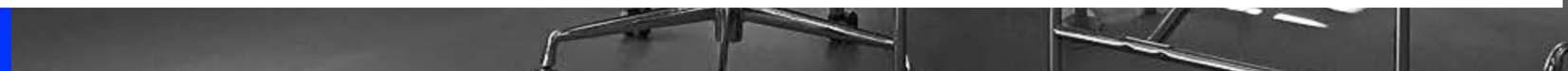
Marius Wilms & Christoph Labacher

Discovering Principles for Design System Tools

code.talks Hamburg — 24.10.2019

Atelier Disko



We are …

Marius Wilms

Technical Director at Atelier Disko

Christoph Labacher

Interaction Designer at Atelier Disko

Our Talk

— What are Design Systems?

— What is DSK?

— Lessons Learned: Principles

Design Systems are repositories of organizational knowledge on design.

Styleguide

Styleguide

Component Library

Documentation
of Principles

Culture

~~Styleguide~~
Tokens

Component
Library

Case Studies

DSK is a workbench for collaboratively creating and documenting Design Systems.

Live Demo of DSK

Lessons Learned:
Principles

Principle I

Designed for Process

Many tools help you with the outcome, and little with the process.

Outcome

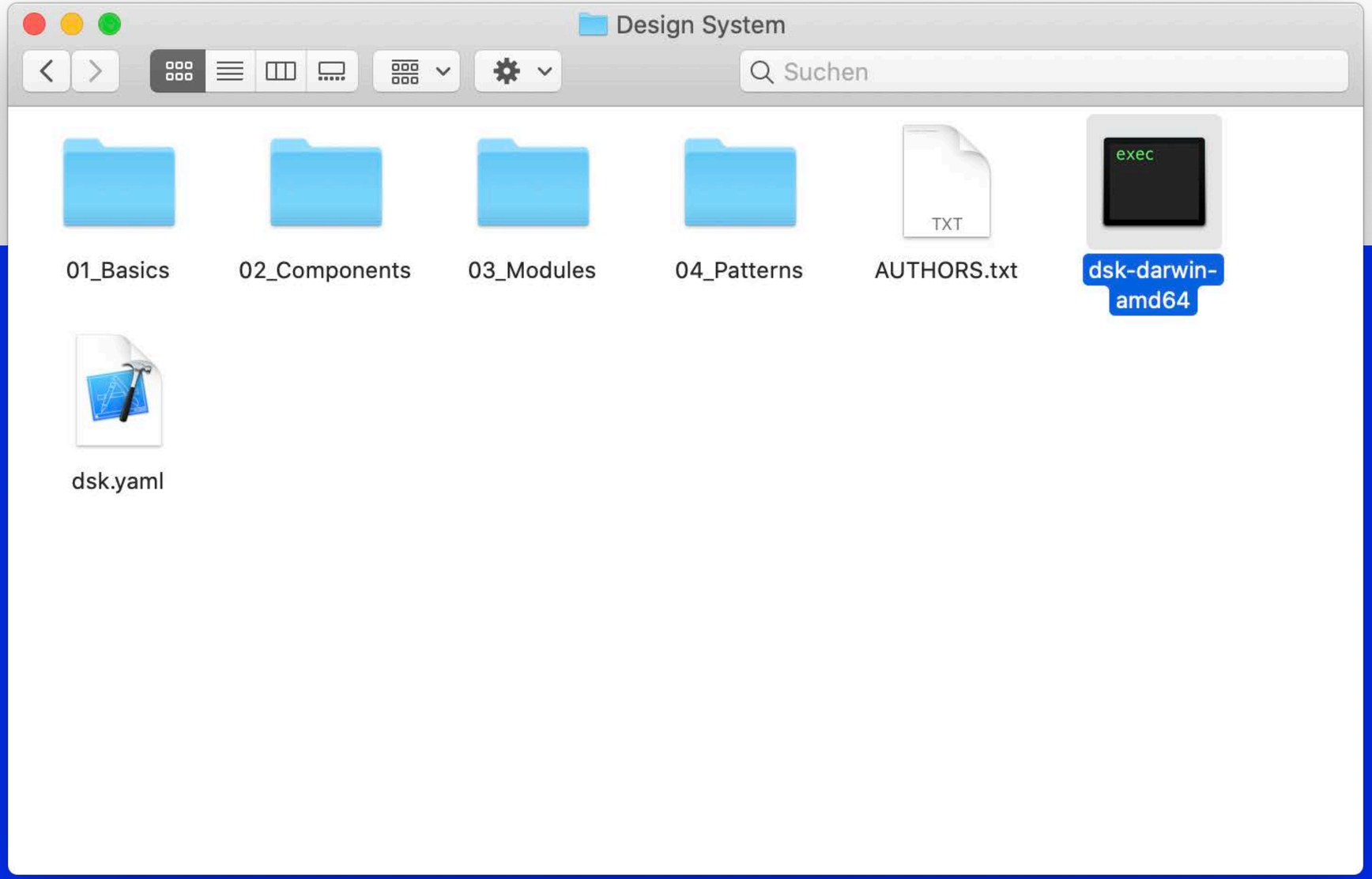
»We want a documentation website for our Design System.«

Process

»We need to build a design system, and we’re creating it from scratch!«

Many tools help you with the outcome, and little with the process.

Process
in DSK

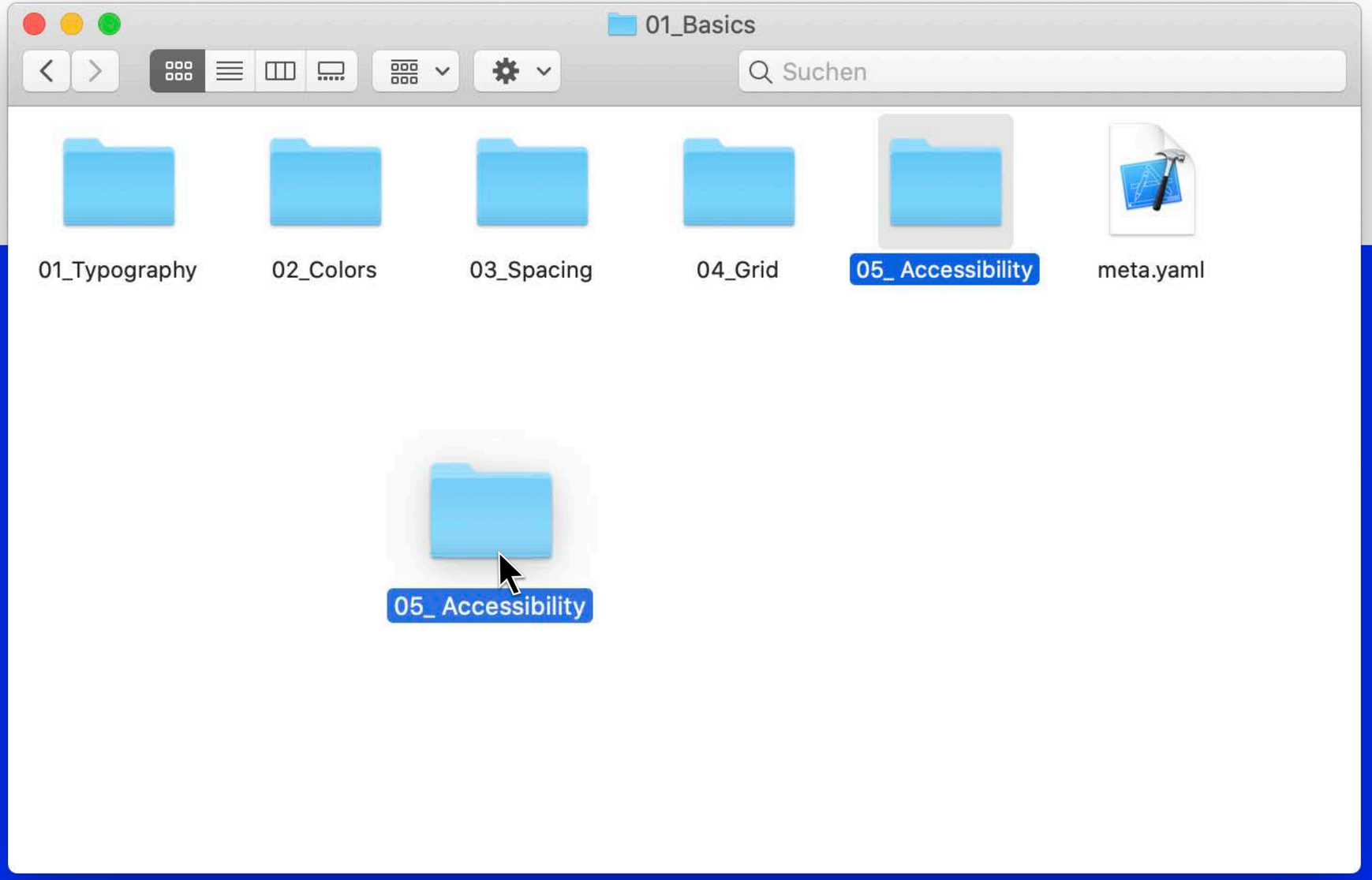


Start Locally

Direct Manipulation

Vanilla Markdown

Process
in DSK



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Process
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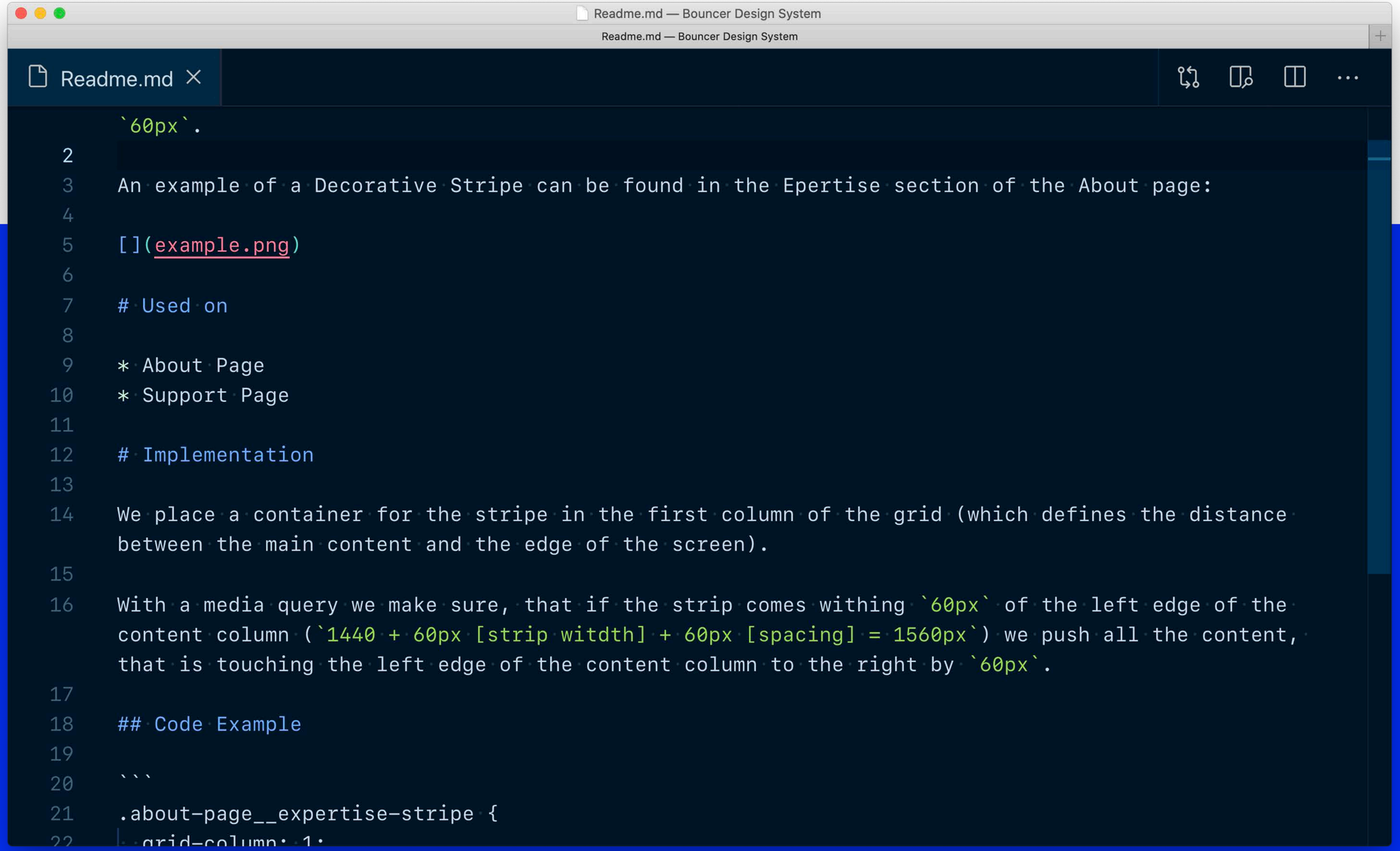
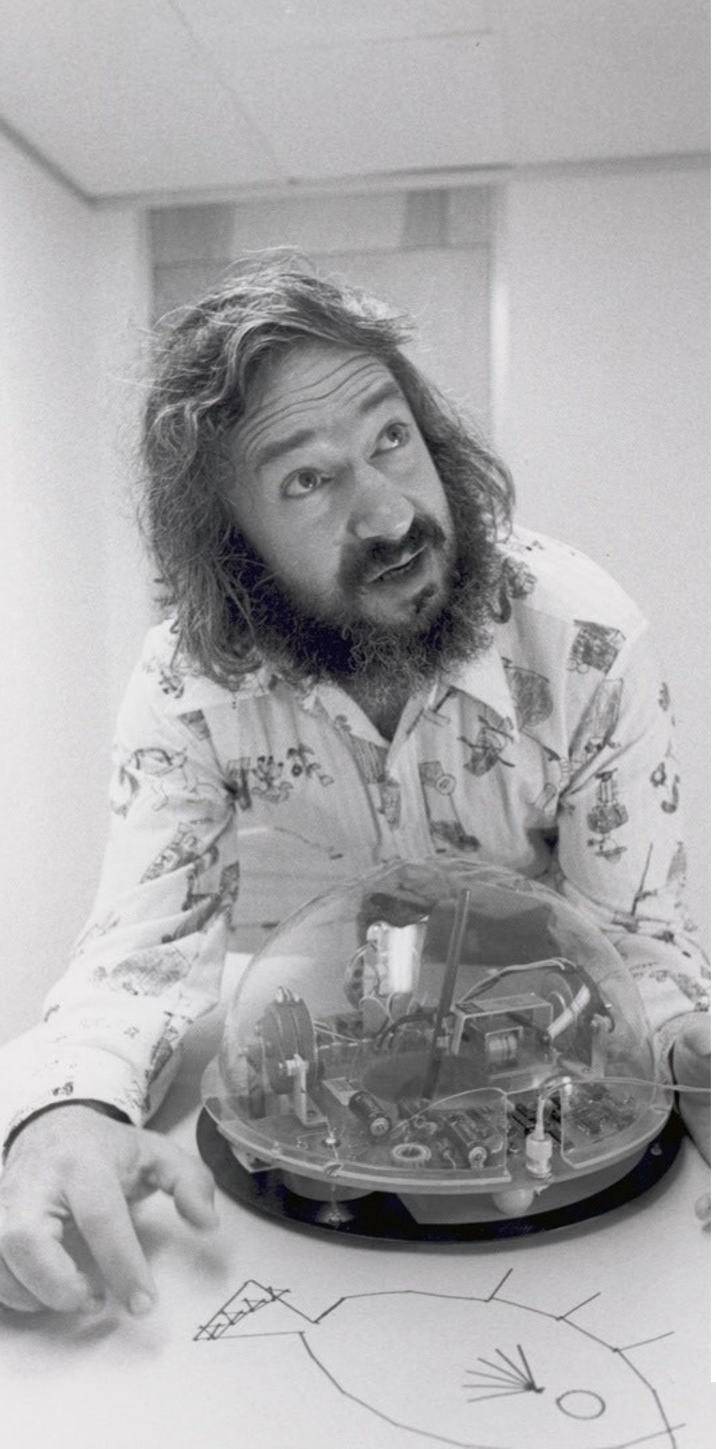


Start Locally

Direct Manipulation

Vanilla Markdown

DSK is a tool for supporting creativity, not a website generator.



»For a technology to be effective, [Seymour Papert] said, it should provide easy ways for novices to get started (low floor) but also ways for them to work on increasingly sophisticated projects over time (high ceiling).«

[Resnick 2016]

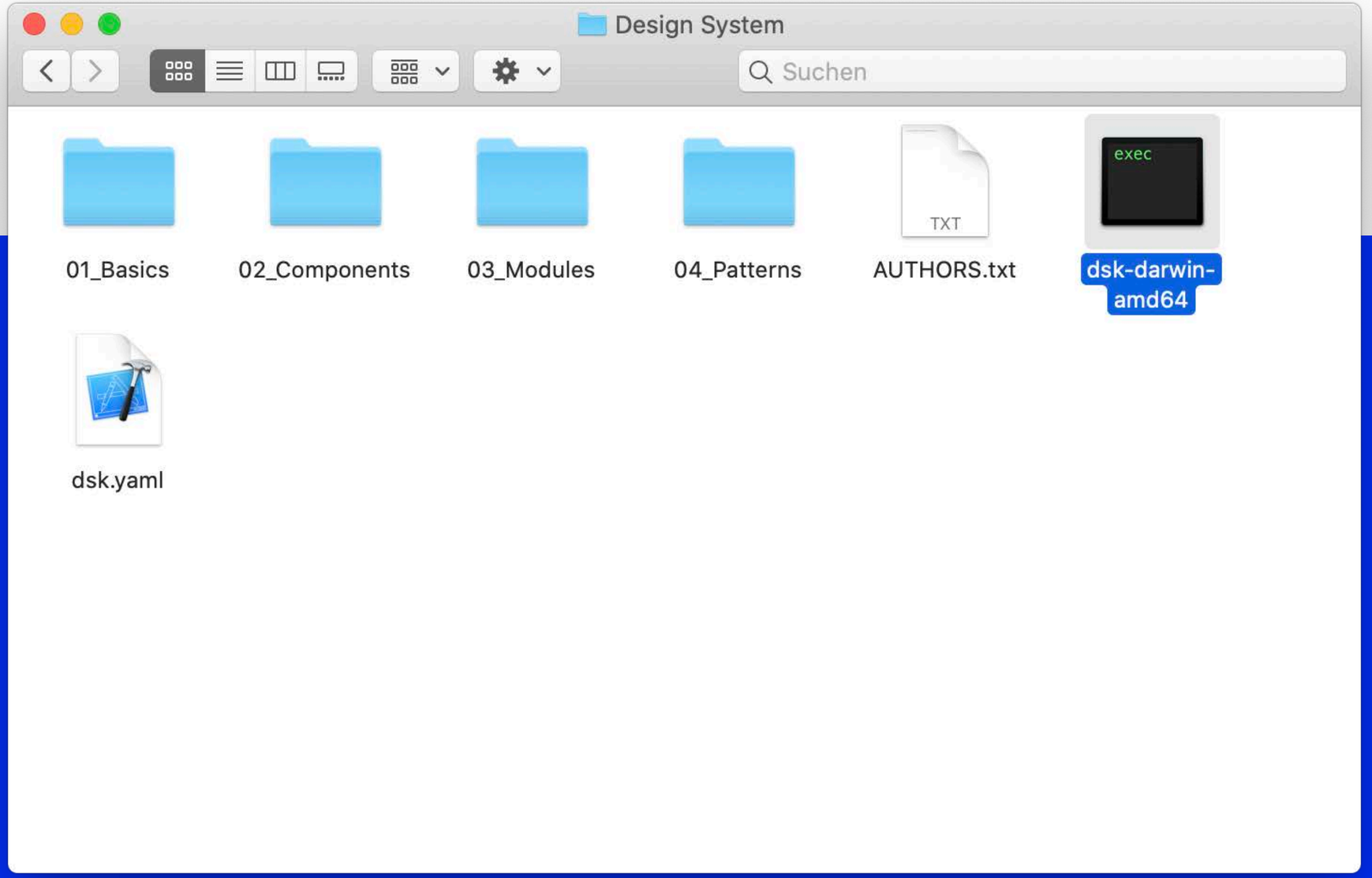
»For a more complete picture, we need to add an extra dimension: wide walls. It’s not enough to provide a single path from low floor to high ceiling; we need to provide wide walls so that kids can explore multiple pathways from floor to ceiling.«

[Resnick 2016]

Principle II

low floor — easy to start
high ceilings — scalable
wide walls — many ways

Low Floor
in DSK



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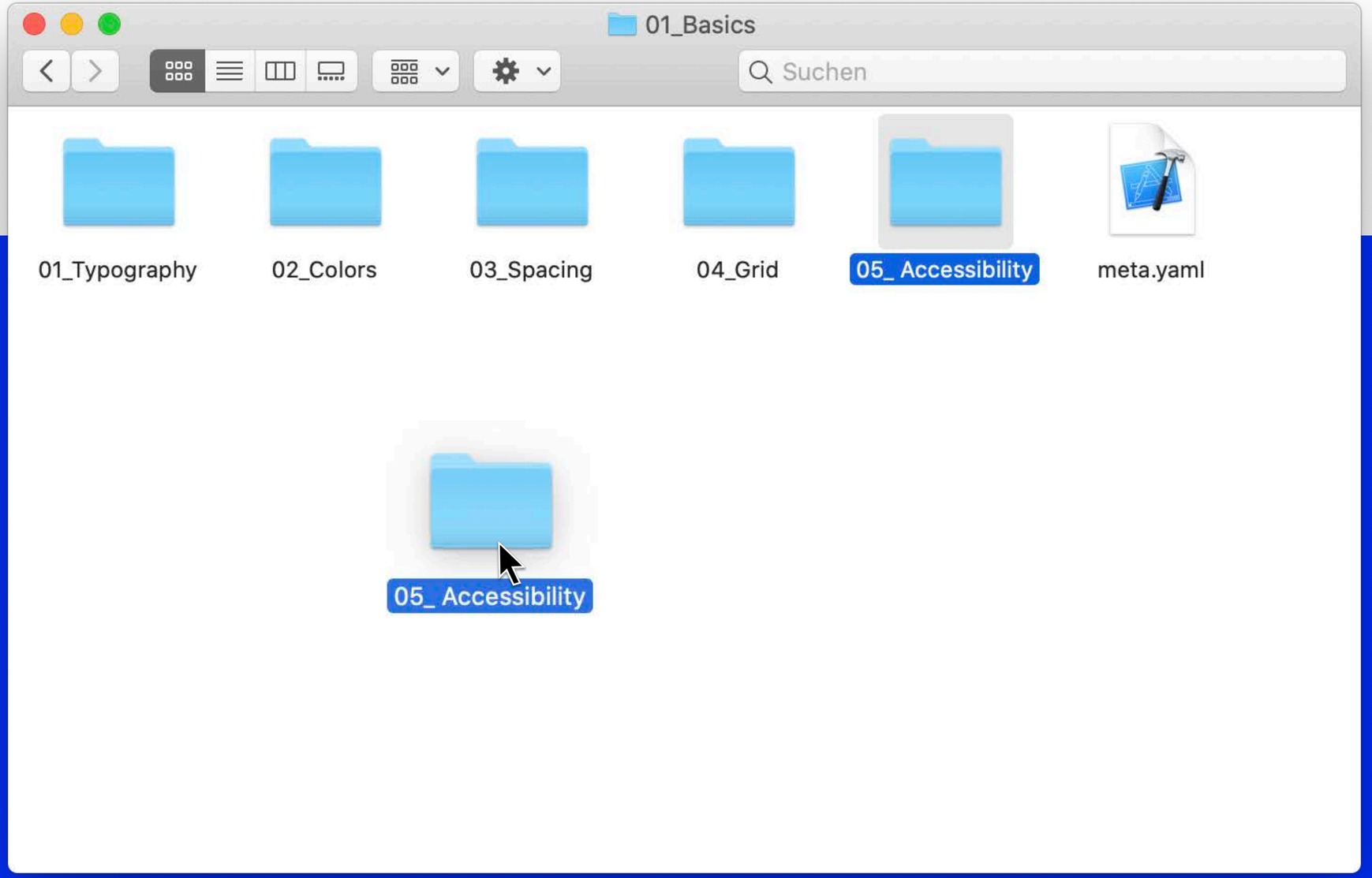
Low Floor
in DSK



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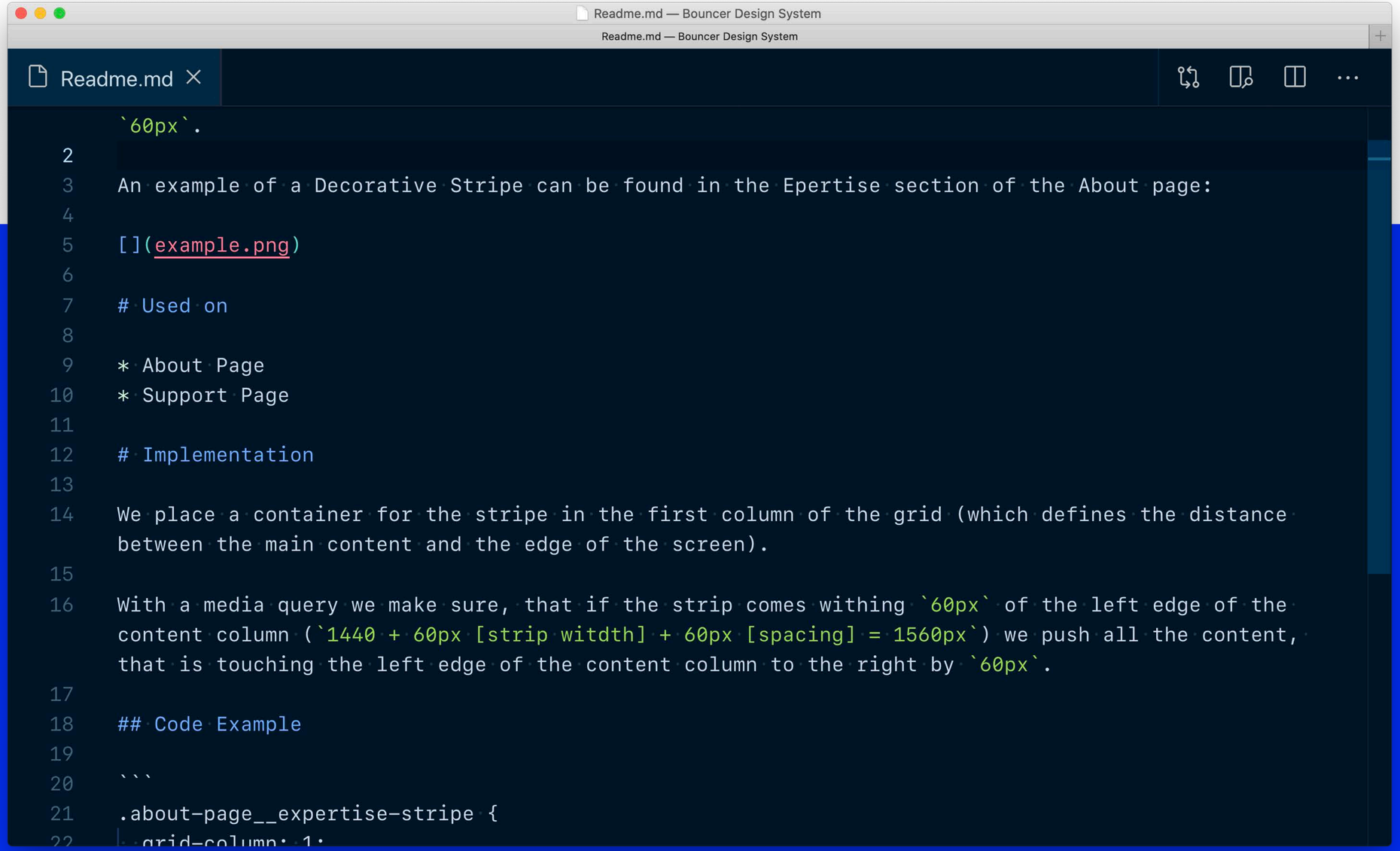
Low Floor
in DSK



Start Locally

Direct Manipulation

Vanilla Markdown

High Ceiling
in DSK

```
$ rsync -vru ./my-design-system \
    disko@web0.disko.io:/var/www/dsk
```

Hosted

Documentation
Components

Search

Versions

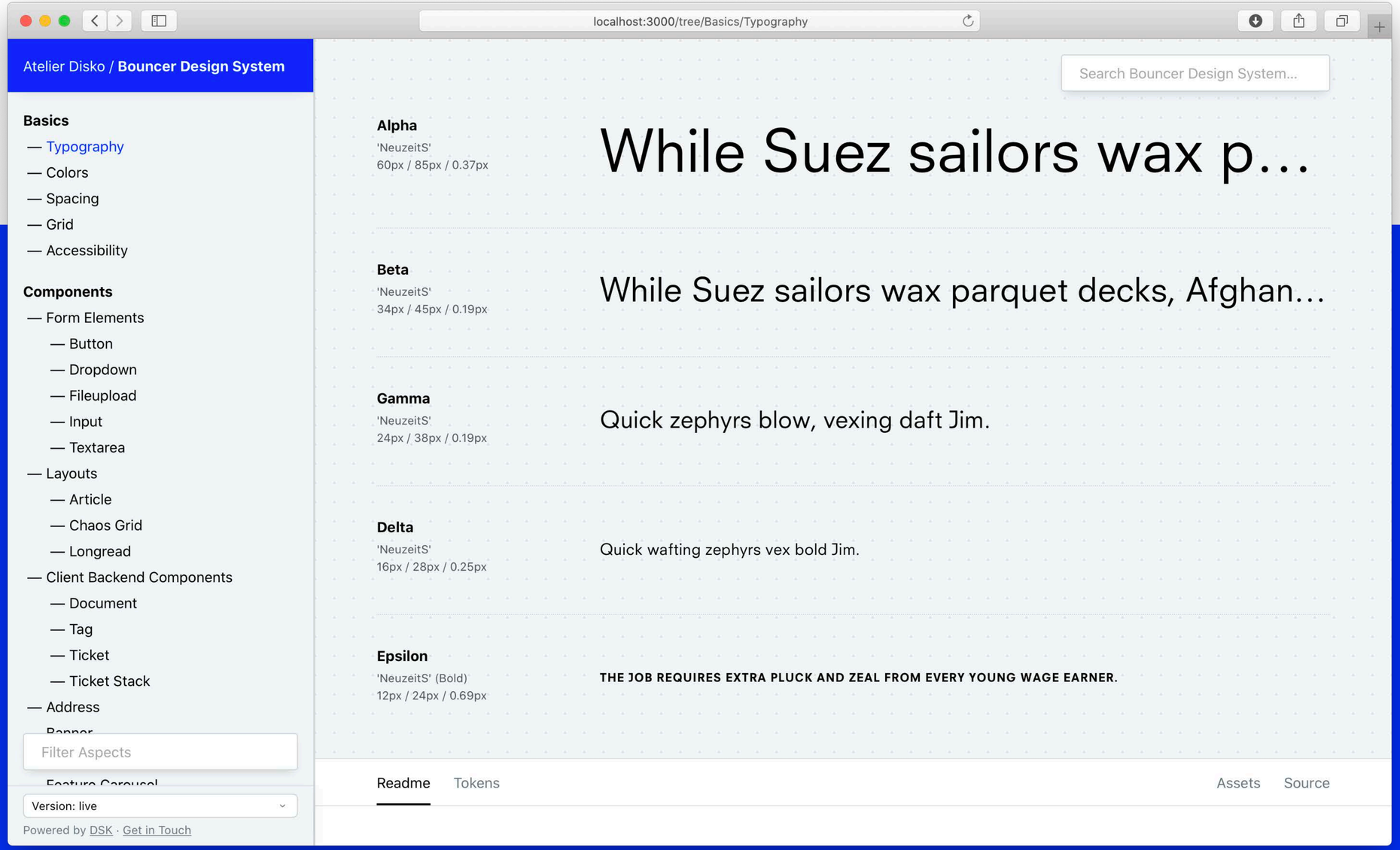
High Ceiling
in DSK

Hosted

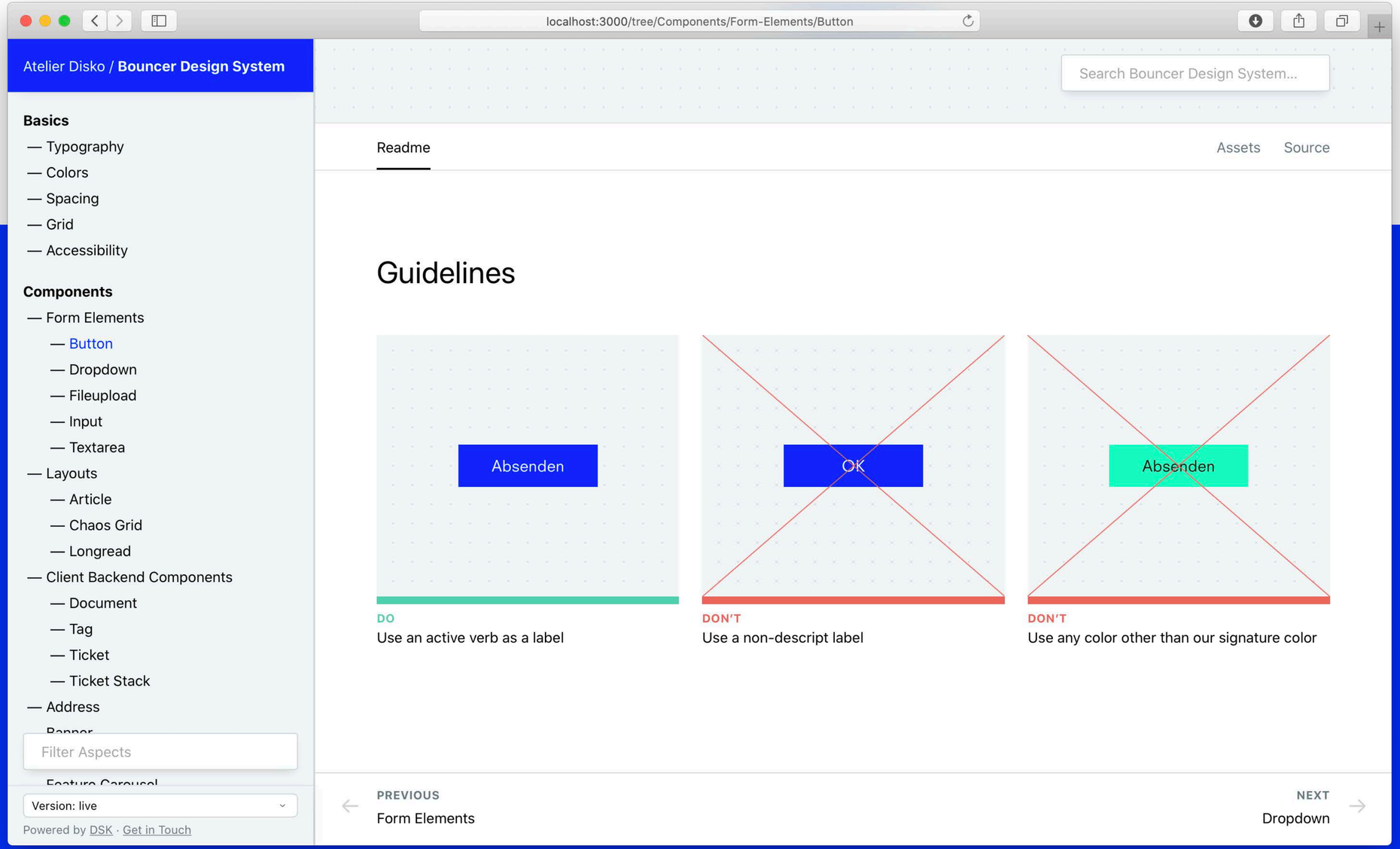
Documentation
Components

Search

Versions



High Ceiling
in DSK



Hosted

Documentation
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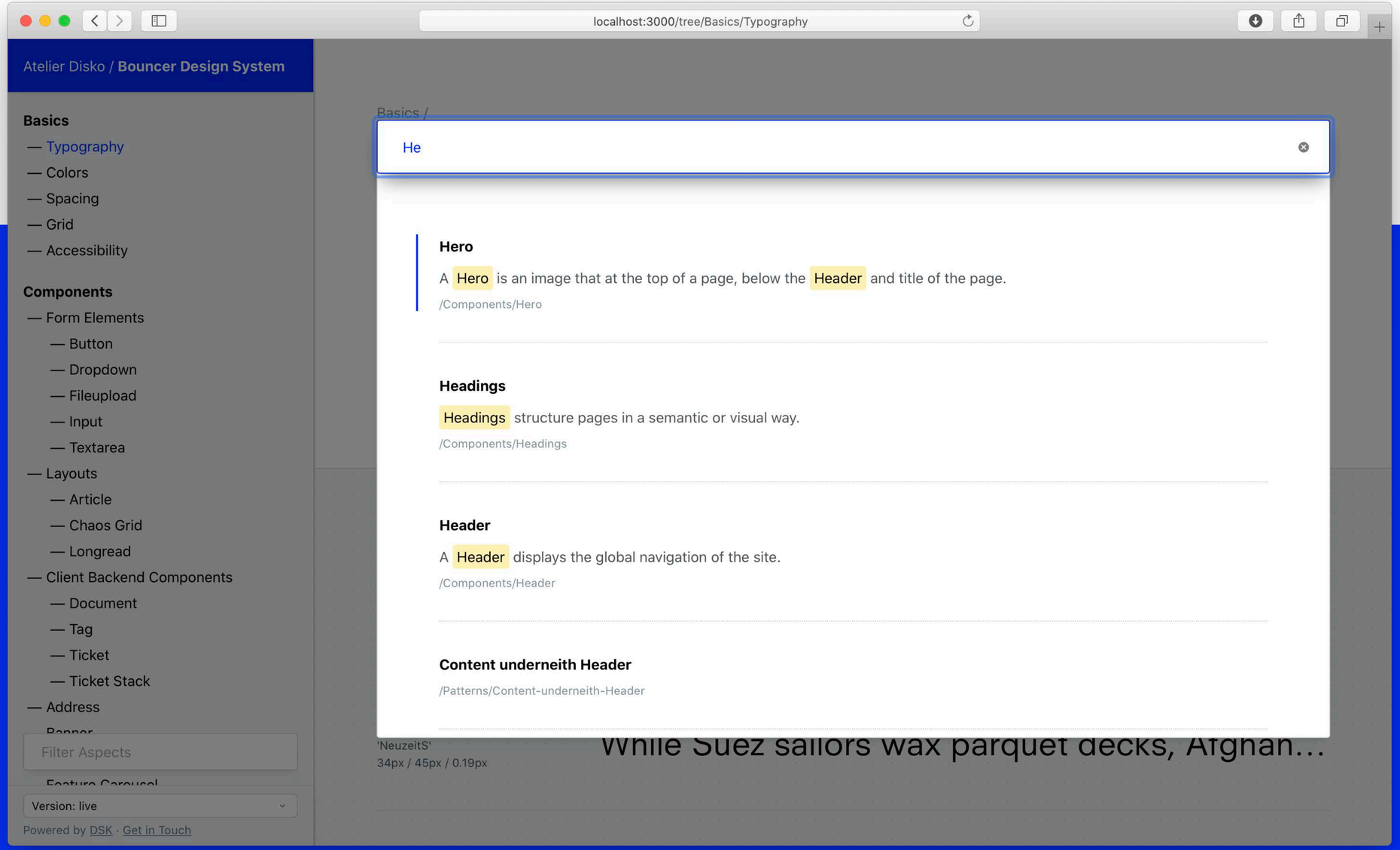
High Ceiling
in DSK



Hosted

Documentation
Components

Search

Versions

High Ceiling
in DSK

Hosted

Documentation
Components

Search

Versions

— Input
— Textarea
— Layouts
— Article
— Chaos Grid
— Longread
— Client Backend Components
— Document
— Tag
— Ticket
— Ticket Stack
— Address
— Banner

Filter Aspects

— Feature Carousel

Version: live

Powered by DSK · Get in Touch

Readme Tokens

Desktop

The grid for Desktop is based around `10` colum
`60px`. It is centered with a total max-width of `1`

High Ceiling
in DSK

Hosted

Documentation
Components

Search

Versions

— Input
— Textarea
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Filter Aspects

Version: version-1
Version: version-2
✓ Version: live

Powered by DSK · Get in Touch

Readme Tokens

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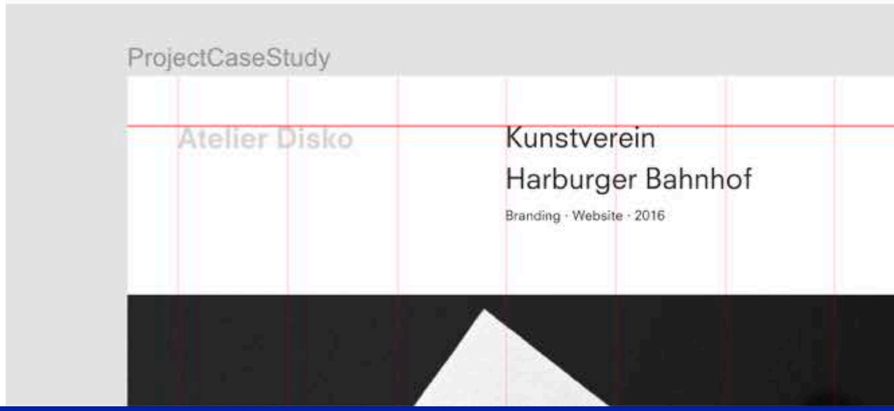


»When evaluating the use of creativity support tools, we consider diversity of outcomes as an indicator of success.«

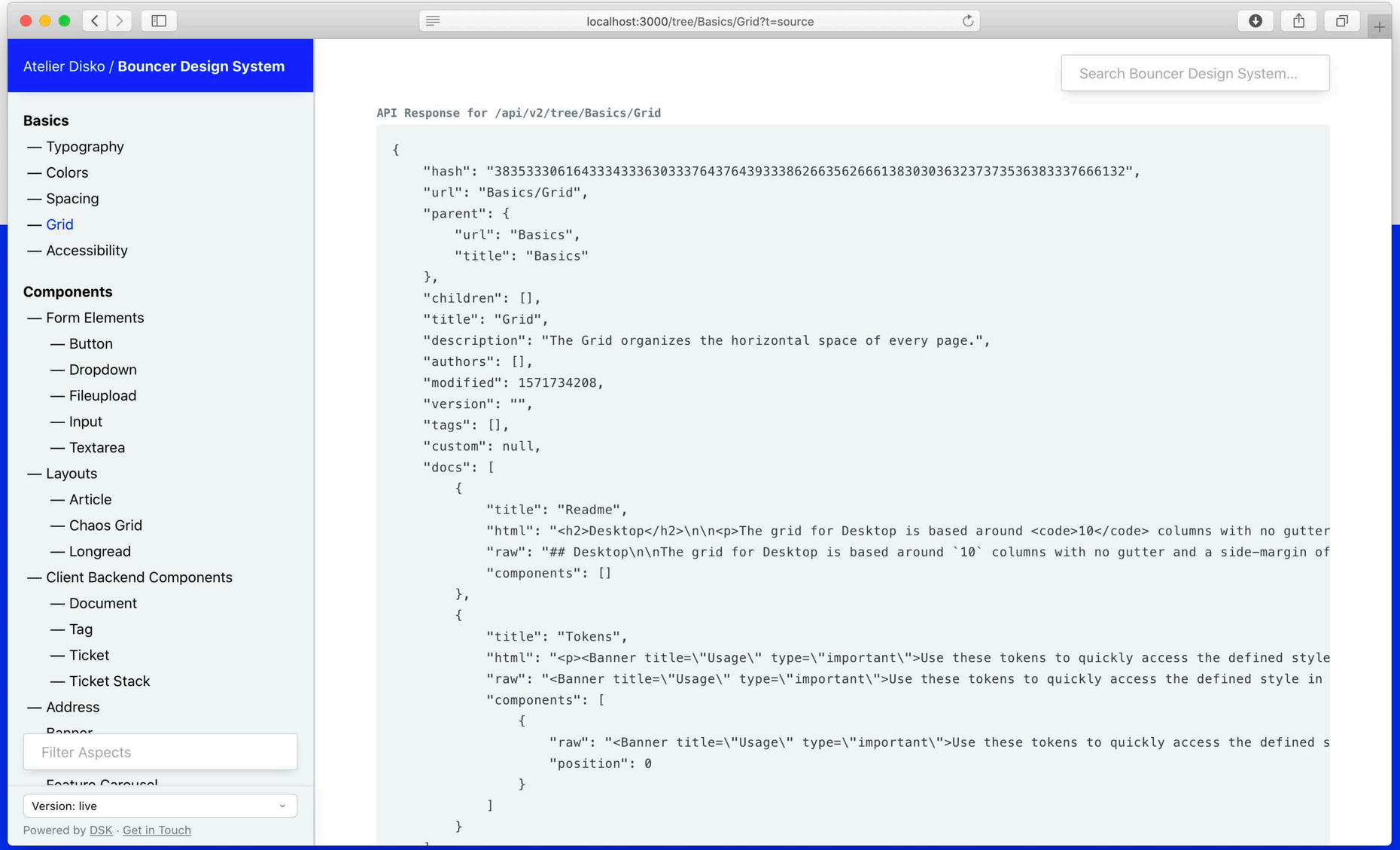
[Resnick et al. 2005]

Wide Walls
in DSK

API

Custom Frontends

Custom
Documentation
Components



Wide Walls
in DSK

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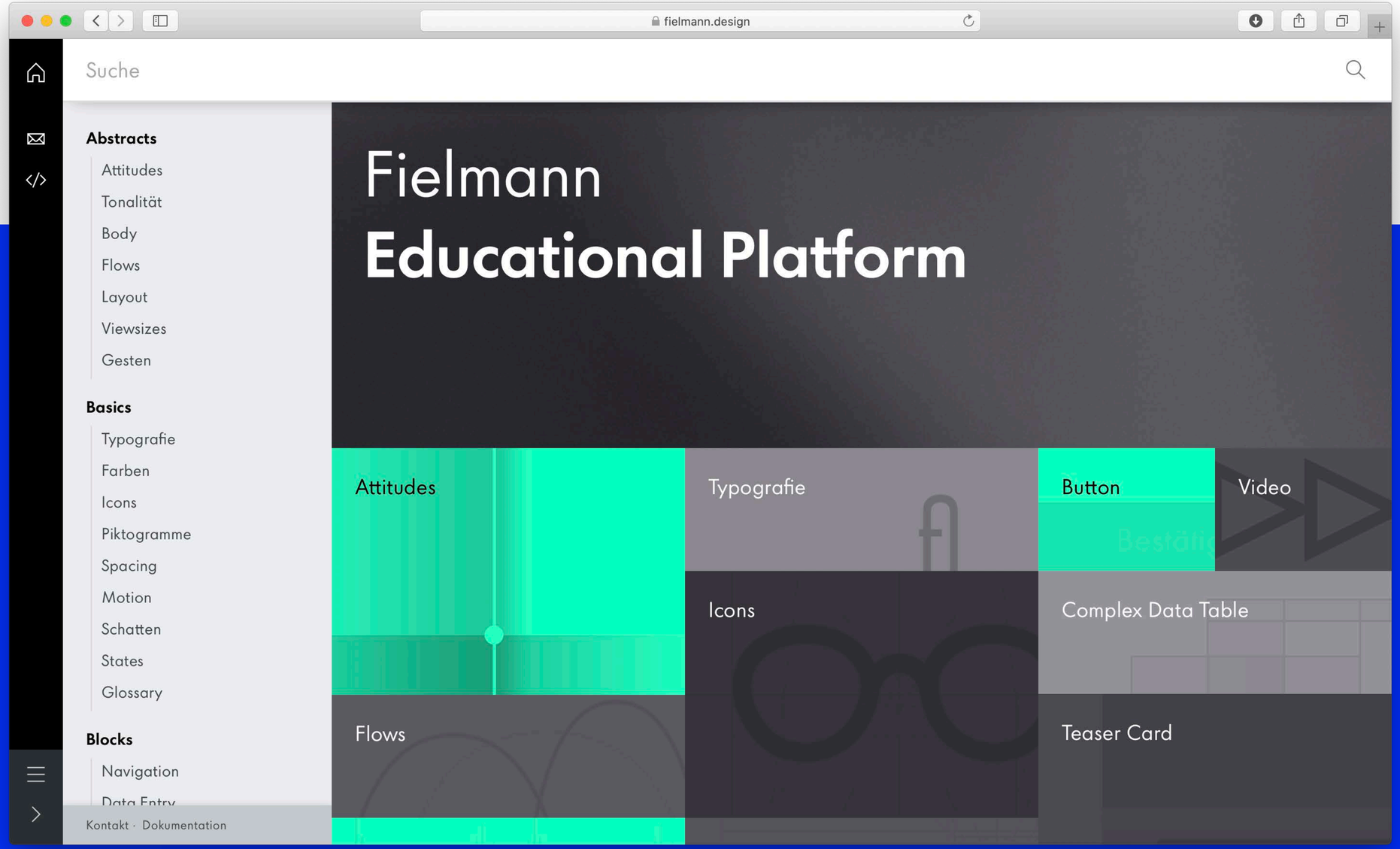

Wide Walls
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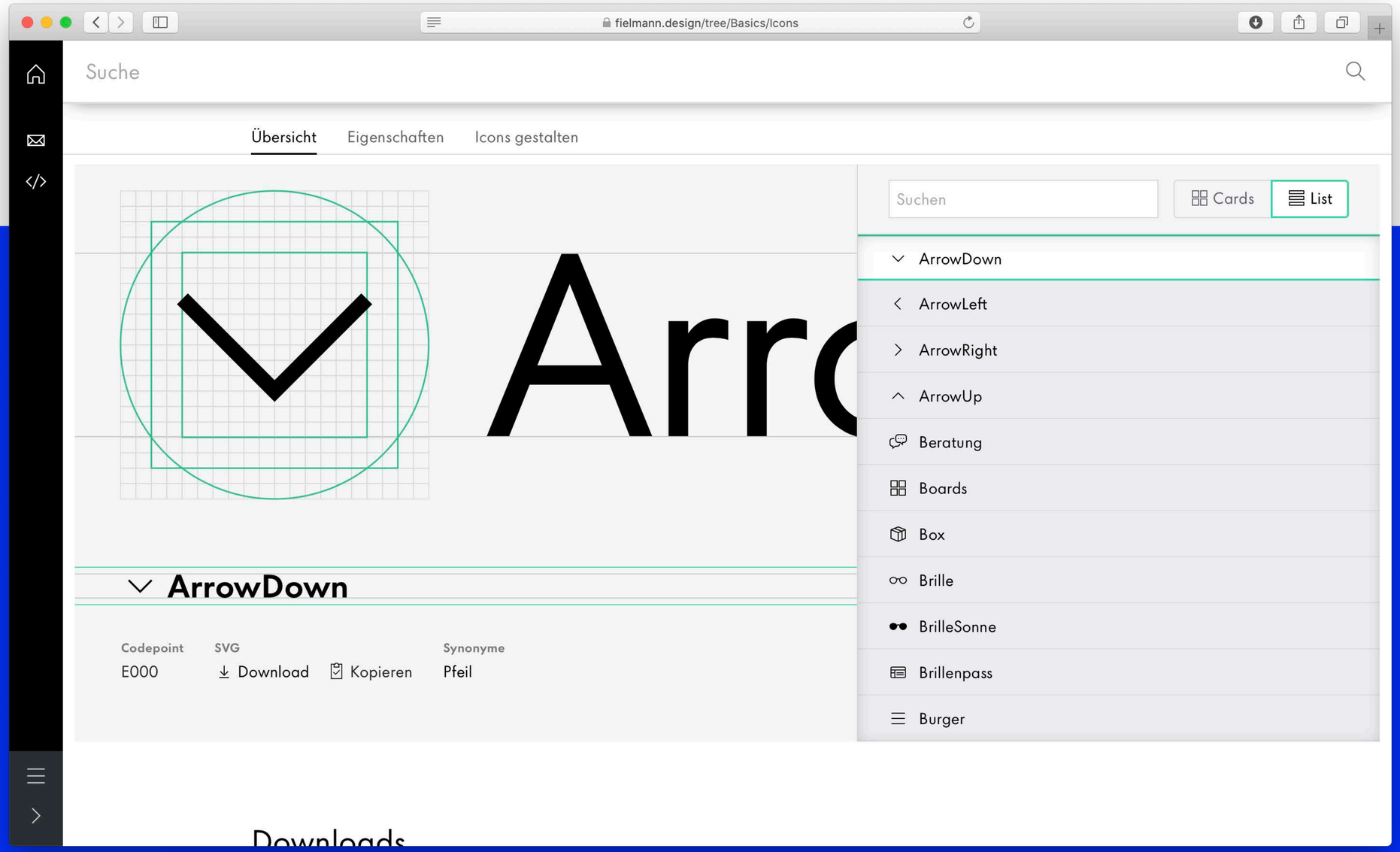


Principle II

low floor — easy to start
high ceilings — scalable
wide walls — many ways

Principle III

Designed for Uncertainty

Principle III

Designed for Uncertainty

Principle III — Designed for Uncertainty

Known Knowns

Known Unknowns

Unknown Unknowns

Designed for Uncertainty

Compass

over

Maps

- Develop new skills
- Reflect on past successes
- Seek support from ones you trust
- Control what you can
- Ask for help

Uncertainties in product development should anticipated.

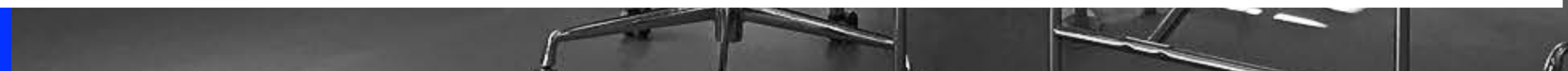
Sustain uncertainties for a while, resist immediate clarification.

Have a phase of divergence at all.

DSK is built for content that is uncertain.

As users of DSK we needed a place…

… to »shape« the Design System

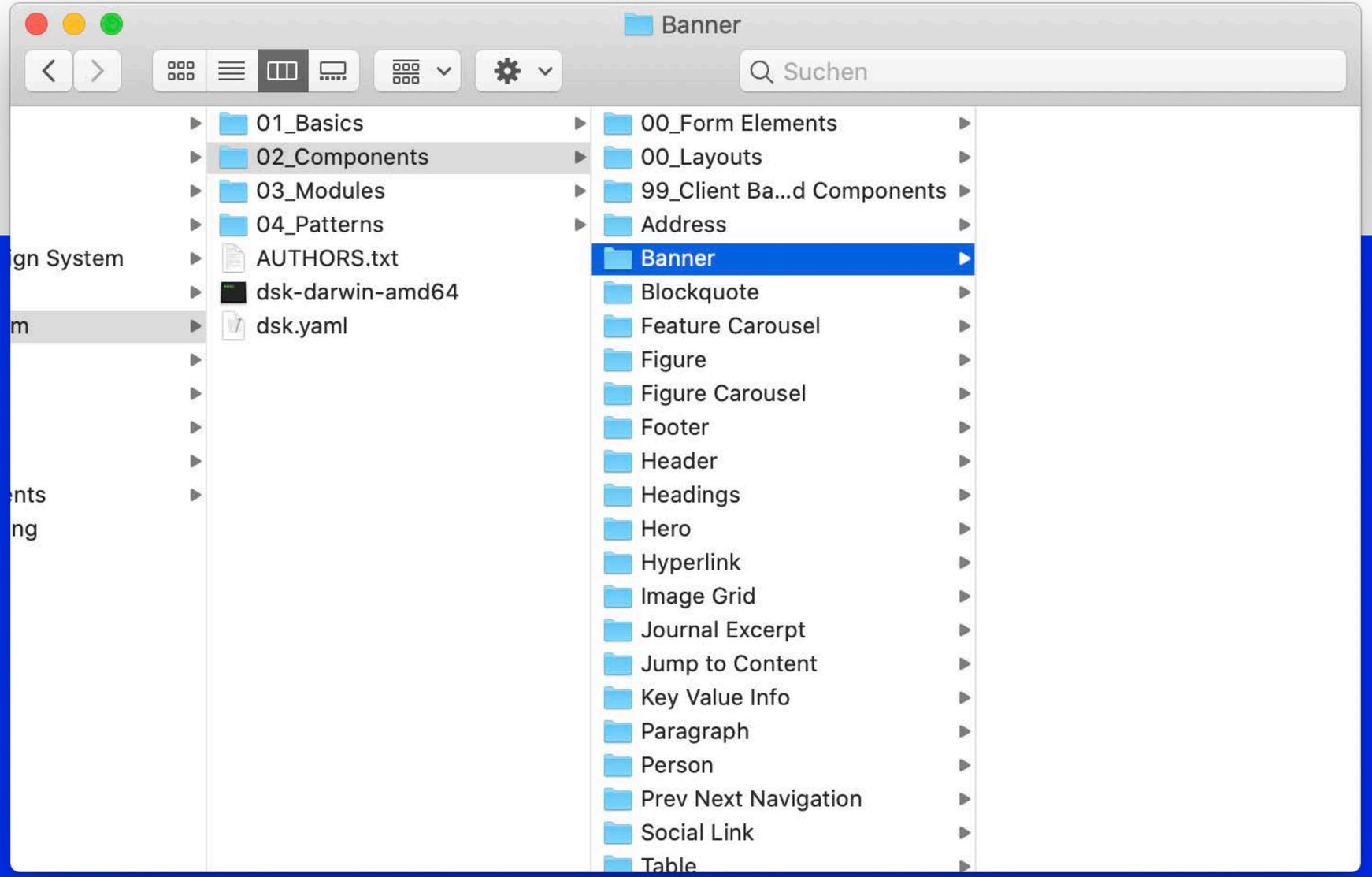


As users of DSK we needed a place…

… for fragments
… that allows for chaos
… that allows for structure
… with flexibility to adapt

… to »shape« the Design System

Uncertainty
in DSK

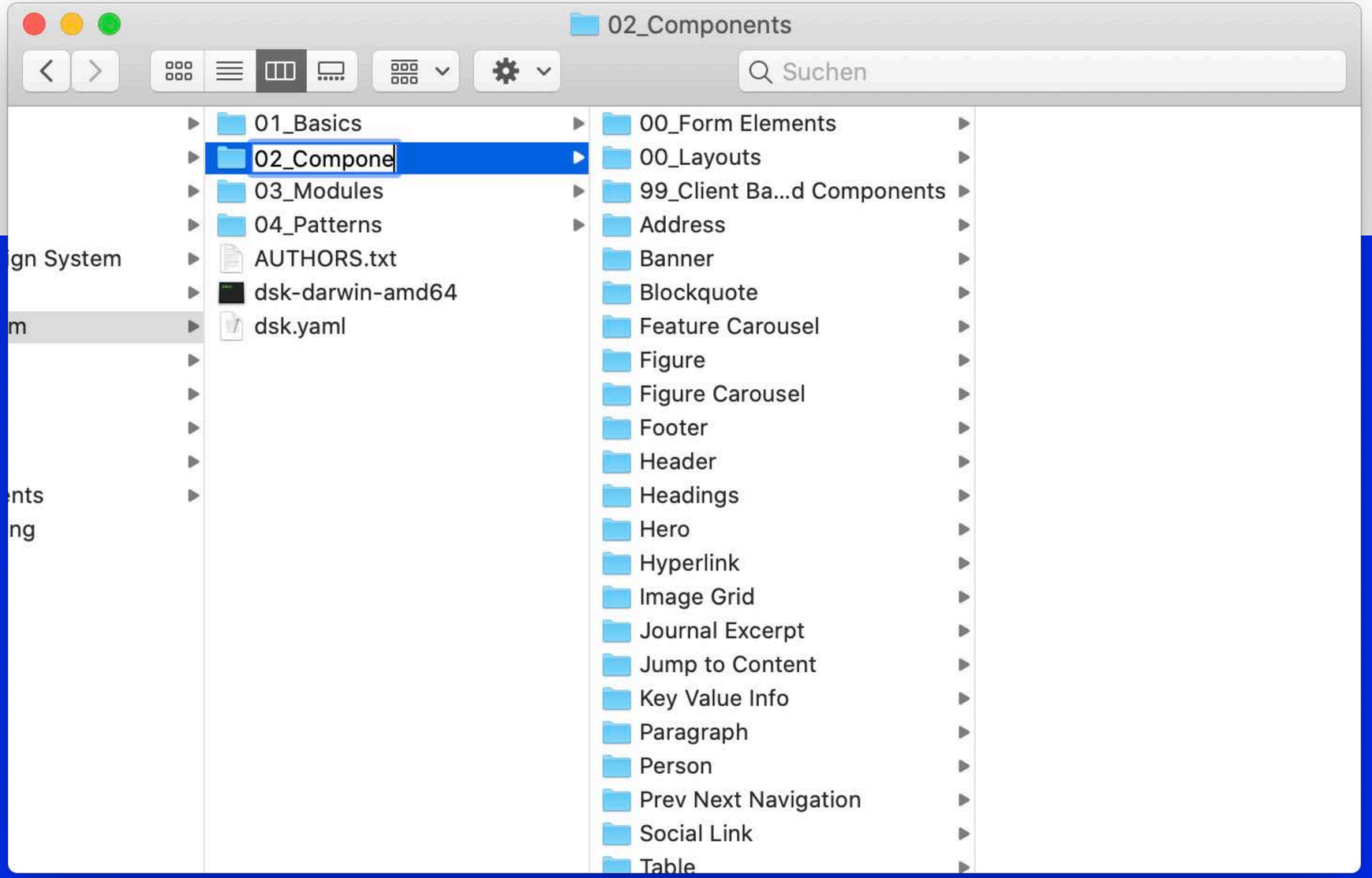


Stubs & Placeholders

Change Your Mind

Copies Are Cheap

Uncertainty
in DSK



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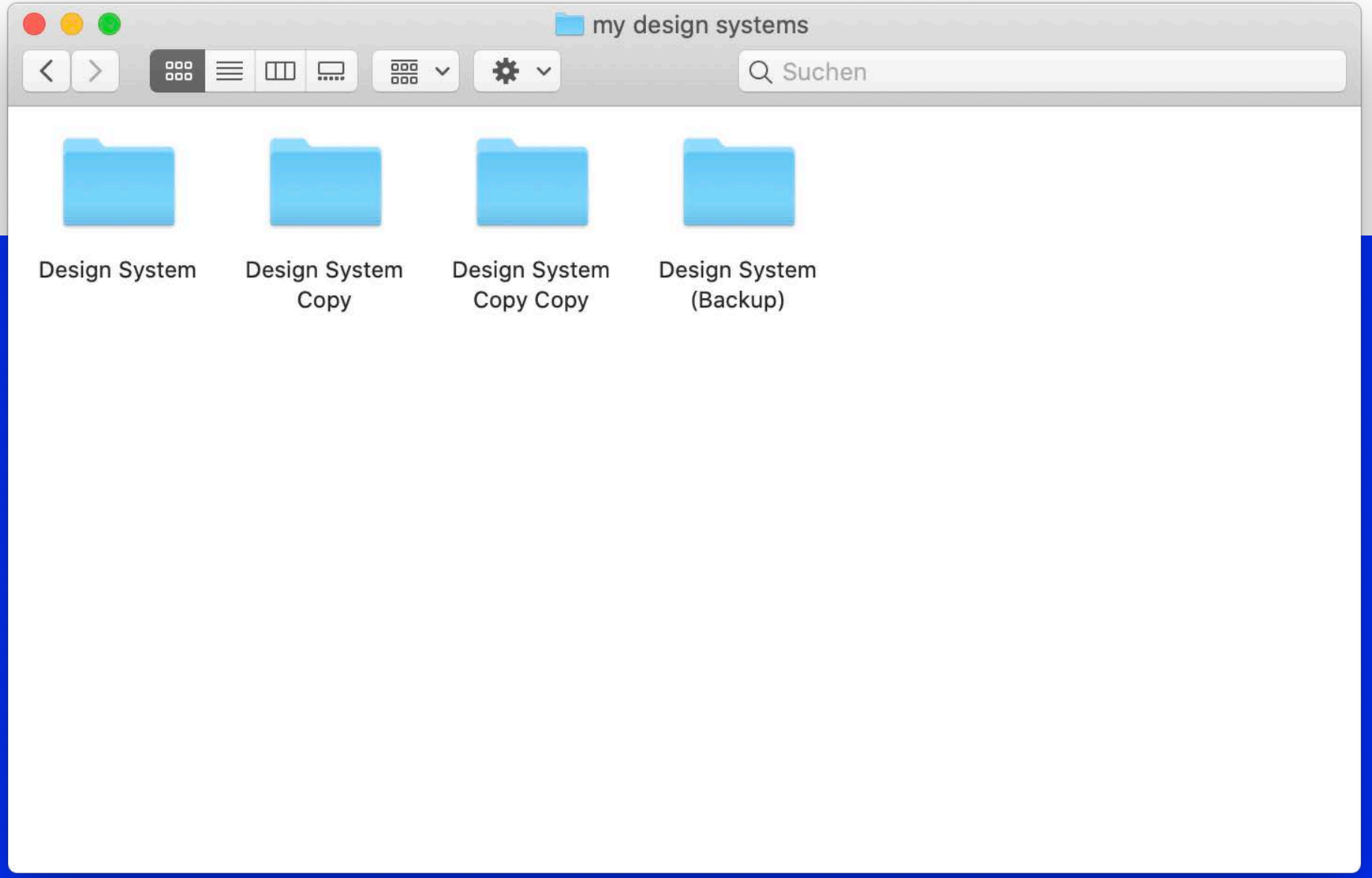


Stubs & Placeholders

Change Your Mind

Copies Are Cheap

Principle IV

Resourcefulness

Services are well practiced, but long-term product building is not fully understood.

No extra budget, therefore a by-product on a running project.

DIY?

NIH?

We are no geniuses and are not infinitely capable.

Principle IV

Resourcefulness

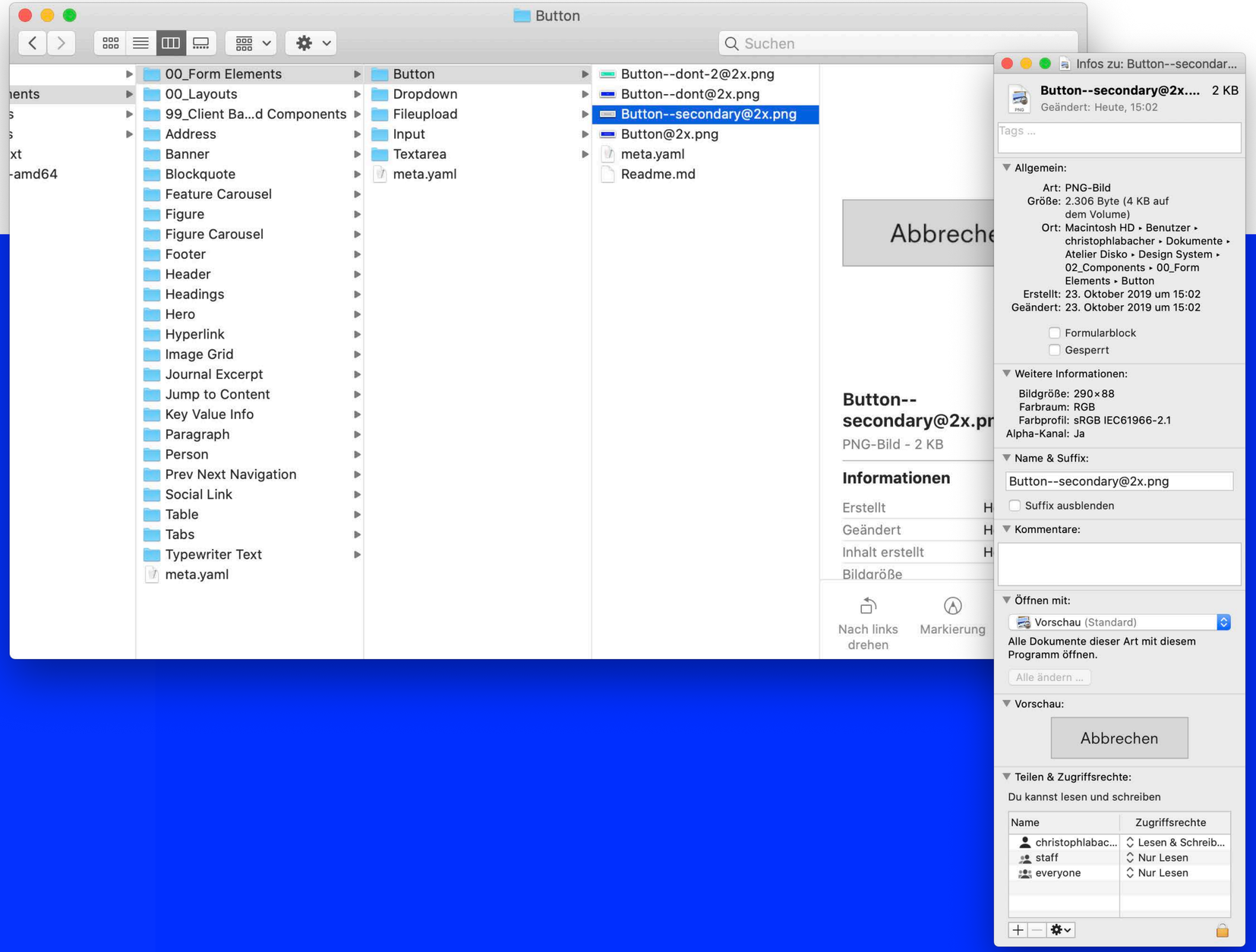
Prioritized features by our capabilities.

Worked with existing components and knowledge.

We didn’t forget about our emotional resources.

Practiced »release early — release often« paradigm.

Resourcefulness
in DSK

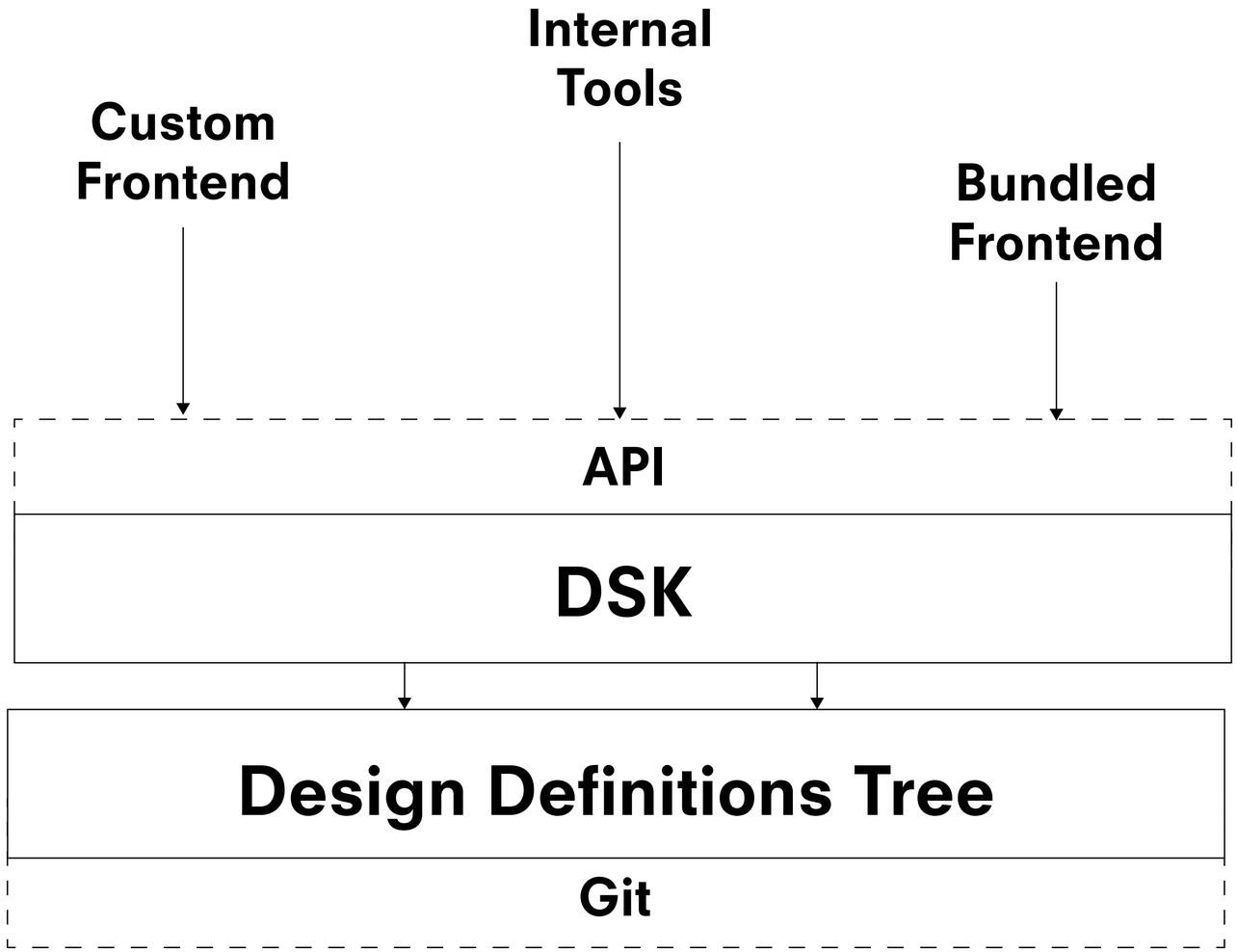


Filesystem

Architecture

Existing Formats

Resourcefulness
in DSK



Filesystem

Architecture

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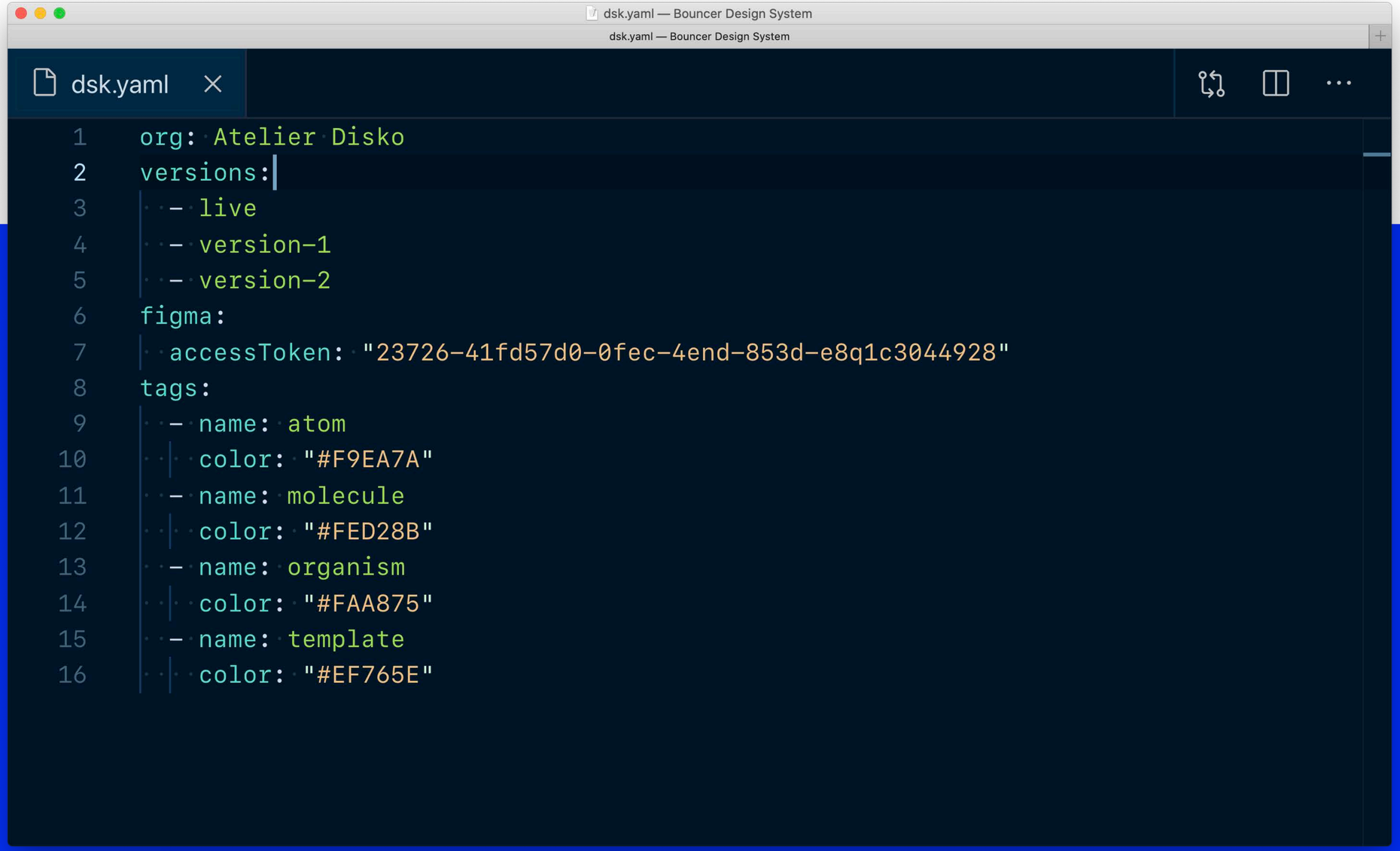
Resourcefulness
in DSK



Filesystem

Architecture

Existing Formats

Principle V

Being Principled

Principles guide you and help develop a coherent product.

Some principles are worth sticking to through the whole lifetime of a product.

Sometimes it’s time to let go.

let go — zero configuration
sticked to — low floor
questioning — format agnostic

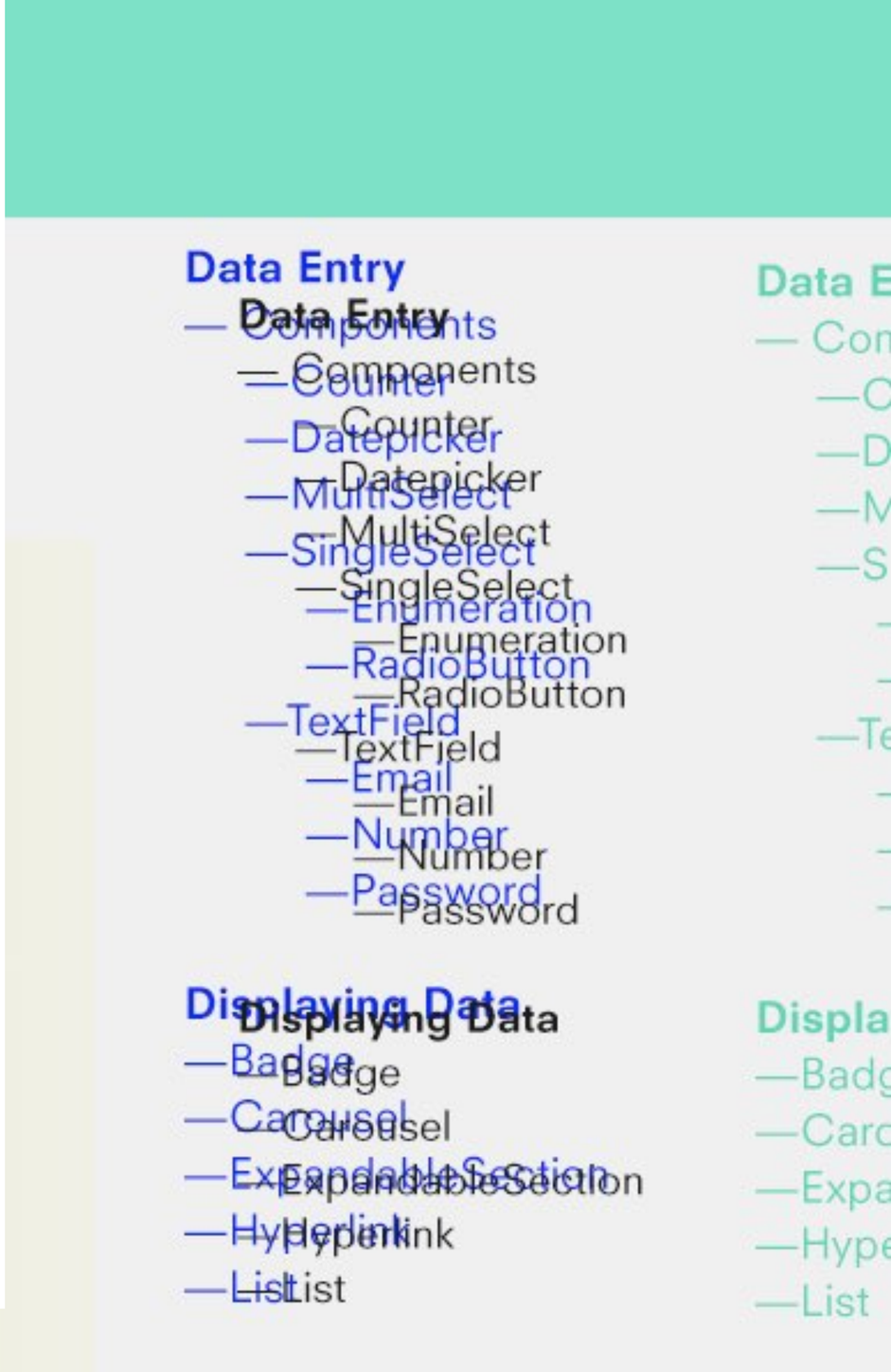
You don’t need a principle to start: discover them.

Thank You!

rundsk.com

github.com/atelierdisko/dsk

atelierdisko.de



References

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