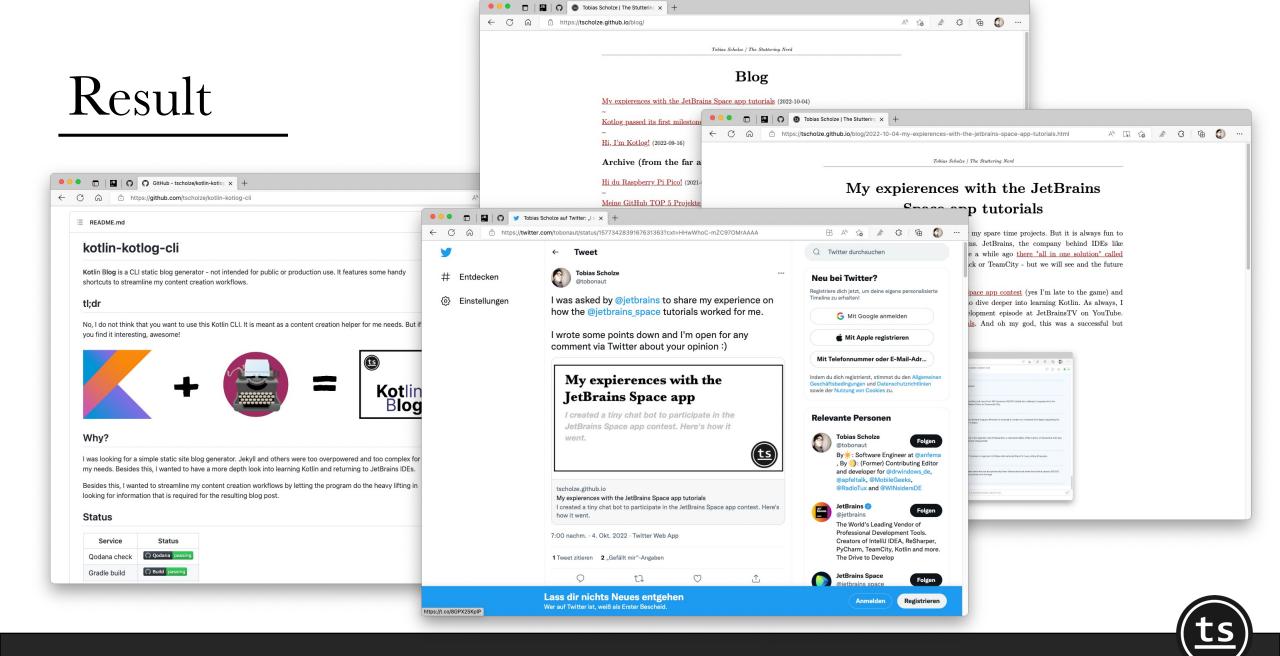
/ Users / tobiasscholze / .kotlog

6:2 UTF-8 JSON
```

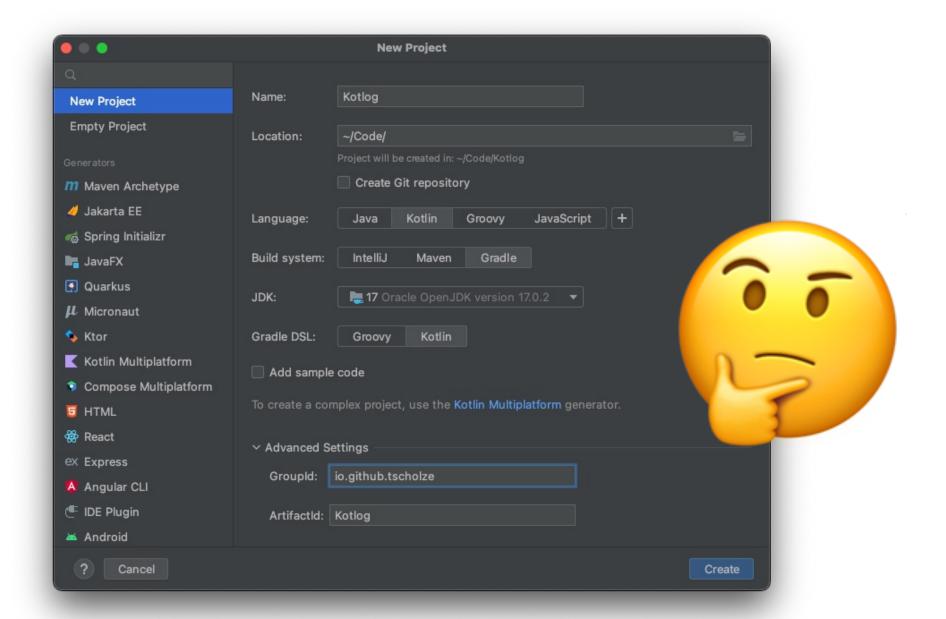
Simple CLI | Terminal

```
🧿 🔵 🥛 🌉 kotlin-kotlog-cli — build/install/Kotlog/bin/Kotlog -c 'This is a demo' — build/install/Kotlog/bin/Kotlog — java -classpath ~/Code...
   kotlin-kotlog-cli git:(main) x build/install/Kotlog/bin/Kotlog
Welcome to Kotlog <3
ERROR: No arguments given.
Please specify an argument what you want to do.
    -c : 'My awesome title' : To create a new Markdown post
    -y: 'xcg24fa': To create a new YouTube video Markdown post
    -g : To generate output files
    -p : To publish output files
    -co: To publish output files
    -cc: To create a new configuration file
   kotlin-kotlog-cli git:(main) x
   kotlin-kotlog-cli git:(main) x
   kotlin-kotlog-cli git:(main) x
   kotlin-kotlog-cli git:(main) x build/install/Kotlog/bin/Kotlog -c 'This is a demo'
Welcome to Kotlog <3
New post '2022-10-27-this-is-a-demo.md' has been created!
Location: /Users/tobiasscholze/Code/kotlin-kotlog-cli/__posts/2022-10-27-this-is-a-demo.md
Run `kotlog -g` to generate the html.
Open Markdown file in VSCode? (y/n)
```

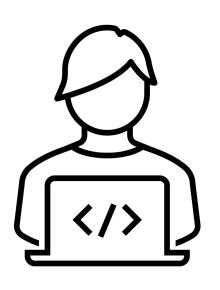




A month earlier ...



In detail

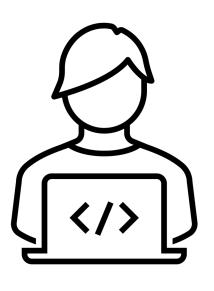


Everything is built on gaint's shoulders

Aka Dependencies



In detail

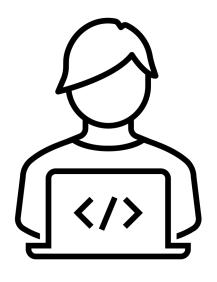


build.gradle.kts

```
dependencies {
  // Markdown
  implementation("org.commonmark:commonmark")
  implementation("org.commonmark:commonmark-ext-yaml-front-matter")
  implementation("org.commonmark:commonmark-ext-gfm-tables")
  implementation("org.commonmark:commonmark-ext-autolink")
  // Html
  implementation("org.jsoup:jsoup")
  // Json
  implementation("org.jetbrains.kotlinx:kotlinx-serialization-json")
  // CLI
  implementation("org.jetbrains.kotlinx:kotlinx-cli")
  implementation("com.lordcodes.turtle:turtle")
```



Markdown



2022-10-04-my-expierences-with-the-jetbrains-space-app-tutorials.md

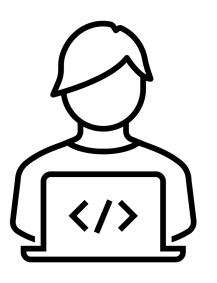
title: 'My expierences with the JetBrains Space ...' abstract: 'I created a tiny chat bot ...'

date: '2022-10-04'

I use GitHub during my day job and also for my spare time projects. But it is always fun to play around with other developer ecosystems.



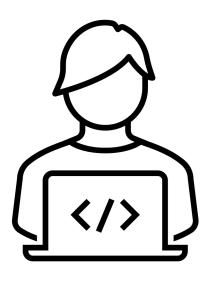
Markdown



Generator.kt

```
fun fromFile(file: File): PostConfiguration {
   val node = parser.parse(file.readText())
   // Check for front matter data
  val fm = YamlFrontMatterVisitor()
  node.accept(fm)
  // Get simple objects
   val title = fm.data["title"]?.first()
 // Get complex objects
 val date = LocalDate.parse(ds, DATE_FORMATTER)
  val tags = fm.data["tags"] ?: listOf("none")
 // Generate inner html string
 val html = HtmlRenderer.builder().build().render(node)
 // Return created configuration
  return PostConfiguration(...)
```

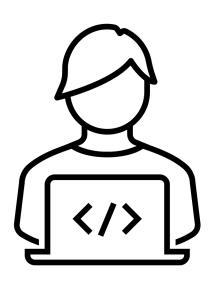
SMP Images



```
fun generate(pc: PostConfiguration) {
 // Create canvas
  val image = BufferedImage(...)
  // Create image with background
  val graphics = image.createGraphics()
  graphics.drawImage(BACKGROUND_IMAGE, 0, 0, null)
  // Add title
  graphics.font = TITLE_FONT
  graphics.color = TITLE_COLOR
  val titleLines = wrap(pc.title,graphics.fontMetrics)
  for ((index, value) in titleLines.withIndex()) {
    graphics.drawString(...)
```

. . .

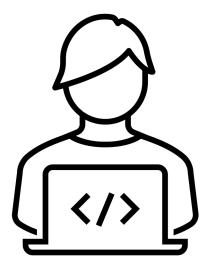
SMP Images

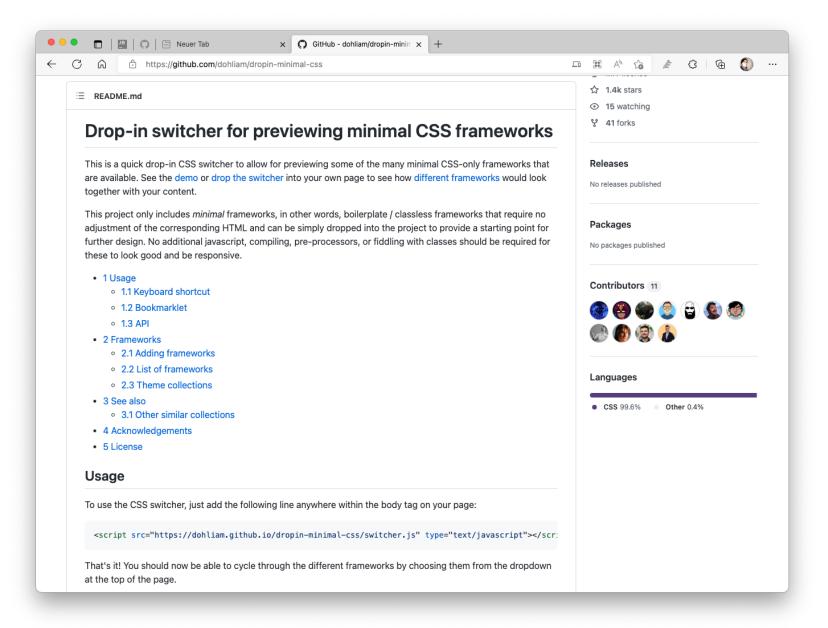


```
// Add abstract
graphics.font = ABSTRACT_FONT
graphics.color = ABSTRACT_COLOR
val abstractLines = wrap(
  postConfiguration.abstract,
 graphics.fontMetrics
) take(3)
for ((index, value) in abstractLines.withIndex()) {
 graphics.drawString(
    value,
    100,
    140 + (index * 60) + (titleLines.count() * 88))
// Write file
ImageIO.write(...)
```



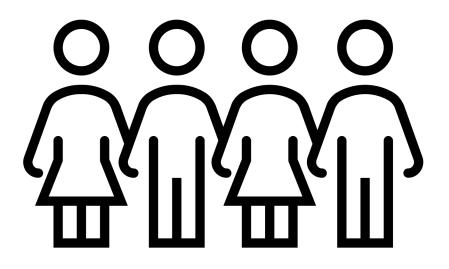
Styling







Most important!



Without mentors and friends, I would not got this far

Marcel for getting me started with Kotlin

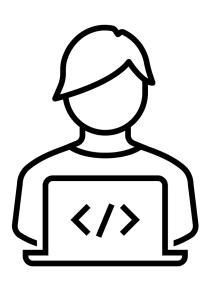
Dave Herman for having always an open ear for me

Klaus for mentioning the Drop-In-CSS files



Caution Bugs, Bugs, Bugs

Links



Kotlog

- https://github.com/tscholze/kotlin-kotlog-cli
- https://github.com/tscholze/kotlin-kotlog-template

Usage

https://github.com/tscholze/blog

Discord tip

https://discord.gg/5NZ2GKV5Cs



- The End - Any questions?