

Rafał Schmidt

Unlocking the Complexity of Documentation Creation: Perspectives, Challenges, and Criticality in a Large Organization

Rafał Schmidt

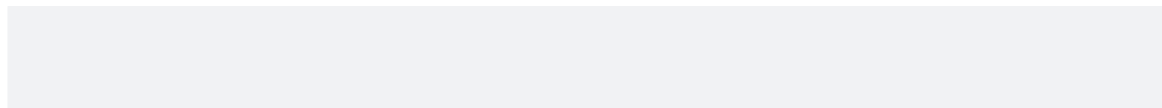
Unlocking the Complexity of Documentation Creation: Perspectives, Challenges, and Criticality in a Large Organization





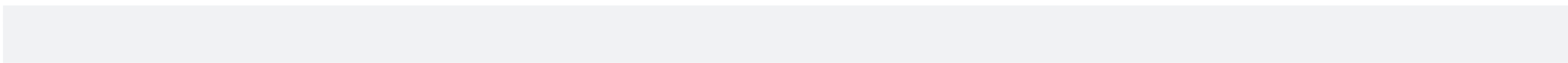
I've never heard (from devs)

++

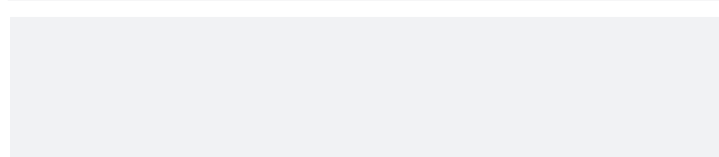


📄 🏆 2 🤖 🙌 🙏 13 😊 14 📄 8 🐻 15 🧡

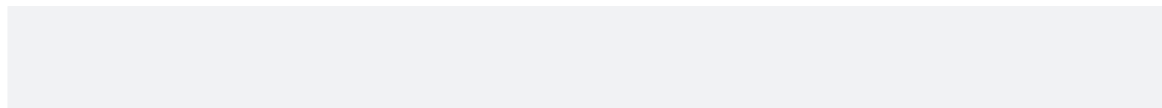
29.8k



--



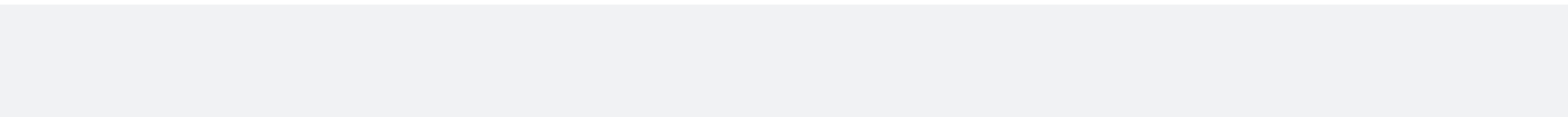
++



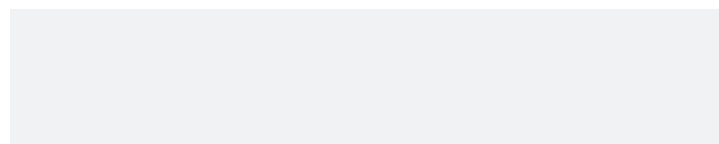
  2    13  14  8  15 

29.8k

The documentation is super intuitive



--



++



29.8k

The documentation is super intuitive, we do not need code examples for our api.

--





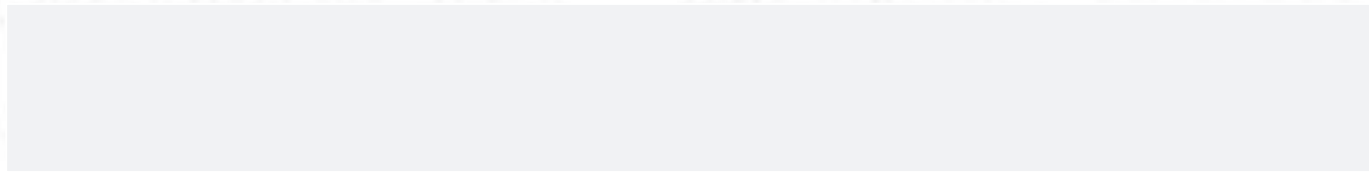
[Redacted text]

[Redacted text]

++ 1.1k --

Share





Looks like bad documentation to me.

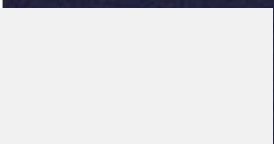
++ **1.1k** -- Share ...



?

New solution?

Features?



Features?

Restrictions?

Features?

Restrictions?

Alternatives?

Features?

Restrictions?

Alternatives?

Credibility?

Features?

Restrictions?

Alternatives?

Credibility?



Well written?

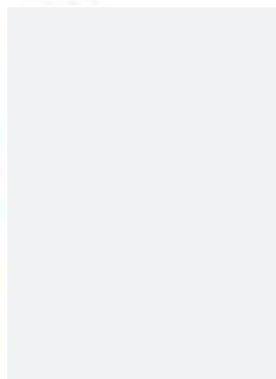


First
impression



Unclear





[Redacted]

[Redacted]

[Redacted]

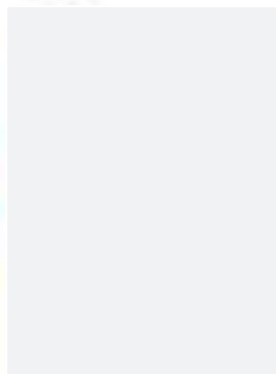
++ 3.0k --



Reply

Share





[Redacted]

"Code is like a joke. [Redacted]

[Redacted]

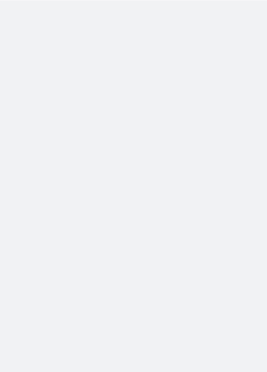
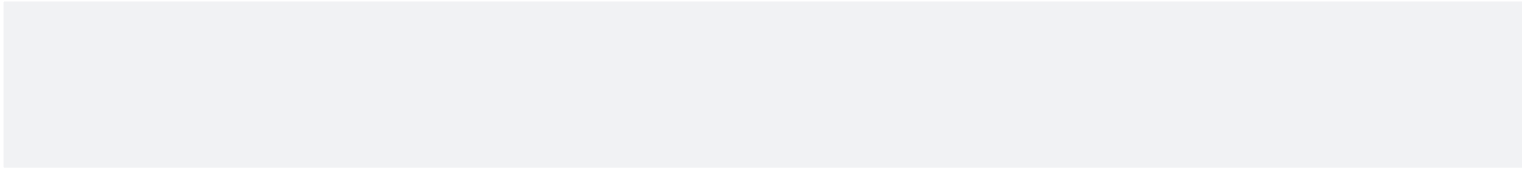
++ 3.0k --



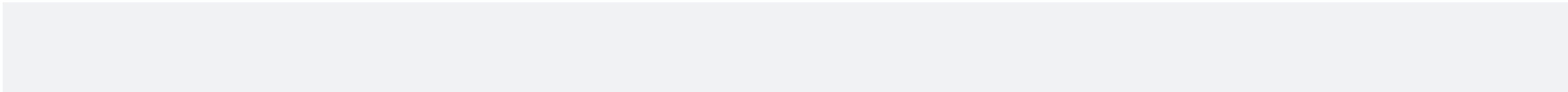
Reply

Share



"Code is like a joke. If you have to explain it, then it's bad."



++ 3.0k --



Reply

Share



"Code is like a joke. If you have to explain it, then it's bad."

~ Coworker whose code was truly a joke.

++ 3.0k --



Reply

Share



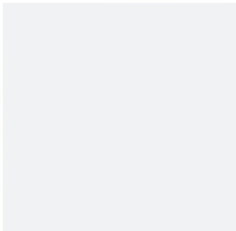
Unclear

Null





Google



ALL

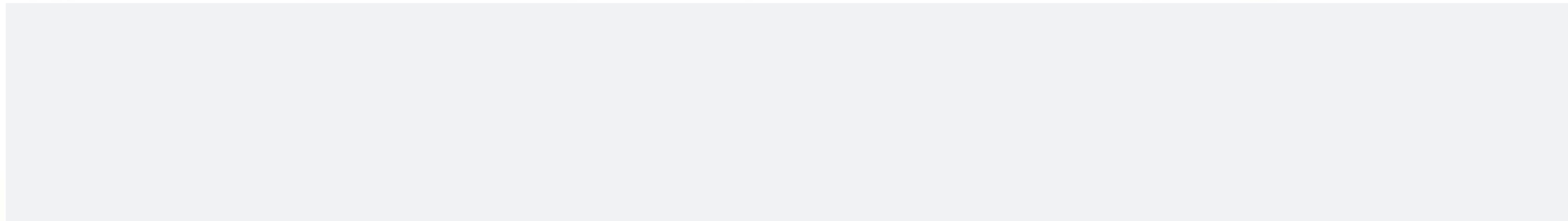
IMAGES

NEWS

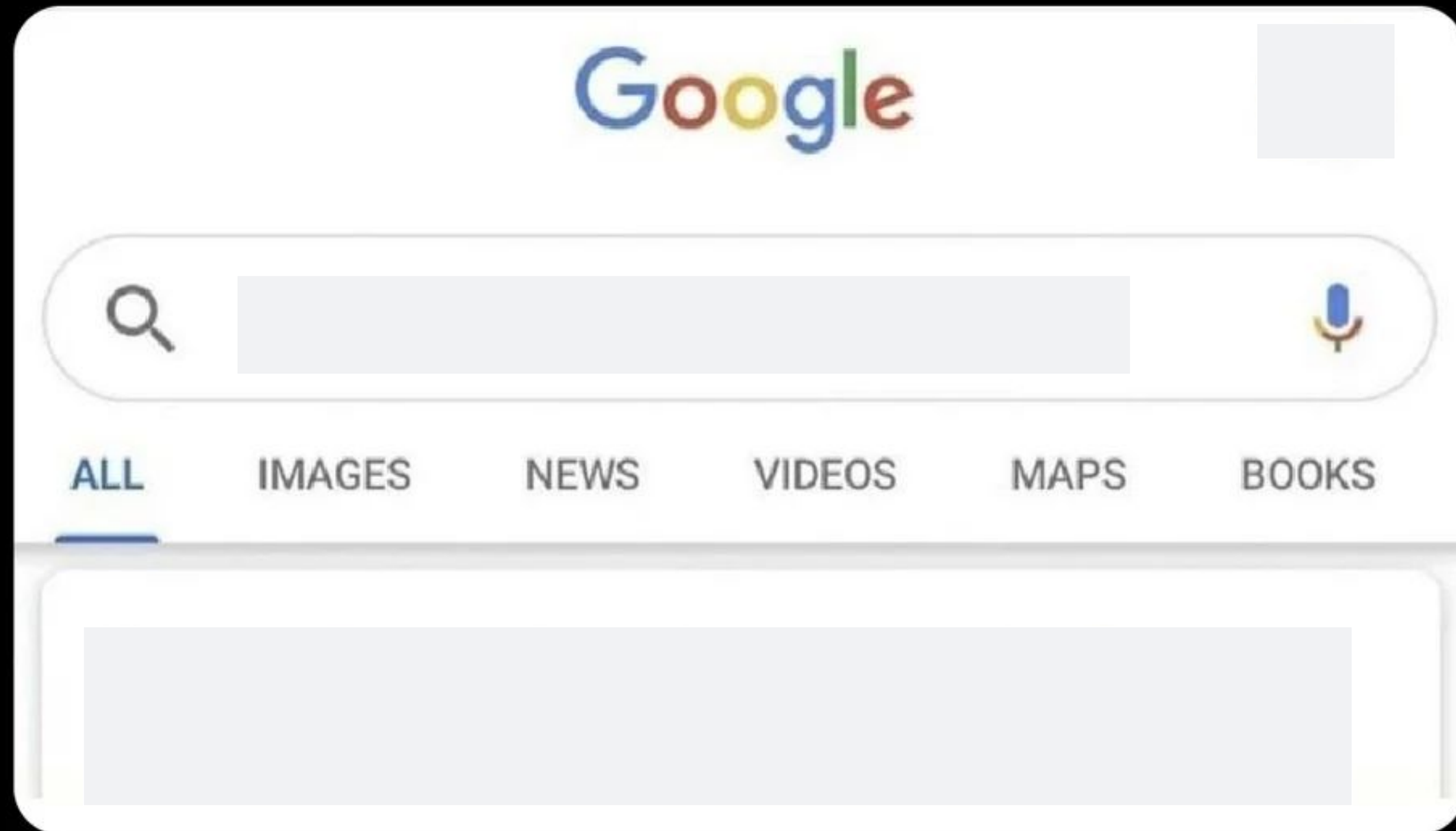
VIDEOS

MAPS

BOOKS



software documentation be like

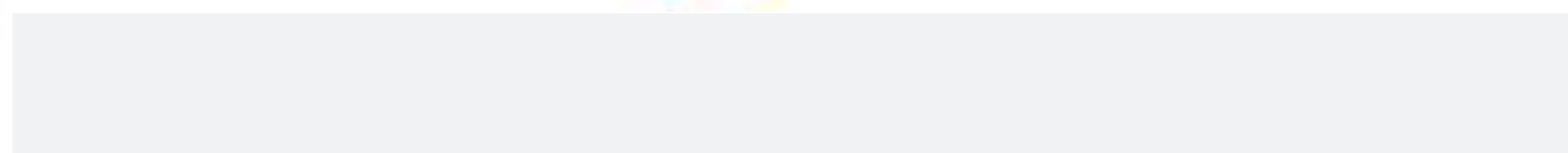
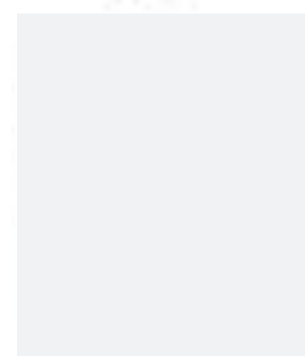


software documentation be like



software documentation be like

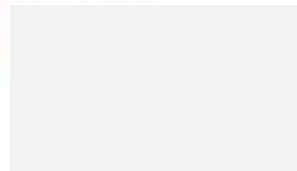
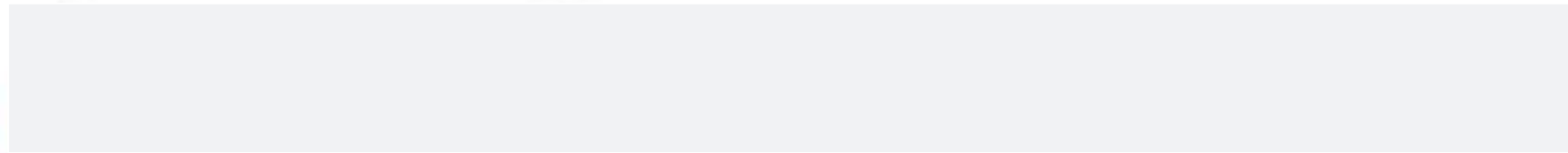
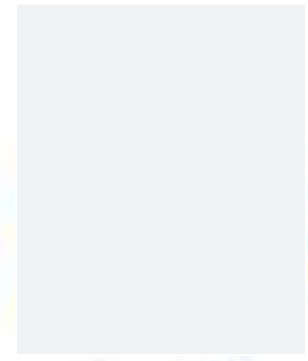




"How do I cure a hangover?"

Drink water before bed, drink less alcohol

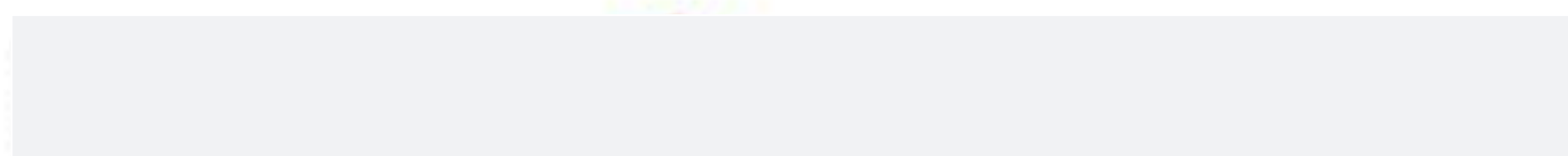
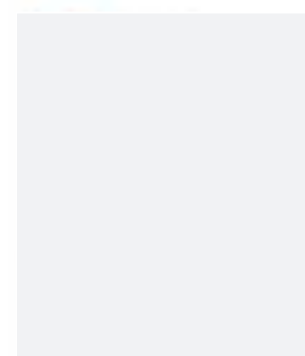
++ 438 -- Share ...



How do I prevent hunger

Eat food

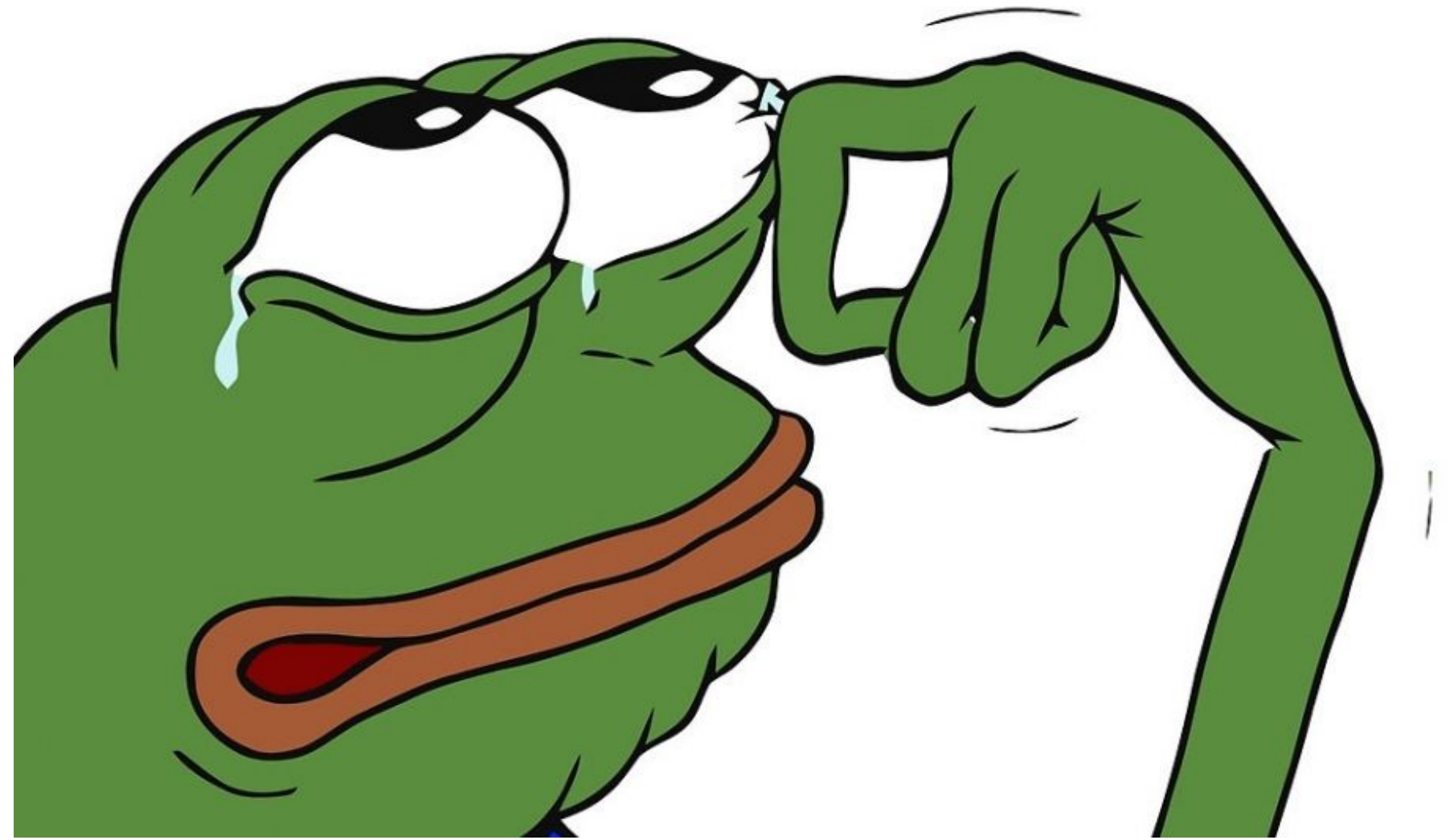
++ 8 -- Share ...



How to cure food poisoning?

┆ Don't eat poisonous food

++ 243 -- Share ...





Grr. Who writes this stuff?



++ 708 -- Share ...



Grr. Who writes this stuff? I want to meet them and tell them a few things.

++ 708 -- Share ...

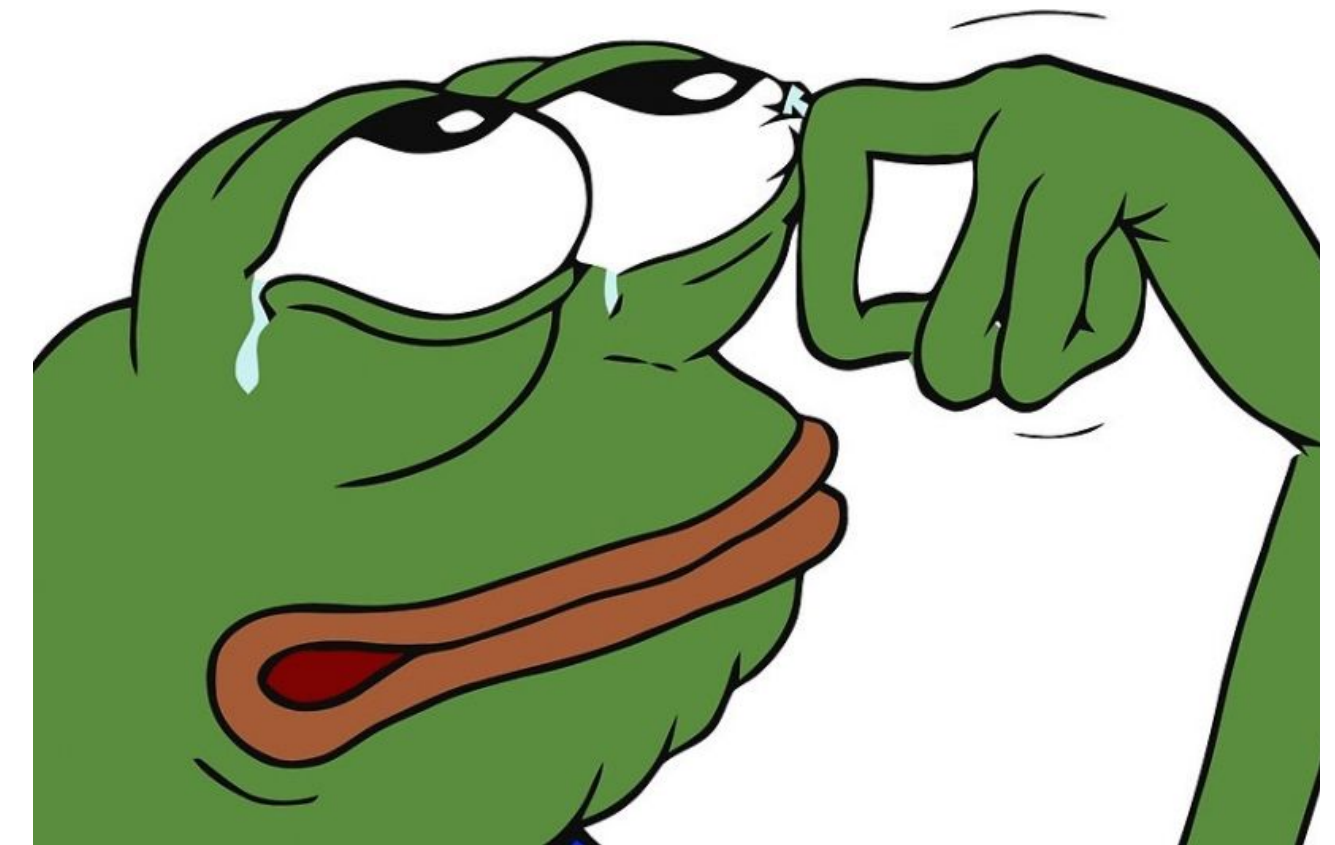
Unclear



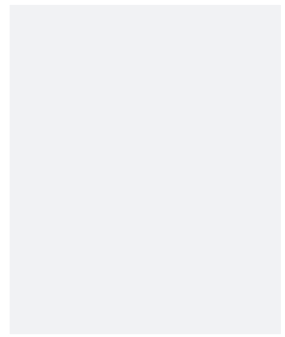
Null



Obvious



Lesson?



[Redacted]

It's simple..

[Redacted]

[Redacted]

[Redacted]

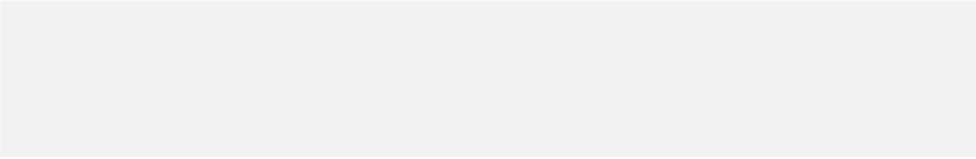
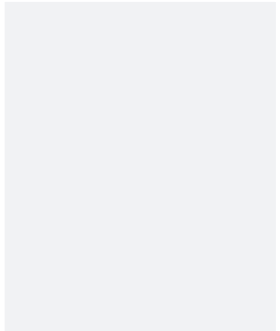
++ 221 -- Share ...

It's simple.. writing good documentation is a is a non trivial skill

++ 221 -- Share ...

It's simple.. writing good documentation is a is a non trivial skill that most devs aren't good at.

++ 221 -- Share ...



It's simple.. writing good documentation is a is a non trivial skill that most devs aren't good at. Mainly because they suffer from the curse of knowledge about the system they are trying to document.

++ 221 -- [Share](#) **...**

It's simple.. writing good documentation is a is a non trivial skill that most devs aren't good at. Mainly because they suffer from the curse of knowledge about the system they are trying to document.

++ 221 -- Share ...



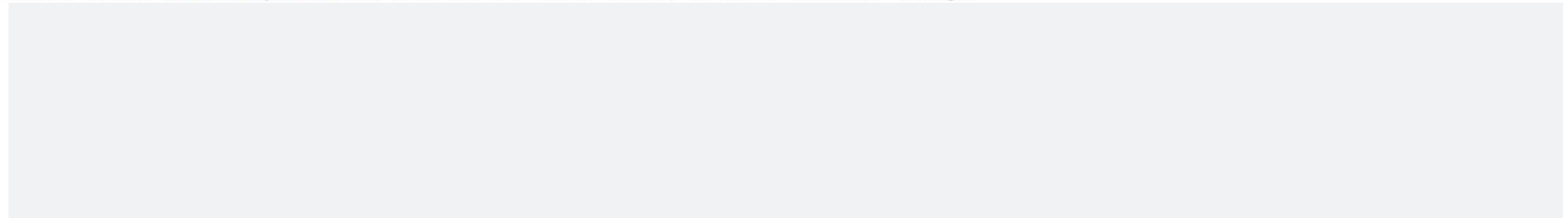
Array.prototype.reduce()

Wrap up...

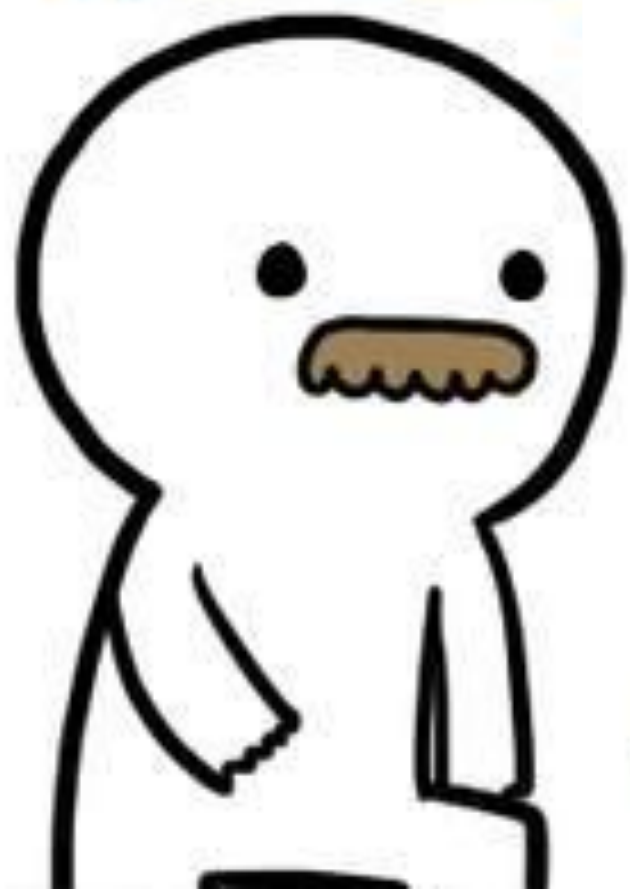
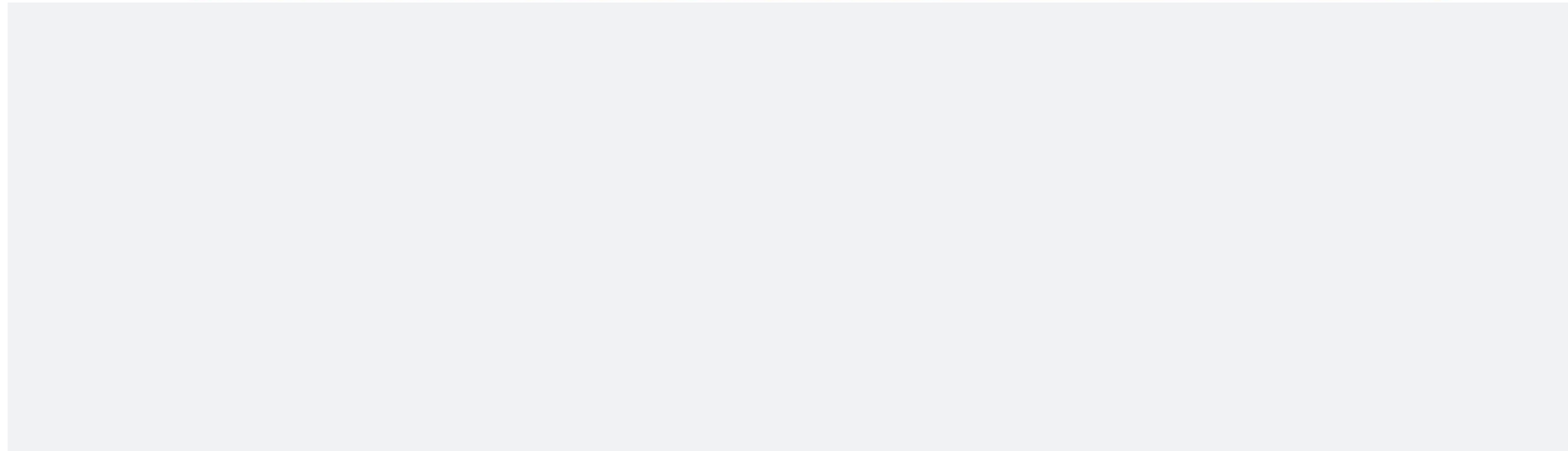
Rate your tools - Development Ecosystem feedback wanted ➤

Hello,

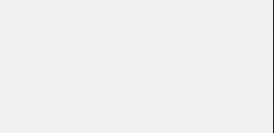
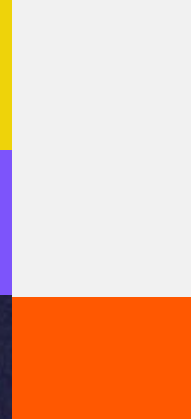
I'm done with [the report](#) and here is the brief TL;DR summary:



b. [lack of documentation](#) making us wandering in the search for knowledge,



Goal





Goal

1. Target groups - “who”




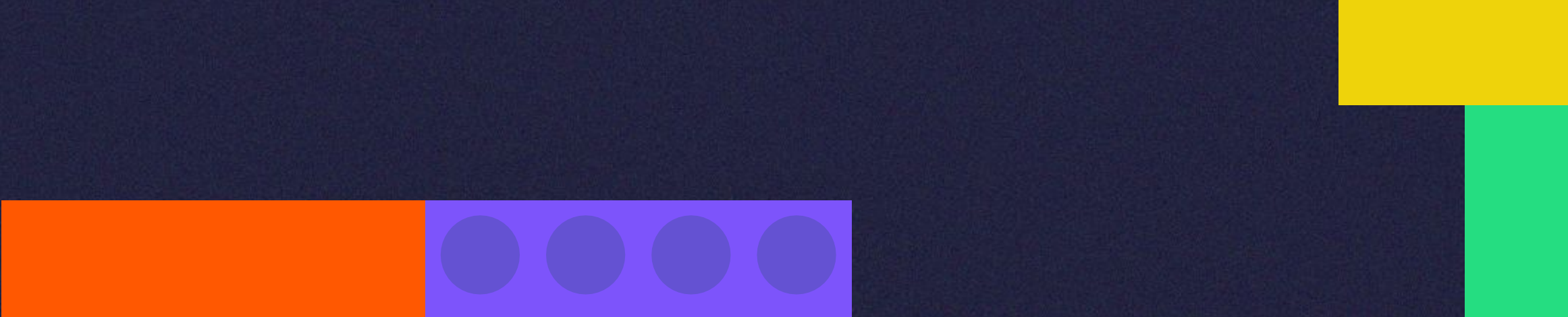


Goal

1. Target groups - “who”
 2. Use cases - “what”
- 

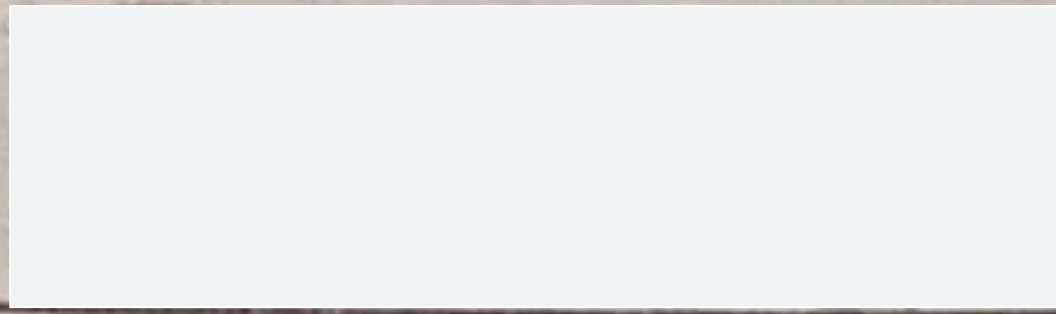


Goal

1. Target groups - “who”
 2. Use cases - “what”
 3. Tooling - “how”
- 
- 

Why?

**My friend told the lady at McDonalds
"It's Stephen, with a ph"...**



216

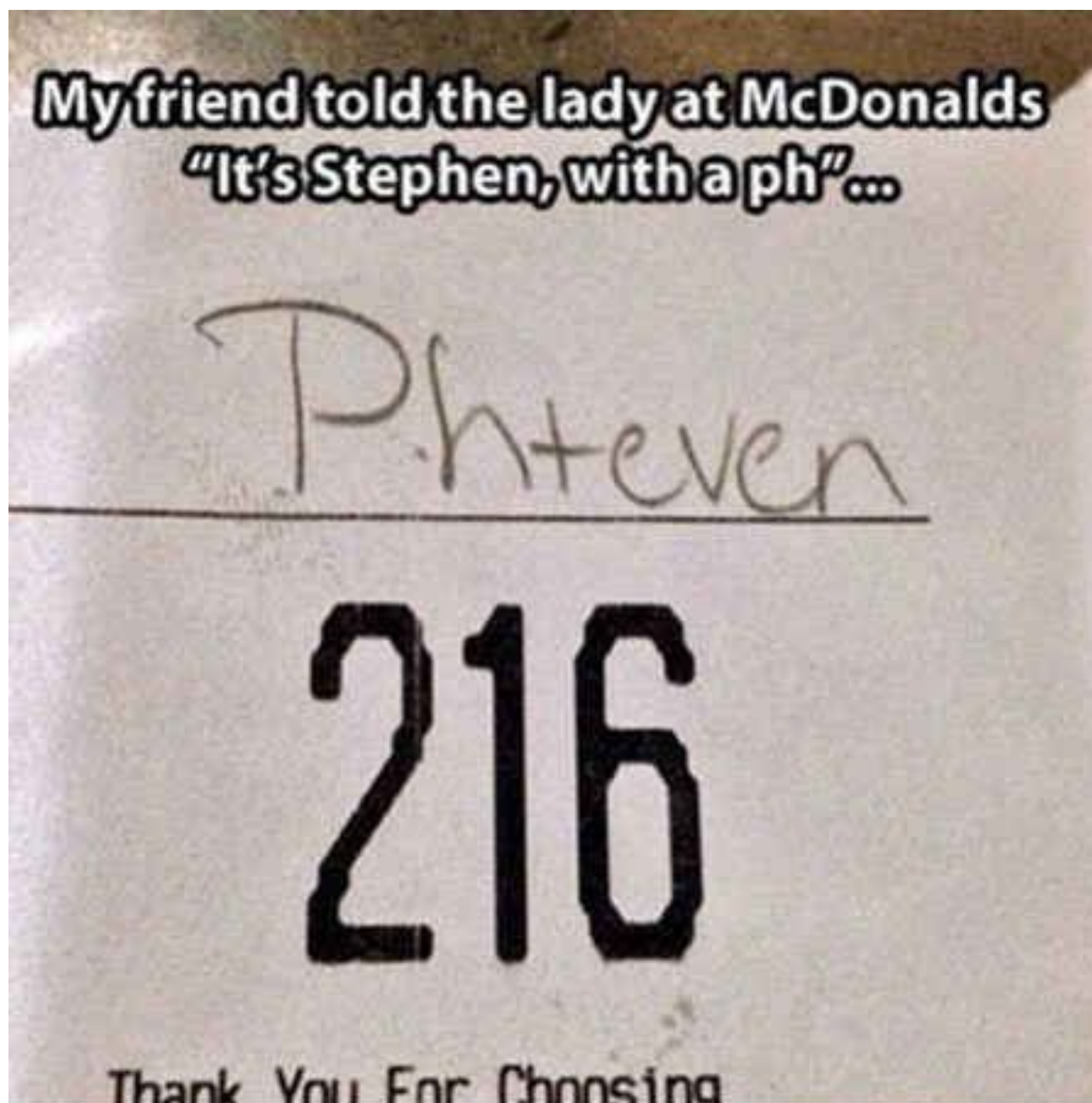
Thank You For Choosing

**My friend told the lady at McDonalds
"It's Stephen, with a ph"...**

Ph+even

216

Thank You For Choosing



P H T E V E N

Target groups - “who”

++ 1.1k --  Reply [Share](#) 



I comment so that 

++ **1.1k** --



Reply

Share





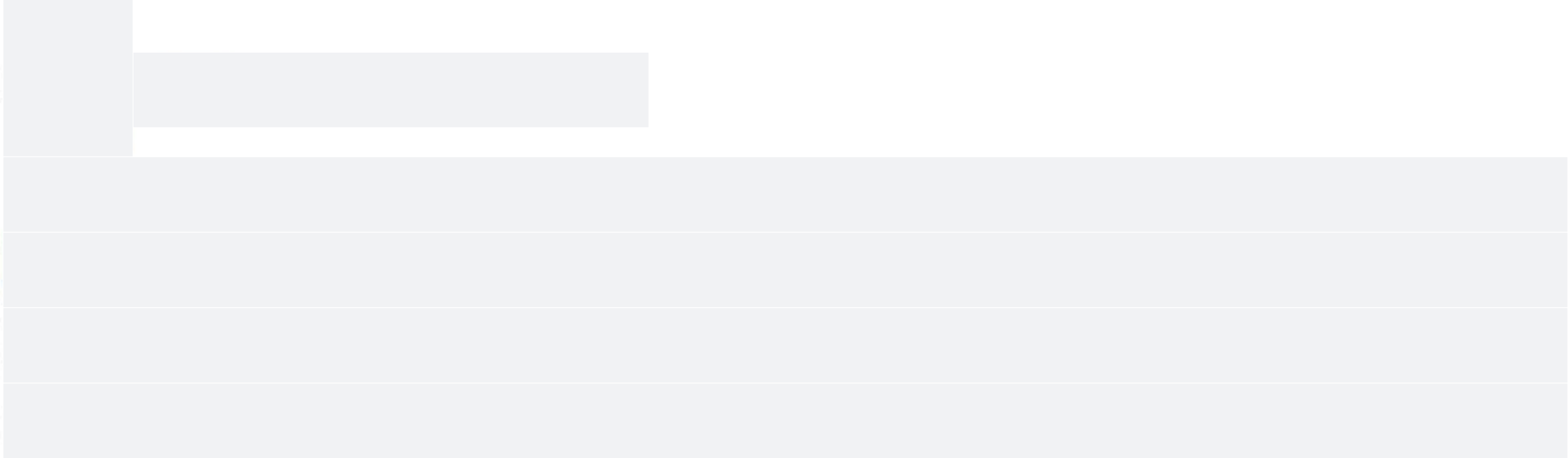
I comment so that *I'll* be able to remember what the hell I was thinking 6 months ago

++ **1.1k** --  Reply [Share](#) ...

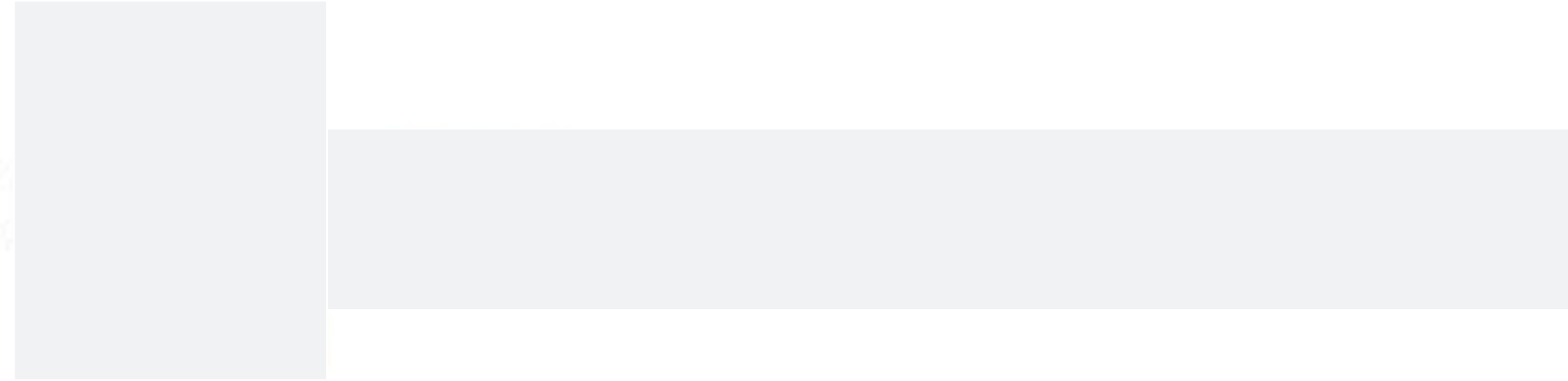




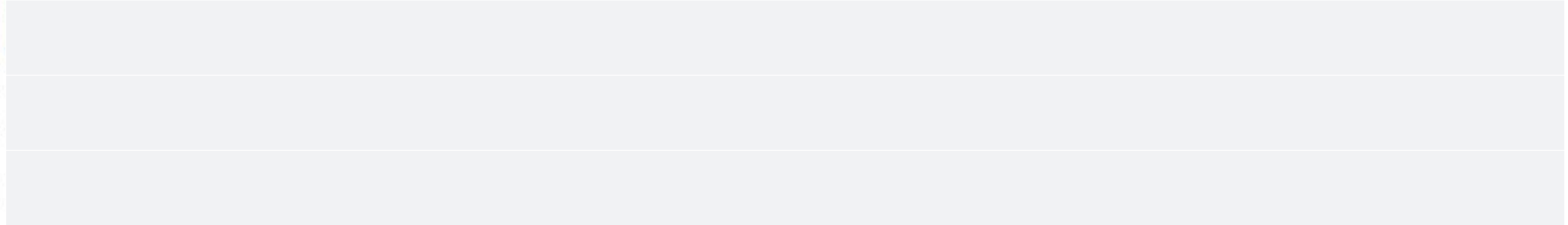
New hires



++ 503 -- Share ...



Exactly. New hires and junior developers represent



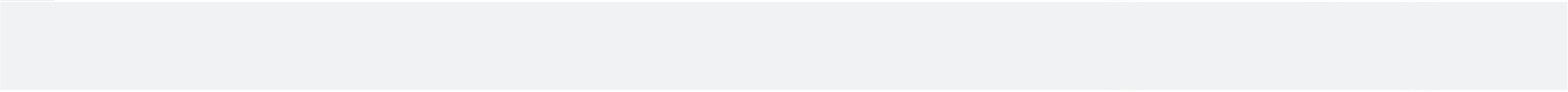
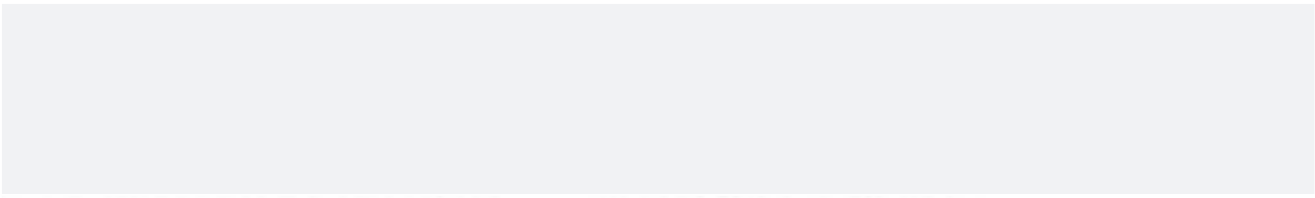
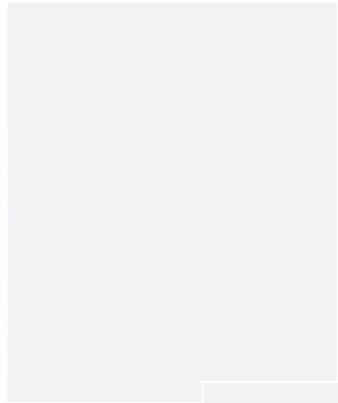
++ 503 -- Share ...

New hires and junior developers represent a golden opportunity to identify cargo cult policies, tribal knowledge, and absent or incorrect documentation in your product.

++ 503 -- Share ...



Bulletproof?



++ 9 --

Share



So hard to make foolproof documentation.

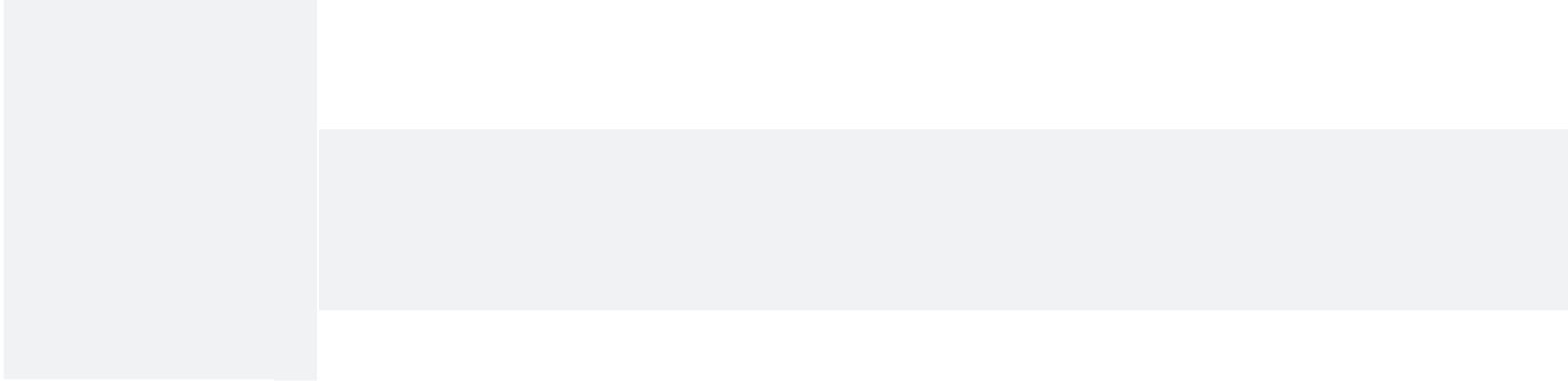
++ 9 -- Share ...



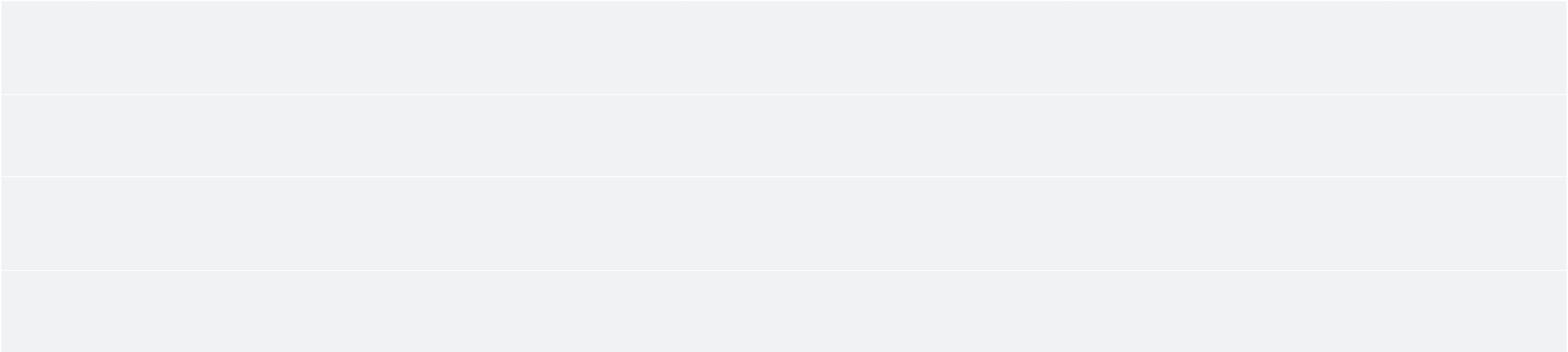
So hard to make foolproof documentation. Fools are too clever.

++ 9 -- Share ...

Loop?



much like writing code, documentation also should go iterative process.



much like writing code, documentation also should go iterative process. If there is someone complaining, i don't understand the doc, ask them back which part that need clarification.

much like writing code, documentation also should go iterative process. If there is someone complaining, i don't understand the doc, ask them back which part that need clarification.

"The example is vague and not explaining the use case". Okay, then write the doc again with common use case. If the doc grow excessively long, split the doc into intuitive section.

much like writing code, documentation also should go iterative process. If there is someone complaining, i don't understand the doc, ask them back which part that need clarification.

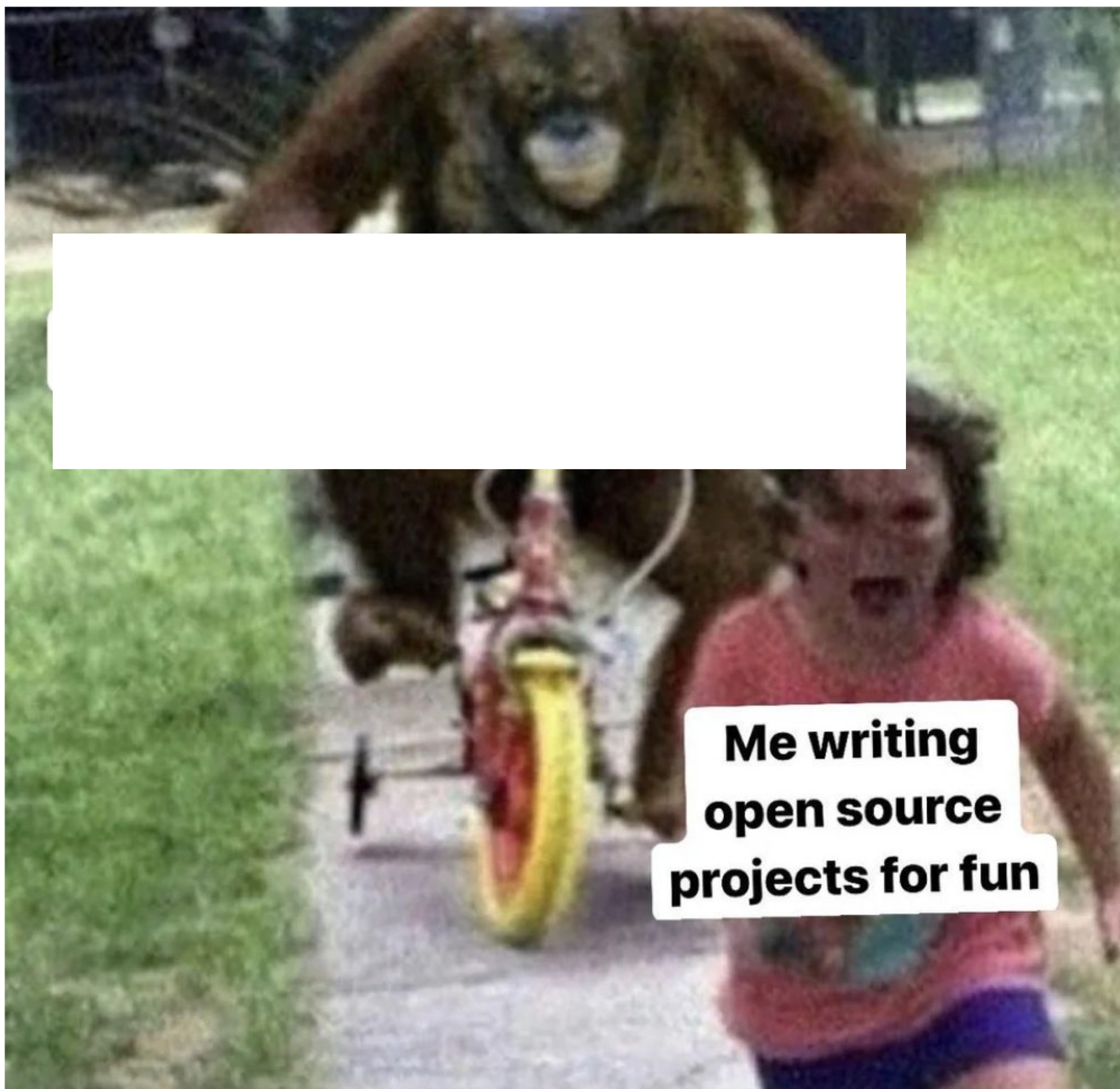
"The example is vague and not explaining the use case". Okay, then write the doc again with common use case. If the doc grow excessively long, split the doc into intuitive section.

Loop

The background is a dark blue gradient. It features several abstract geometric shapes: a yellow square with a white circle inside at the top left; a purple square and a white square below it; a green square and a white square below that; a yellow horizontal bar at the top right; a purple square with a white circle inside below it; a white square and an orange square to its right; a yellow horizontal bar at the bottom right; a white horizontal bar at the bottom left; a yellow horizontal bar with six white circles at the bottom left; an orange horizontal bar at the bottom center; and a purple horizontal bar with four white circles at the bottom center.

Responsibility?





**Me writing
open source
projects for fun**



**Someone actually using it for
some reason and start asking for
documentation and examples**

**Me writing
open source
projects for fun**

Target groups - “who”

Target groups - “who”

You



Target groups - “who”

You

Team devs





Target groups - “who”

You

Team devs

Testers





Target groups - “who”

You

Team devs

Testers

Other devs





Target groups - “who”

You

Team devs

Testers

Other devs

Principals





Target groups - “who”

You

Analysts

Team devs

Testers

Other devs

Principals





Target groups - “who”

You

Team devs

Testers

Other devs

Principals

Analysts

Business



Target groups - “who”

You

Team devs

Testers

Other devs

Principals

Analysts

Business

On duty

Target groups - “who”

You

Team devs

Testers

Other devs

Principals

Analysts

Business

On duty

Compliance

Target groups - “who”

You

Team devs

Testers

Other devs

Principals

Analysts

Business

On duty

Compliance

Auditors

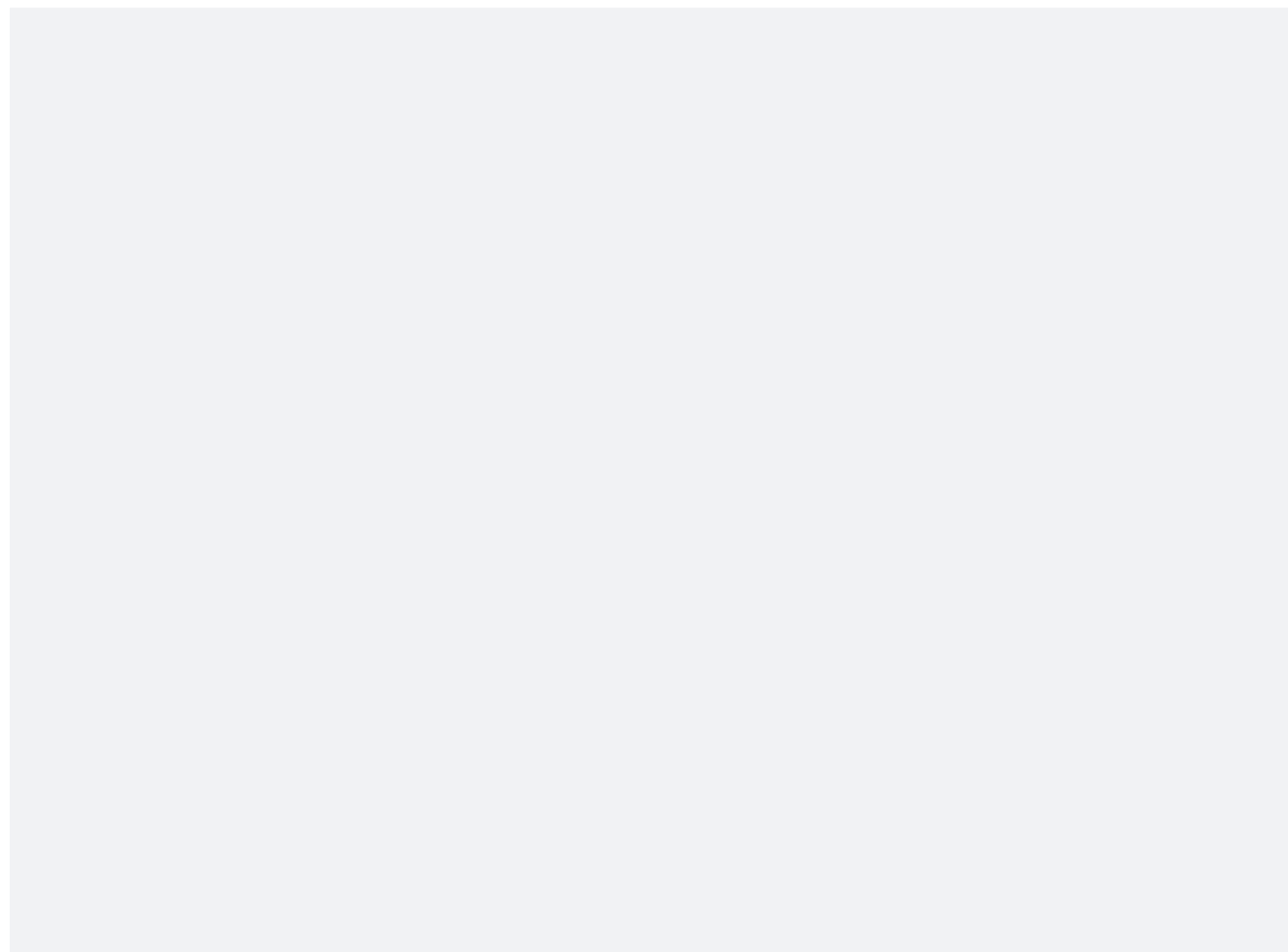


Use cases - “what”

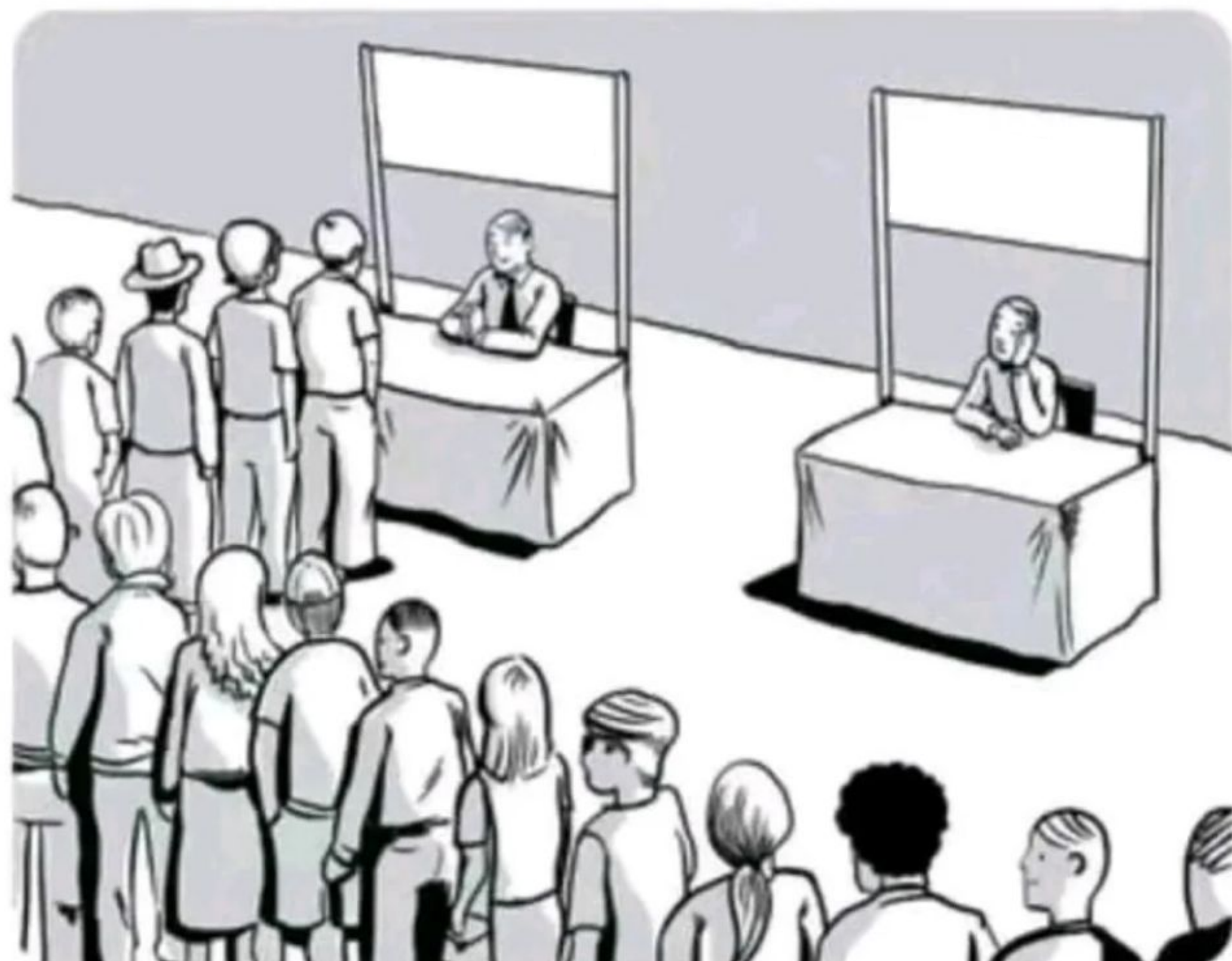
(mixed with recommendations)



Developers searching
for information



Developers searching for information



Developers searching for information



Developers searching for information



Developers searching for information



stackoverflow =



Developers searching for information



**stackoverflow = target_group
* use_cases**



Developers searching for information



**stackoverflow = target_group
* use_cases
* living_doc_ratio**



Developers searching for information



Developers searching
for information



Developers searching
for information



**comprehensive
enough**

easily accessible

Developers searching
for information



The only thing I miss in some documentations is examples

++ 148 --



Reply

Share



The only thing I miss in some documentations is examples, they just define, this thing does this and done.

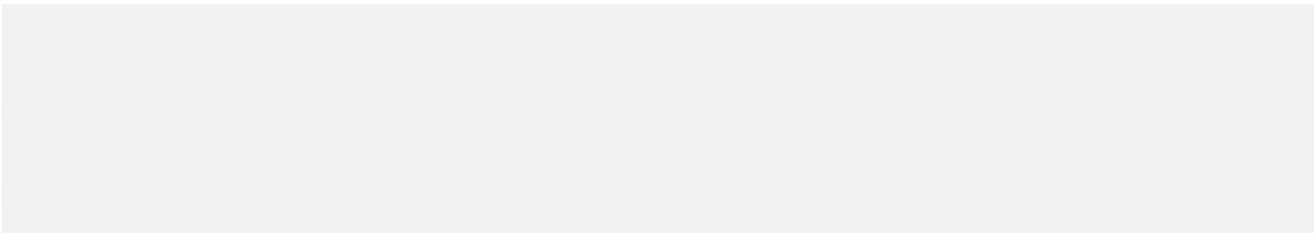
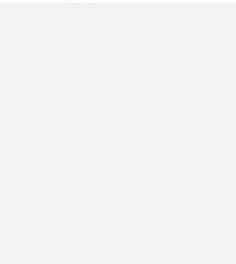
++ 148 --



Reply

Share





The only thing I miss in some documentations is examples, they just define, this thing does this and done. Sometimes I don't understand how to use them actually

++ 148 --



Reply

Share



Syntax Highlighting [🔗](#)

```
```json
{
 "firstName": "John",
 "lastName": "Smith",
 "age": 25
}
```
```




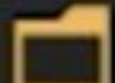


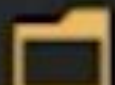
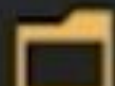
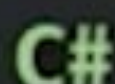
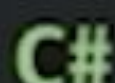
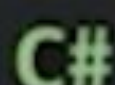
Syntax Highlighting [🔗](#)

```
```json
{
 "firstName": "John",
 "lastName": "Smith",
 "age": 25
}
```
```





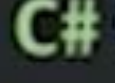
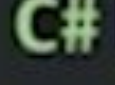
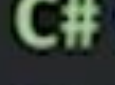
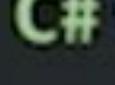
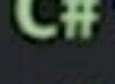
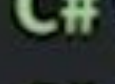
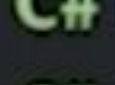
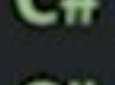
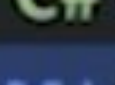
The rendered output looks like this:

```
{
  "firstName": "John",
  "lastName": "Smith",
  "age": 25
}
```

- ▼ Pricing
 - > Discounts
 - > PriceLists
 - > SpecialOffers
 - C# CalculatePrices.cs
 - C# IndividualSalesConditions.cs
 - C# Offer.cs
 - C# OfferModifier.cs
 - C# OfferModifiers.cs
 - C# OfferRequest.cs
 - C# PriceModifier.cs
 - C# Quote.cs
 - C# QuoteModifier.cs
 - M↓ README.md

- ▼  Sales.DeepModel
 - >  Dependencies
 - >  Clients
 - >  Commons
 - >  ExchangeRates
 - >  Integrations
 - ▼  Orders
 - >  PriceChanges
 -  AllOrderDetails.cs
 -  InvoicingDetails.cs
 - ▼  Order.cs

M↓ Order.md

- ▼  Pricing
 - >  Discounts
 - >  PriceLists
 - >  SpecialOffers
 -  CalculatePrices.cs
 -  IndividualSalesConditions.cs
 -  Offer.cs
 -  OfferModifier.cs
 -  OfferModifiers.cs
 -  OfferRequest.cs
 -  PriceModifier.cs
 -  Quote.cs
 -  QuoteModifier.cs

M↓ README.md



Automatic?

```
1 openapi: "3.0.0"
2 info:
3   version: 1.0.0
4   title: Swagger Petstore
5   license:
6     name: MIT
7 servers:
8   - url: http://petstore.swagger.io/v1
9 paths:
10  /pets:
11    get:
12      summary: List all pets
13      operationId: listPets
14      tags:
15        - pets
16      parameters:
17        - name: limit
18          in: query
19          description: How many items to return at one
20            time (max 100)
21          required: false
22          schema:
23            type: integer
24            format: int32
25      responses:
26        '200':
27          description: A paged array of pets
28          headers:
29            x-next:
30              description: A link to the next page of
31                responses
32              schema:
33                type: string
```

Swagger Petstore 1.0.0 OAS3

MIT

Servers

http://petstore.swagger.io/v1

pets

GET

/pets List all pets

POST

/pets Create a pet

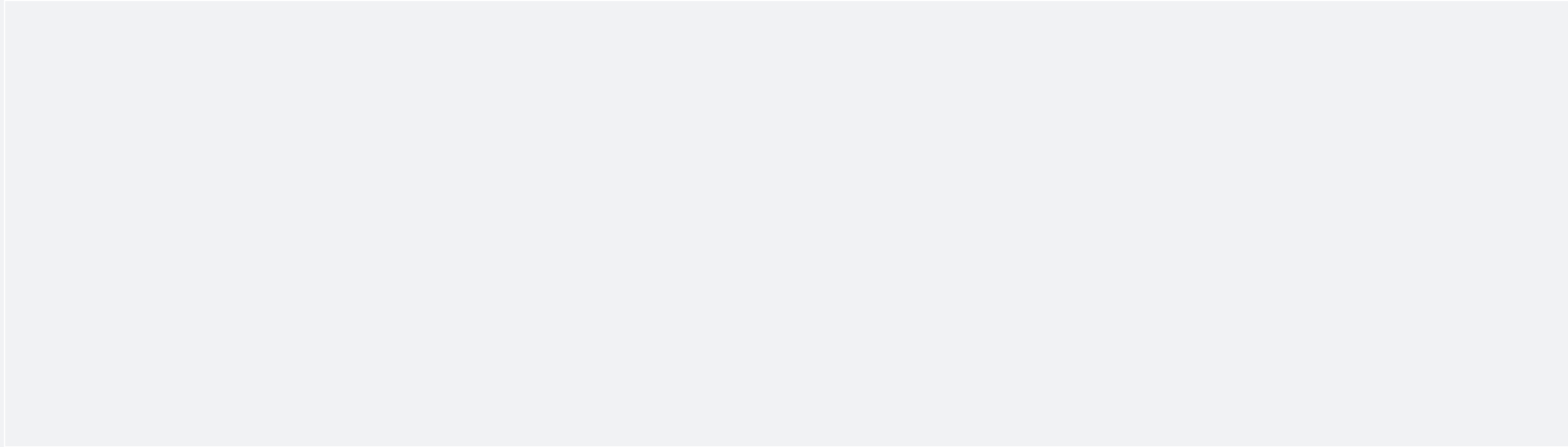
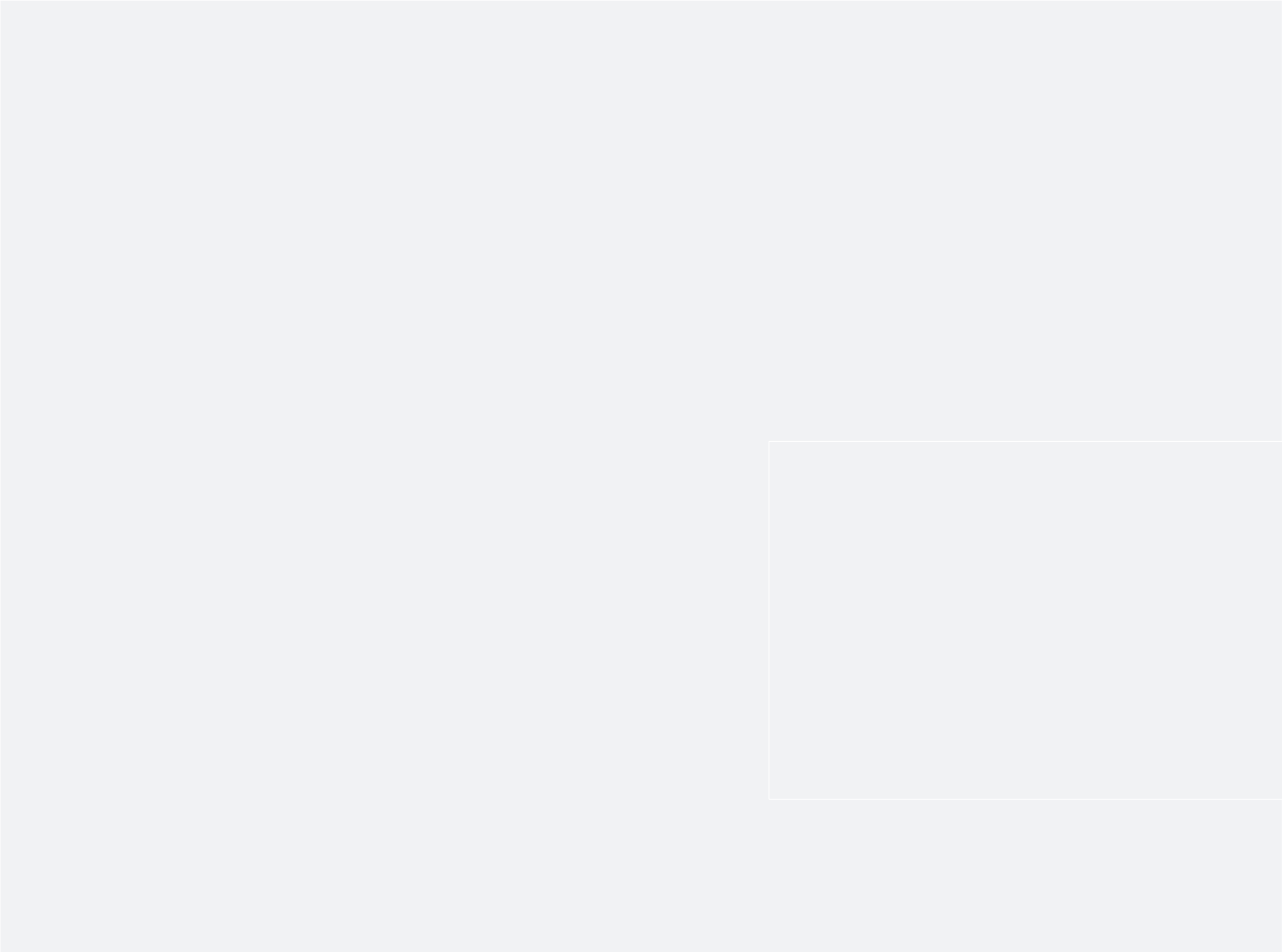
GET

/pets/{petId} Info for a specific pet

Models

examples?

Generating Swagger example requests with Swashbuckle



Generating Swagger example requests with Swashbuckle

```
1 public class DeliveryOptionsSearchModelExample
2 {
3     public object GetExamples()
4     {
5         return new DeliveryOptionsSearchModel
6         {
7             Lang = "en-GB",
8             Currency = "GBP",
9             Address = new AddressModel
10            {
11                Address1 = "1 Gwalior Road",
12                Locality = "London",
13                Country = "GB",
14                PostalCode = "SW15 1NP"
15            },
16            Items = new[]
17            {
18                new ItemModel
19                {
20                    ItemId = "ABCD",
21                    ItemType = ItemType.Product,
22                    Price = 20,
23                    Quantity = 1,
24                    RestrictedCountries = new[] { "US" }
25                }
26            }
27        };
28    }
```

Generating Swagger example requests with Swashbuckle

```
1 public class DeliveryOptionsSearchModelExample : IExamplesProvider
2 {
3     public object GetExamples()
4     {
5         return new DeliveryOptionsSearchModel
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8             Currency = "GBP",
9             Address = new AddressModel
10            {
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12                Locality = "London",
13                Country = "GB",
14                PostalCode = "SW15 1NP"
15            },
16            Items = new[]
17            {
18                new ItemModel
19                {
20                    ItemId = "ABCD",
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26            }
27        };
28    }
```

Generating Swagger example requests with Swashbuckle

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15            },
16            Items = new[]
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18                new ItemModel
19                {
20                    ItemId = "ABCD",
21                    ItemType = ItemType.Product,
22                    Price = 20,
23                    Quantity = 1,
24                    RestrictedCountries = new[] { "US" }
25                }
26            }
27        };
28    }

```

```
1 services.AddSwaggerGen(c =>
2     {
3         c.SwaggerDoc("v1", new Info { Title = "My API",
4         c.OperationFilter<ExamplesOperationFilter>());

```



Generating Swagger example requests with Swashbuckle

```
11
12 public class WeatherForecast
13 {
14     /// <summary>
15     /// The date of the forecast in ISO-whatever format
16     /// </summary>
17     public DateTime Date { get; set; }
18
19     /// <summary>
20     /// Temperature in celcius
21     /// </summary>
22     /// <example>25</example>
23     public int TemperatureC { get; set; }
24
25     public int TemperatureF => 32 + (int)(TemperatureC / 0.5556);
26
27     / <summary>
28     /// A textual summary
29     /// </summary>
30     /// <example>Cloudy with a chance of rain</example>
31     public string Summary { get; set; }
32 }
```

Generating Swagger example requests with Swashbuckle

```
11
12 public class WeatherForecast
13 {
14     /// <summary>
15     /// The date of the forecast in
16     /// </summary>
17     public DateTime Date { get; set;
18
19     /// <summary>
20     /// Temperature in celcius
21     /// </summary>
22     /// <example>25</example>
23     public int TemperatureC { get; s
24
25     public int TemperatureF => 32 +
26
27     / <summary>
28     /// A textual summary
29     /// </summary>
30     /// <example>Cloudy with a chanc
31     public string Summary { get; set
32 }
```

WeatherForecast

GET /WeatherForecast

POST /WeatherForecast

Parameters

No parameters

Request body

Example Value | Schema

```
{
  "date": "2020-04-21T10:20:08.994Z",
  "temperatureC": 25,
  "summary": "Cloudy with a chance of rain"
}
```

Responses

self-documenting code sound so good in theory,

++ 426 --  [Reply](#) [Share](#) [...](#)

self-documenting code sound so good in theory, but in practice, that shit just works when the project is small, and little people works on it.

++ 426 --  Reply [Share](#) 

```
///<summary>
///  Gets or sets the widget.
///</summary>
public object Widget { get; set; }
```

++ 585 -- Share ...

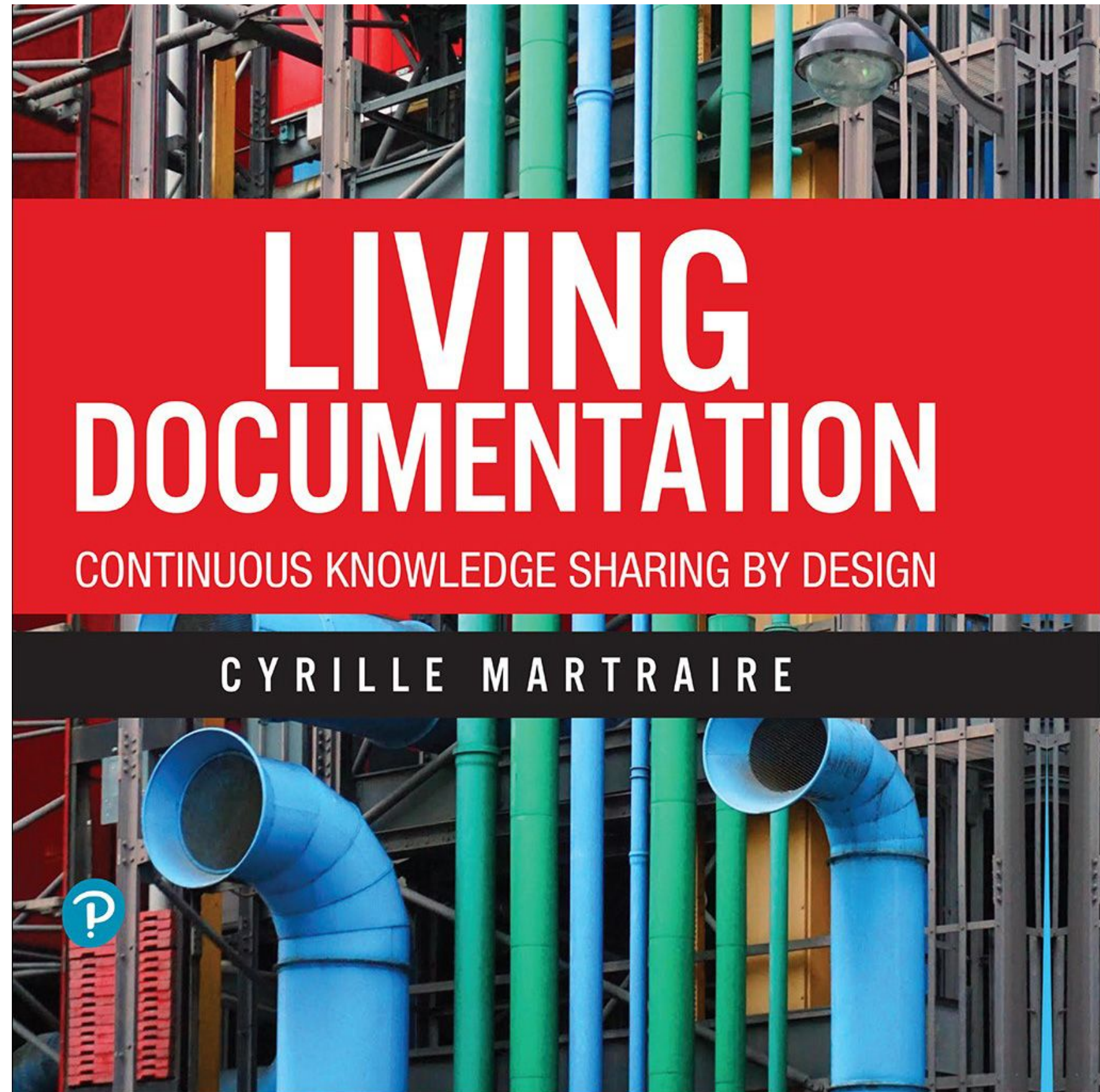
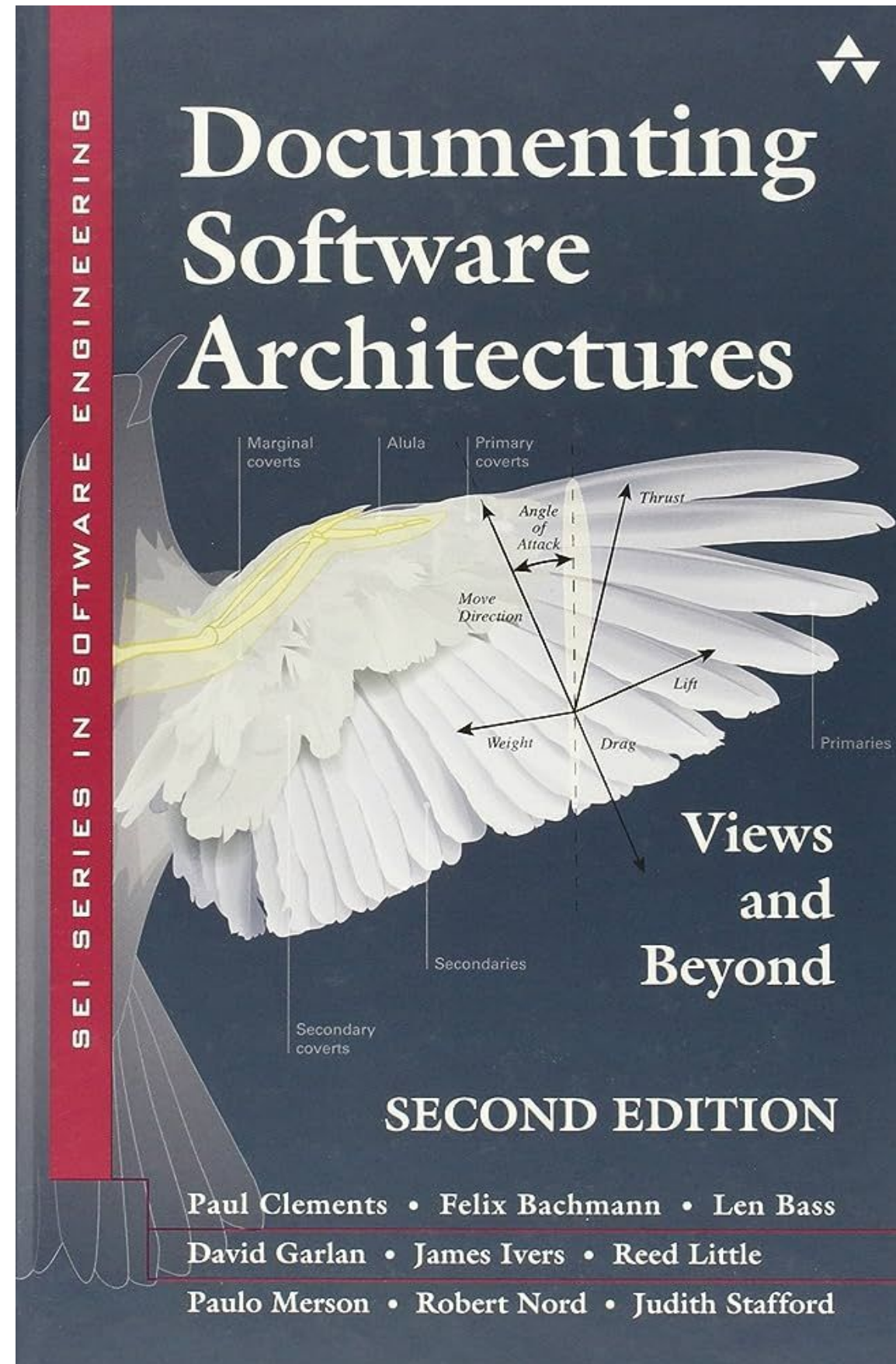


LIVING DOCUMENTATION

CONTINUOUS KNOWLEDGE SHARING BY DESIGN

CYRILLE MARTRAIRE

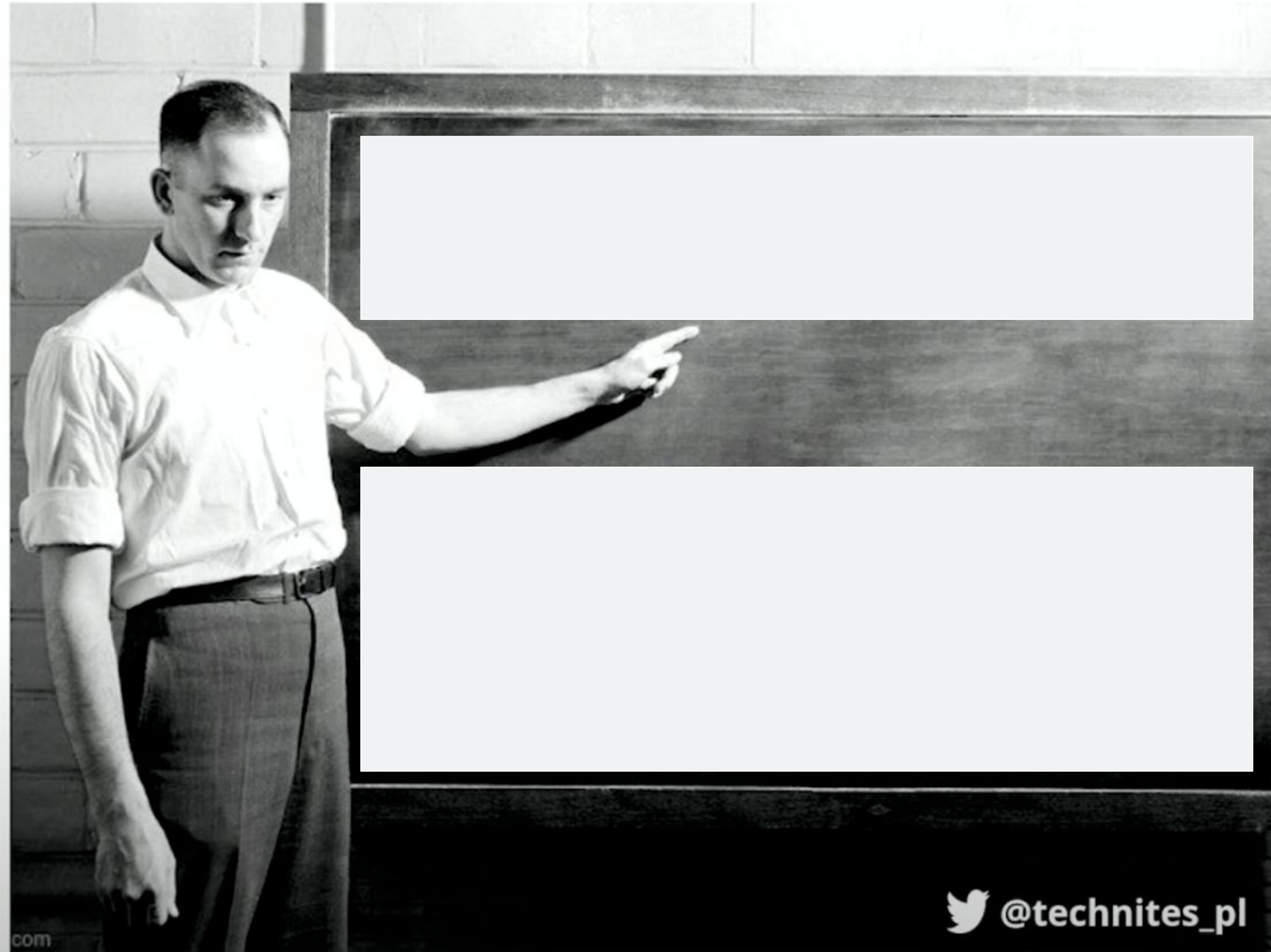




BoilingFrogs

DOKUMENTACJA, KTÓRA SAMA SIĘ PISZE

MARCIN MARKOWSKI
Software Architect and Trainer
TECHNITES_PL



@technites_pl



17:49 / 55:49



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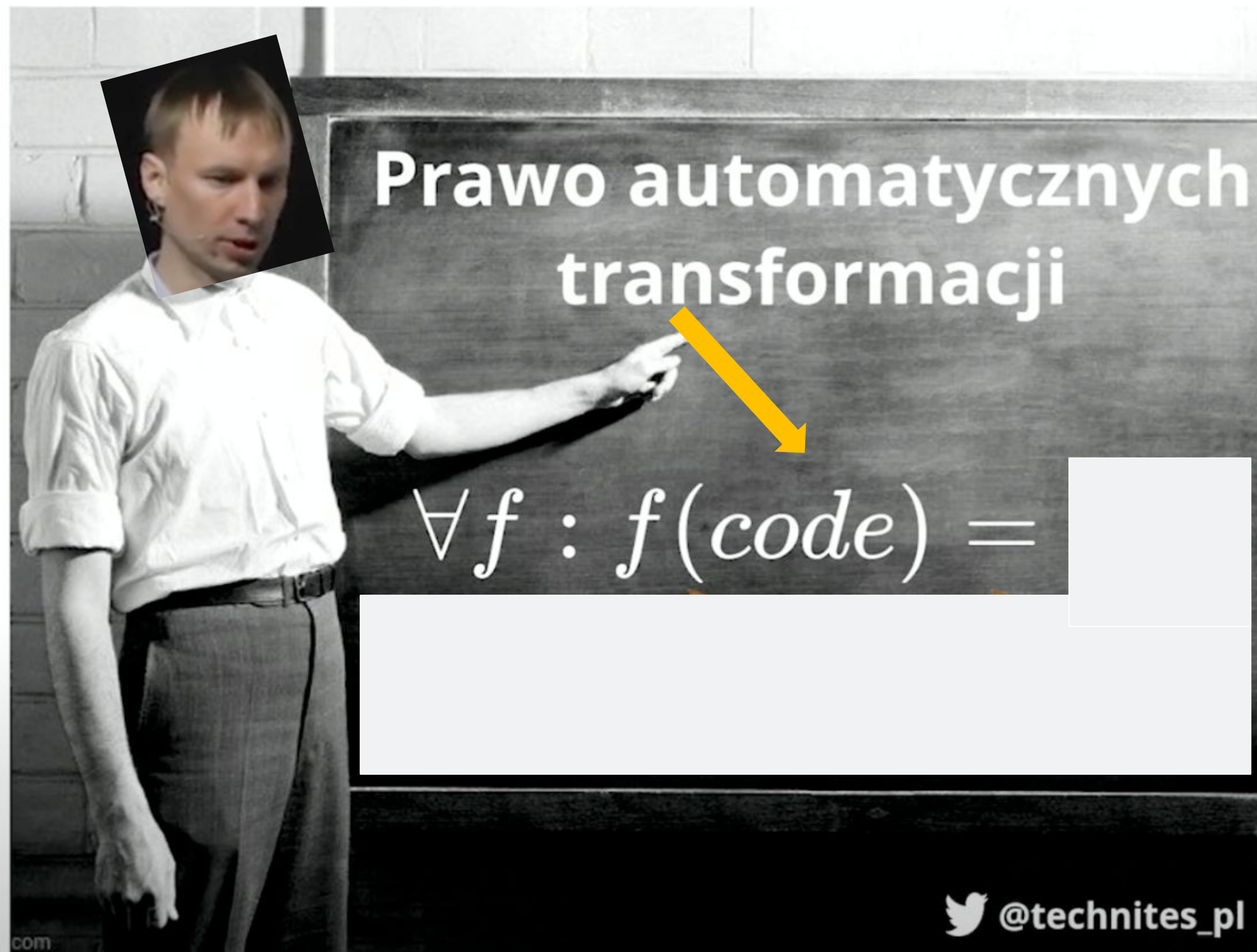


17:49 / 55:49



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Software Architect and Trainer
TECHNITES_PL



Prawo automatycznych transformacji

$$\forall f : f(\textit{code}) =$$

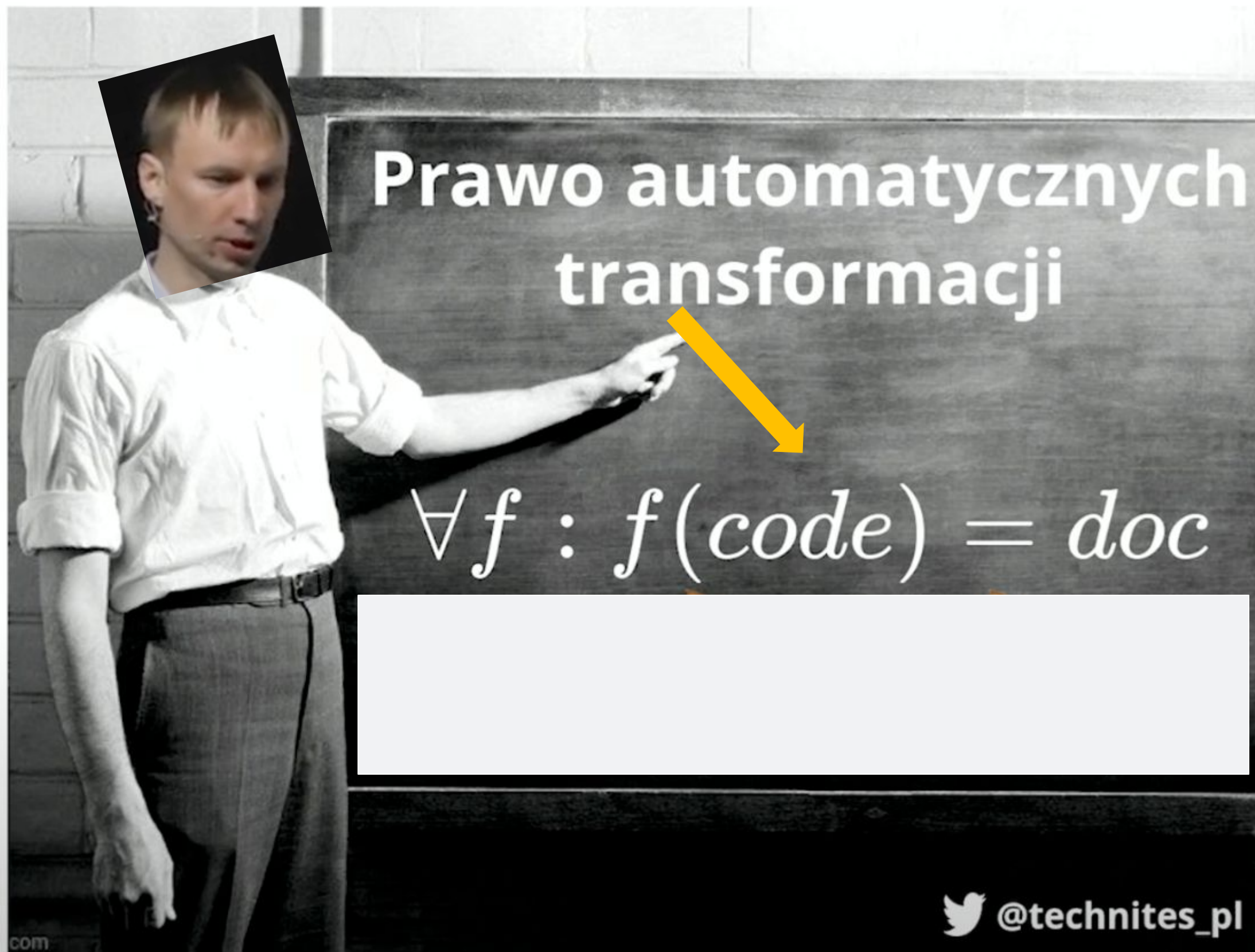
@technites_pl

The image shows a man in a white shirt pointing at a chalkboard. The chalkboard contains the text "Prawo automatycznych transformacji" and the mathematical expression $\forall f : f(\textit{code}) =$. A yellow arrow points from the word "transformacji" to the equals sign. There are two white rectangular boxes, one below the equals sign and one below the entire expression. The man is also pointing at the first white box. The video player interface at the bottom shows a Twitter handle @technites_pl and navigation arrows.



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Software Architect and Trainer
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Prawo automatycznych transformacji

$$\forall f : f(\text{code}) = \text{doc}$$

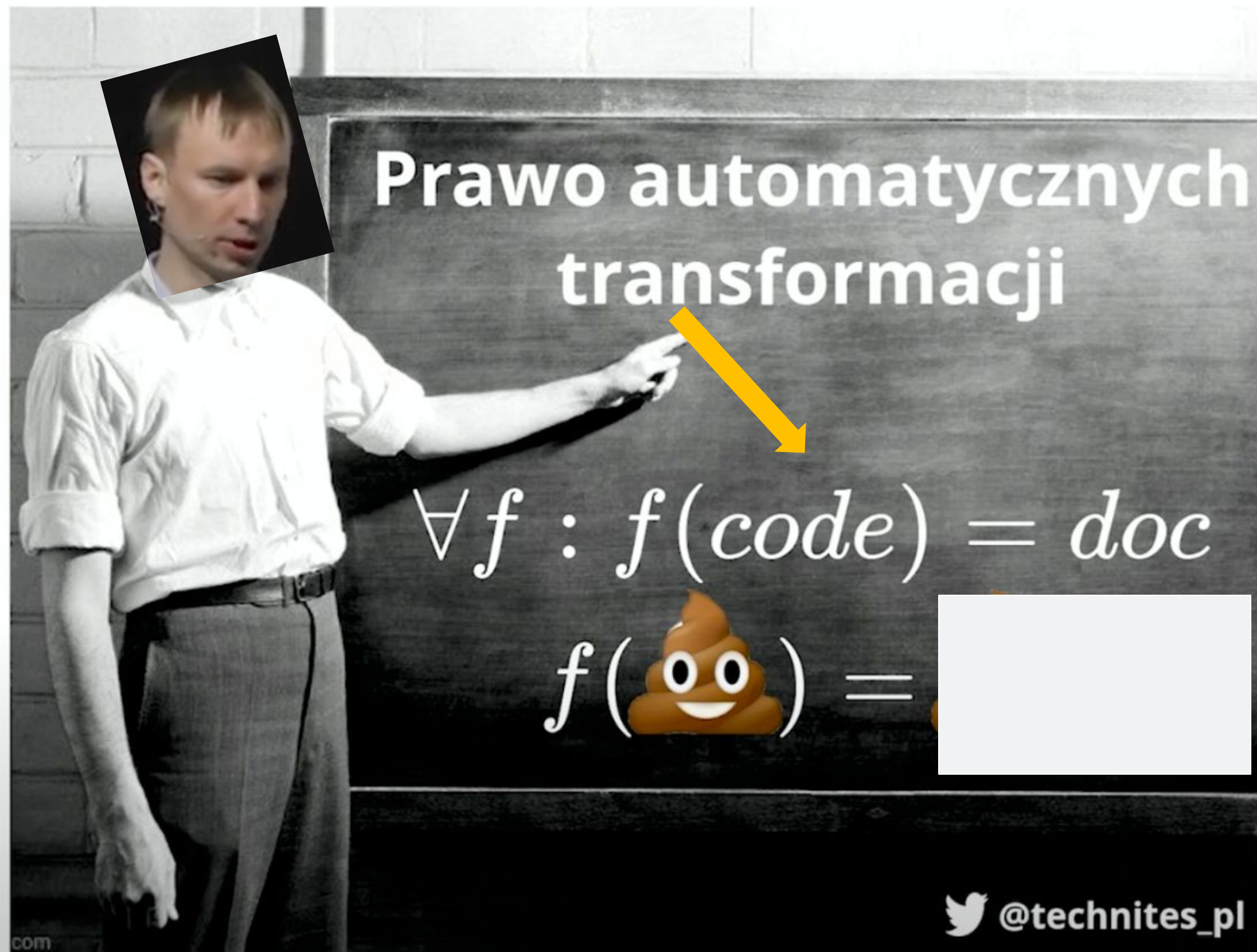
@technites_pl

The image shows a man in a white shirt pointing at a chalkboard. The chalkboard contains the text 'Prawo automatycznych transformacji' and the mathematical expression $\forall f : f(\text{code}) = \text{doc}$. A yellow arrow points from the word 'transformacji' to the expression. The man is also pointing at the expression. The background is a dark chalkboard with a white brick wall behind it.



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Prawo automatycznych transformacji

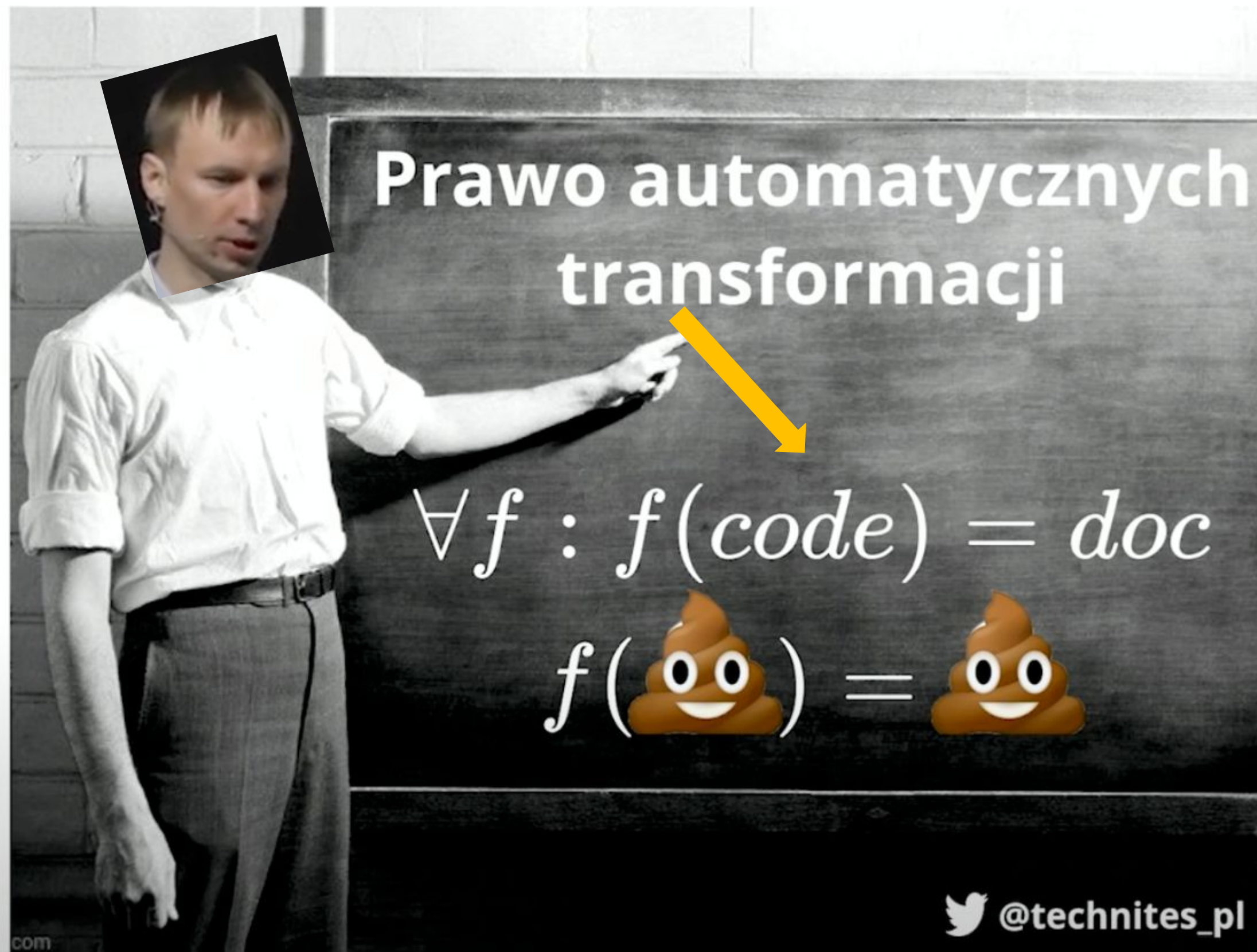
$$\forall f : f(\text{code}) = \text{doc}$$
$$f(\text{💩}) = \text{[redacted]}$$

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Prawo automatycznych transformacji

$$\forall f : f(\text{code}) = \text{doc}$$
$$f(\text{💩}) = \text{💩}$$

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P3-model Public 👁 Watch 17 ▾ 🍴 Fork 1 ▾ ★ Starred 38 ▾

🔗 main ▾ | 🔗 2 branches | 🏷 0 tags | Go to file | Add file ▾ | <> Code ▾

| | | |
|---|-------------------------|--------------|
| technites-pl <code>.gitignore</code> | d13105b on Apr 21 | 🕒 17 commits |
| <code>.gitignore</code> | <code>.gitignore</code> | 5 months ago |
| <code>Elements.md</code> | meta model draft | 5 months ago |
| <code>LICENSE</code> | Update LICENSE | 6 months ago |
| <code>MetaModel.md</code> | meta model draft | 5 months ago |
| <code>README.md</code> | Update README.md | 5 months ago |

☰ **README.md**

P3 Model

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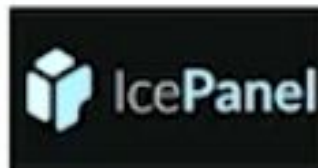








P3 Model is a tool to navigate throughout complex software systems from all important perspectives at all level of details for everyone involved in system development including nontechnical people.










About
P3 Model is a tool to navigate throughout complex software systems




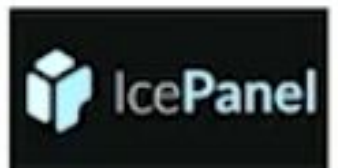
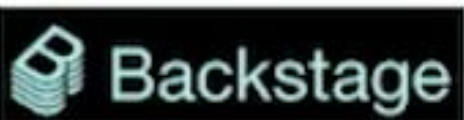













- 📖 Readme
- 📄 CC-BY-SA-4.0 license
- 📊 Activity
- ★ 38 stars
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- 🍴 1 fork
- [Report repository](#)

Releases
No releases published

Packages
No packages published

| | | | |
|---------------|--|---|---|
| | 
 CONTEXT MAPPER
 |  Structurizr
 IcePanel
 Backstage
 CodeSee
 AppMap |  Team Topologies |
| Domain |  |  |   |
| | | | |
| | | | |
| | | | |

| | | | |
|-------------------|---|---|---|
| |  |  |  |
| Domain |  |  |  |
| Technology |  |  |  |
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 | 



 |  |
| Domain |  |  |   |
| Technology |  |  |  |
| People |  |  |  |
| | | | |



60. O technikach Living Documentation i modelu P3 z Marcinem Markowskim

MAY 16TH, 2023 | 01:10:20 | E60

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EPISODE SUMMARY

Istnieją trzy rodzaje dokumentacji. Przy czym pierwszy rodzaj to taki, który... nie istnieje. A o dwóch pozostałych dowiesz się z tego odcinka.

EPISODE NOTES

Istnieją trzy rodzaje dokumentacji. Przy czym pierwszy rodzaj to taki, który... nie istnieje. A o dwóch pozostałych dowiesz się z tego odcinka.

Dziś moim gościem jest Marcin Markowski, a rozmawiać będziemy o dokumentacji i sposobach na utrzymanie jej aktualności. Bo niestety, mało co tak przeszkadza podczas pracy jak dokumentacja, na której nie można polegać.

W tym odcinku rozmawiamy z Marcinem m.in. o:

- o co i dlaczego warto dokumentować podczas prac nad projektem,
- o typowych problemach z dokumentacją, w tym
- o koncepcie Living Documentation autorstwa Cyrille Martraire,
- o strategiach i konwencjach pozwalających utrzymać aktualność dokumentacji wbudowanej w projekt,
- o założeniach modelu P3 i różnych perspektywach dokumentacji.

Files

master

Go to file

- Build
- Docs/P3
 - DocsGenerator
 - JsonOutput
 - MermaidOutput
 - Domain
 - Concepts
 - Glossary
 - Domain_Glossary.md
 - Order.md
 - Processes
 - Risk management
 - Sale
 - BusinessProcesseses.md
 - People
 - BusinessOrganizationalUnits
 - DevelopmentTeams
 - Technology/DeployableUnits
 - DeployableUnits.md
 - EcommerceMonolith.md
 - README.md
 - Sources
 - Contacts/Contacts
 - Payments
 - ProductsDelivery
 - RiskManagement
 - Sales
 - Startup
 - TechnicalStuff
 - DomainVisionStatement.md

technites-pl P3 docs

dcc7219 · yesterday History

Preview Code Blame 168 lines (135 loc) · 5.03 KB

Raw Copy Download Edit

ecommerce-monolith

Deployable Unit

This view contains details information about ecommerce-monolith deployable unit, including:

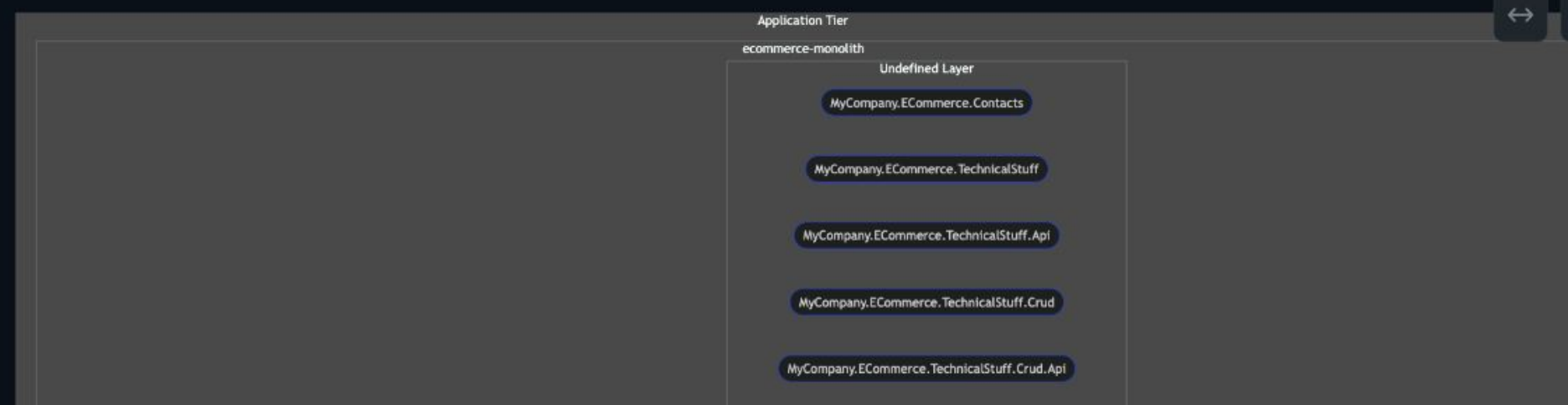
- related domain modules
- related development teams

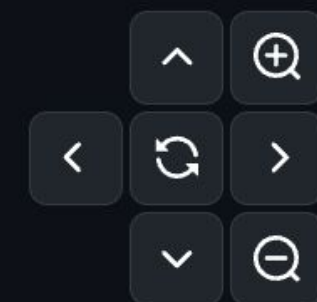
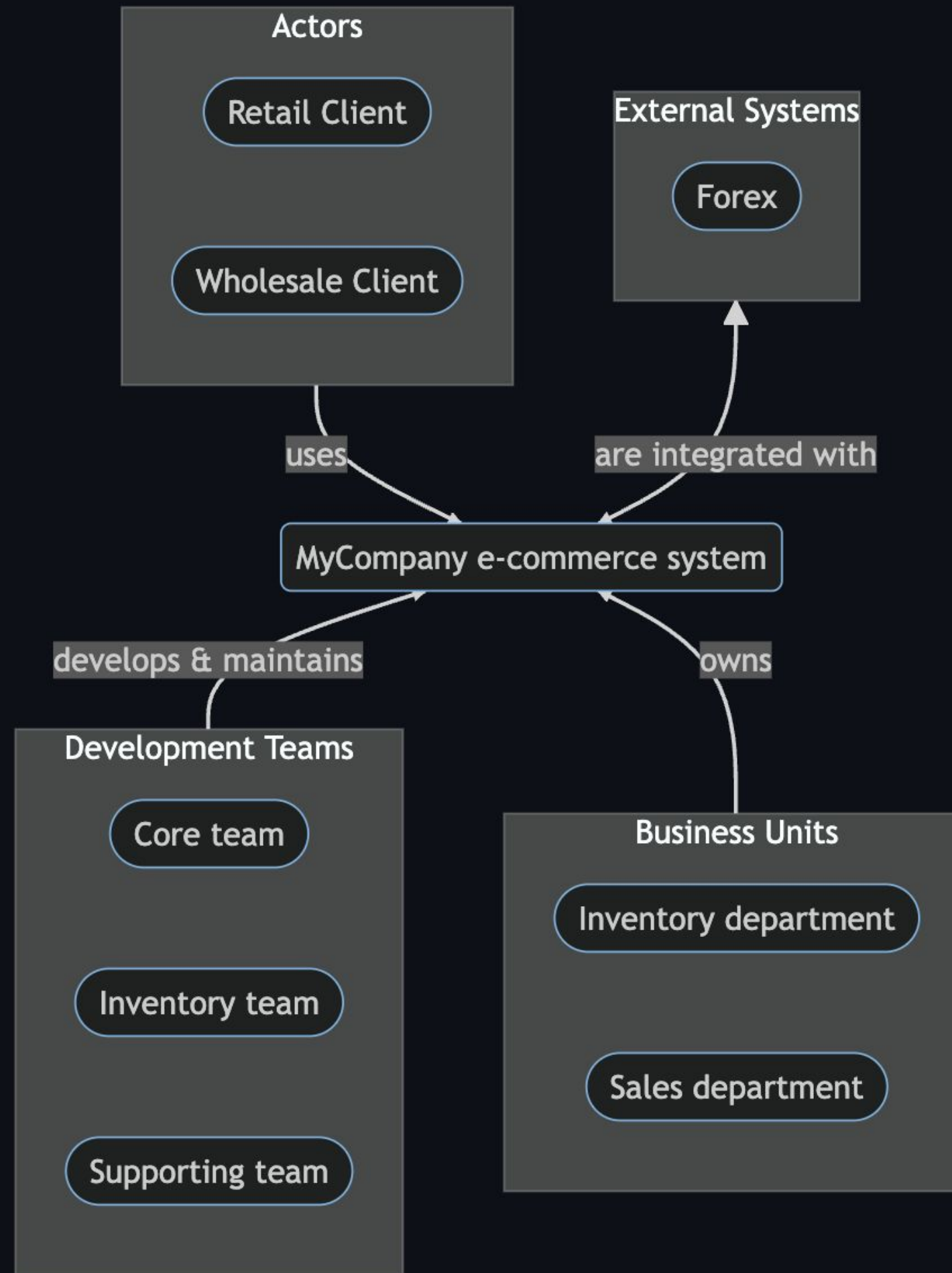
Domain Perspective

Related domain modules



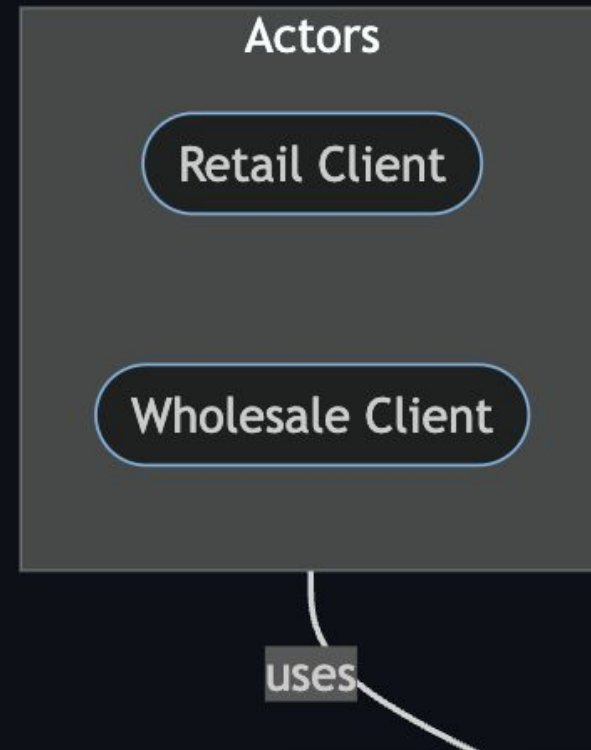
Technology Perspective







uses



SEARCH

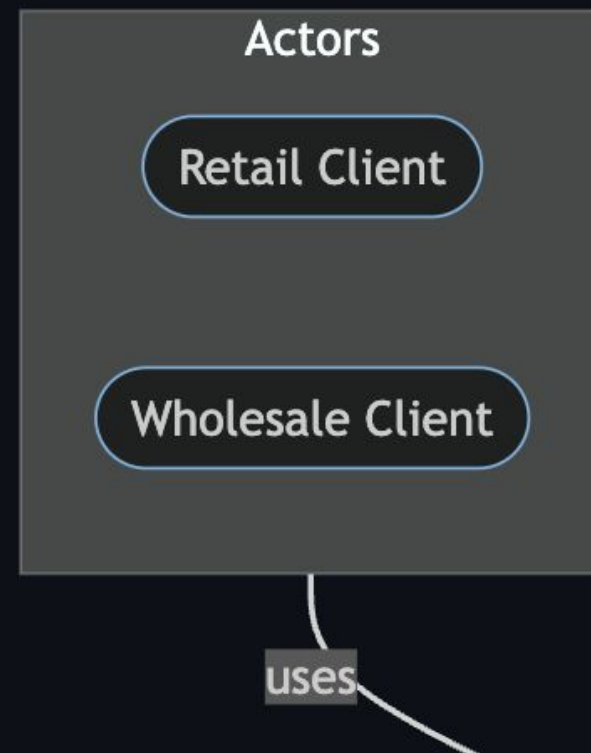


> [Actor(Actors.RetailClient)]

Aa ab * ...

2 results in 2 files - [Open in editor](#)

- ✓ **C#** PriceCartHandler.cs Sources/Sales/Sales.Proc... 1
[Actor(Actors.RetailClient)]
- ✓ **C#** PlaceOrderHandler.cs Sources/Sales/Sales.Proc... 1
[Actor(Actors.RetailClient)]



Marcin Markowski, last month | 1 author (Marcin Markowski)

```
[Actor(Actors.RetailClient)]
```

1 reference

```
public class PlaceOrderHandler : CommandHandler<PlaceOrder, OrderPlaced>
{
```

2 references

await P3

```
.Product(product => product.UseName("MyCompany e-commerce"))
.Repositories(repositories => repositories.Use(repositoryPath))
.Analyzers(analyzers => analyzers
    .UseDefaults(options => options
        .TreatNamespacesAsDomainModules(namespaces => namespaces
            .OnlyFromAssembliesAnnotatedWith<DomainModelAttribute>()
            .RemoveRootNamespace("MyCompany.ECommerce")))
    .OutputFormat(formatters => formatters
        .UseMermaid(options => options
            .Directory($"{outputPath}/MermaidOutput")
            .UseDefaultPages())
    .Analyze();
```

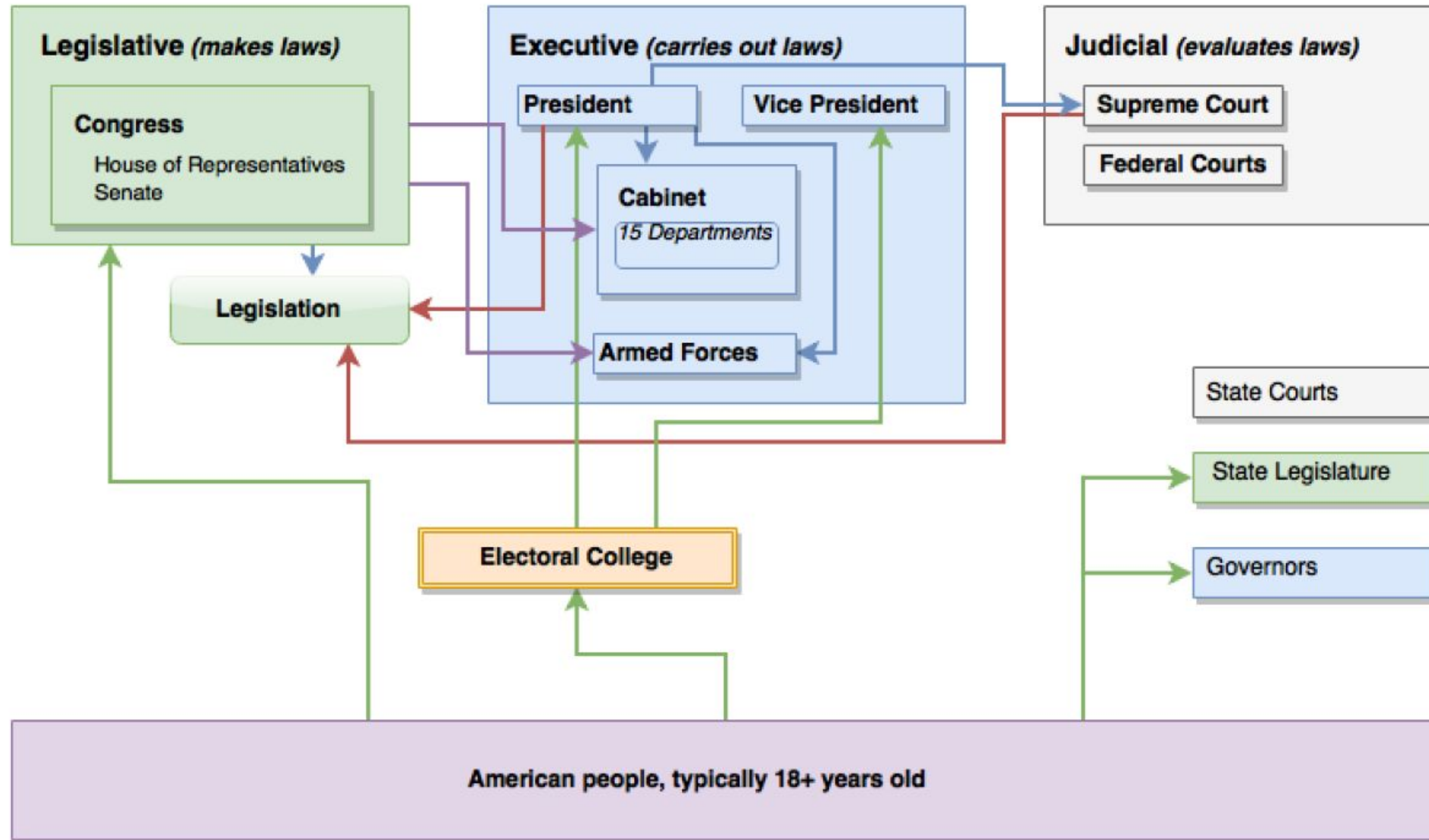
using text

The American political system is broken into three parts. The Legislative branch consists of the Congress and the Senate and proposes legislation. Adapted from Political System of the United States, by 111Alleskönner (CC BY-SA 3.0 DE)

Legislators are elected by the American people. The Executive branch carries out the legislation, and consists of the President, the Vice President, the Cabinet and the Armed Forces. The Cabinet represents 15 departments, and these representatives are appointed directly by the President, but need to be approved by Congress. The Judicial branch evaluates legislation. The supreme court representatives are appointed directly by the President. Both the President and the Supreme Court can veto or appeal legislation. The American people elect people into the Electoral College, who then elect the President, and the Vice President. In addition to the federal political system, states have their own courts, legislators and governors.

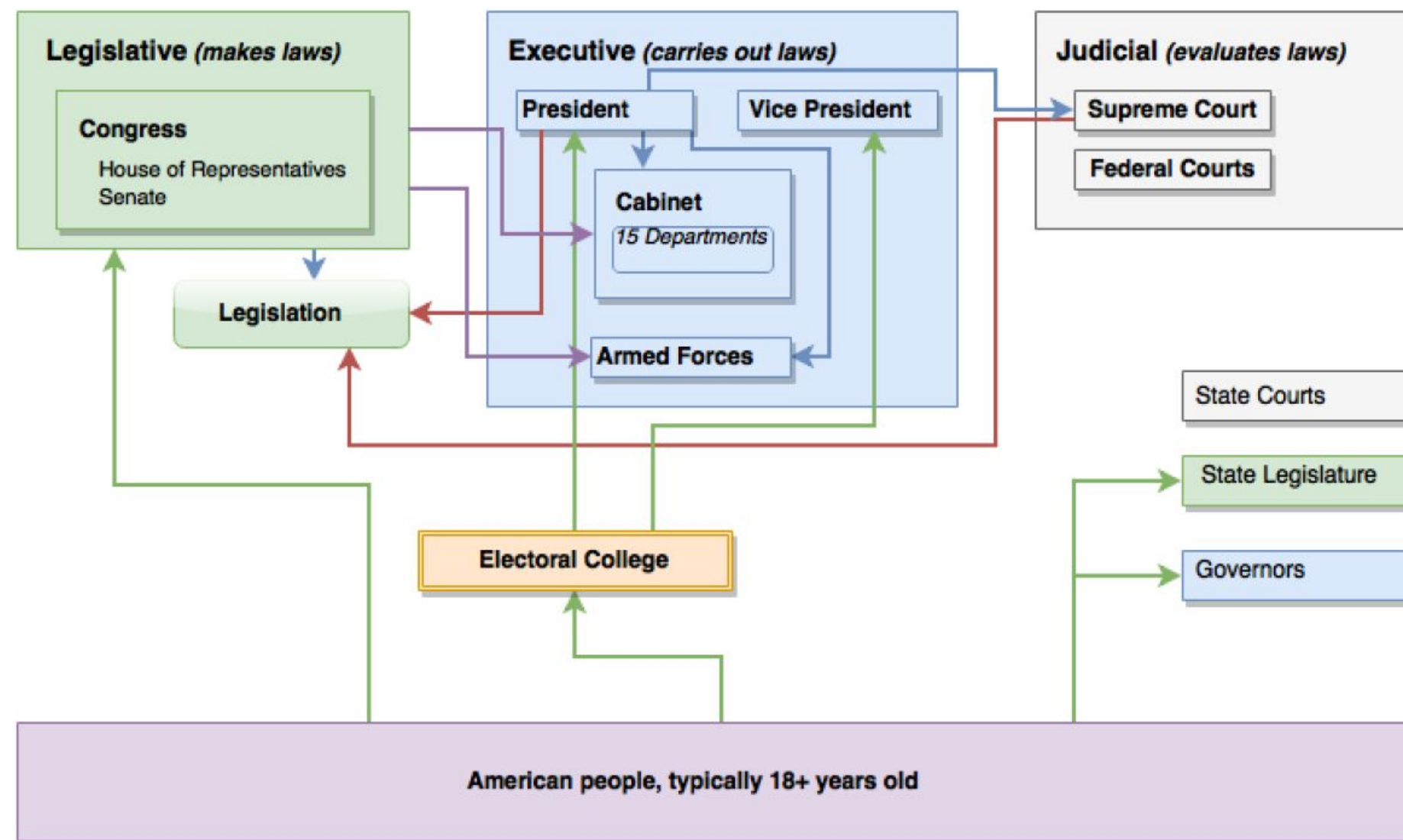
VS

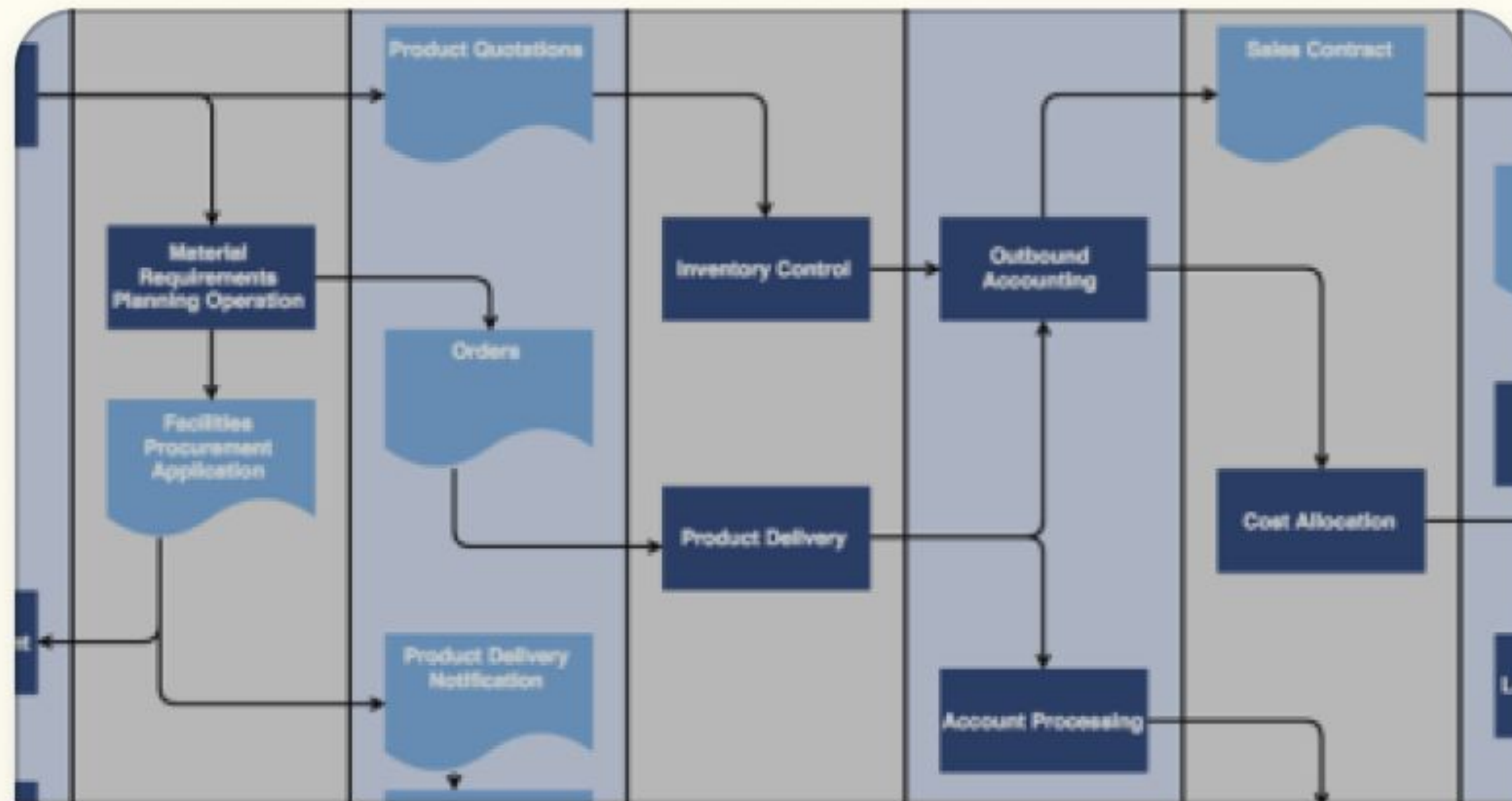
American Political System





The American political system is broken into three parts. The Legislative branch consists of the Congress and the Senate and proposes legislation. Adapted from Political System of the United States, by 111Alleskönner (CC BY-SA 3.0 DE) Legislators are elected by the American people. The Executive branch carries out the legislation, and consists of the President, the Vice President, the Cabinet and the Armed Forces. The Cabinet represents 15 departments, and these representatives are appointed directly by the President, but need to be approved by Congress. The Judicial branch evaluates legislation. The supreme court representatives are appointed directly by the President. Both the President and the Supreme Court can veto or appeal legislation. The American people elect people into the Electoral College, who then elect the President, and the Vice President. In addition to the federal political system, states have their own courts, legislators and governors.



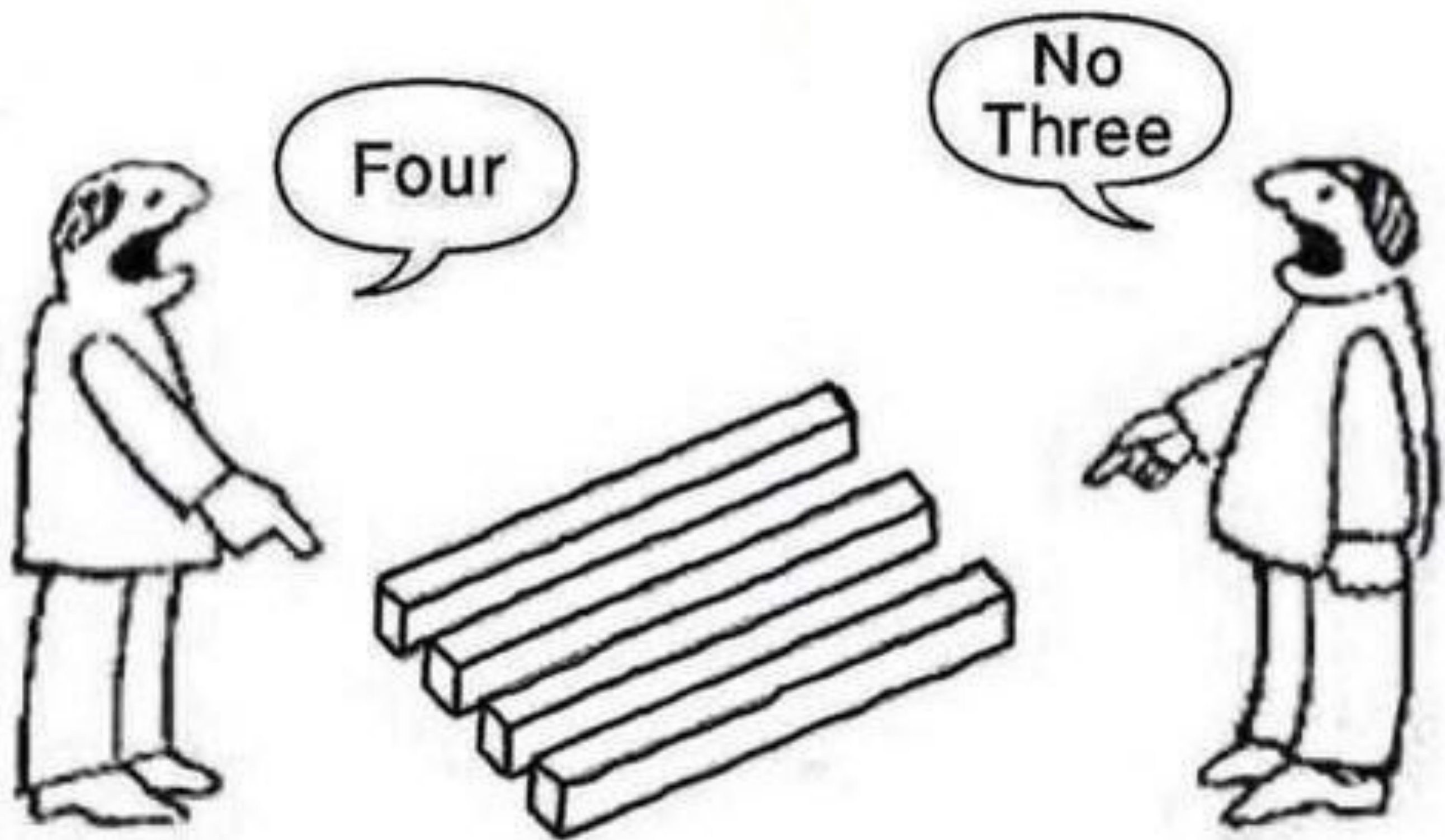


Why Are Diagrams So Powerful?

Visual communication has quickly risen to be the dominant form of communic...



drawio-app.com

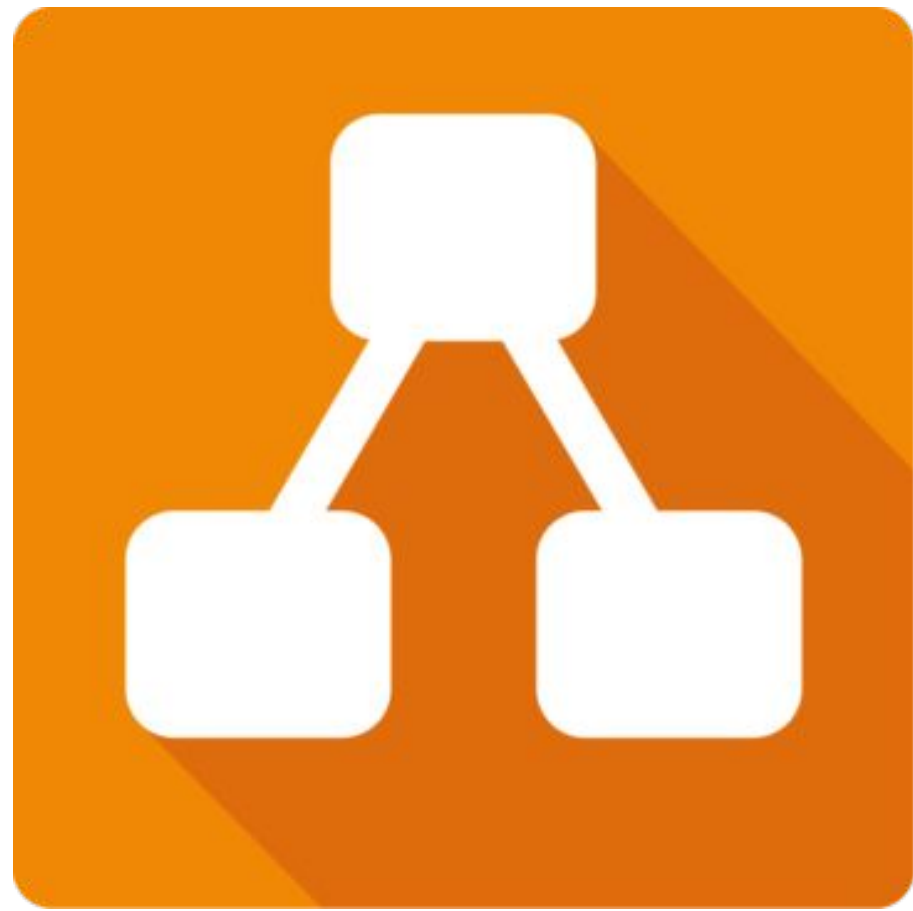






draw.io



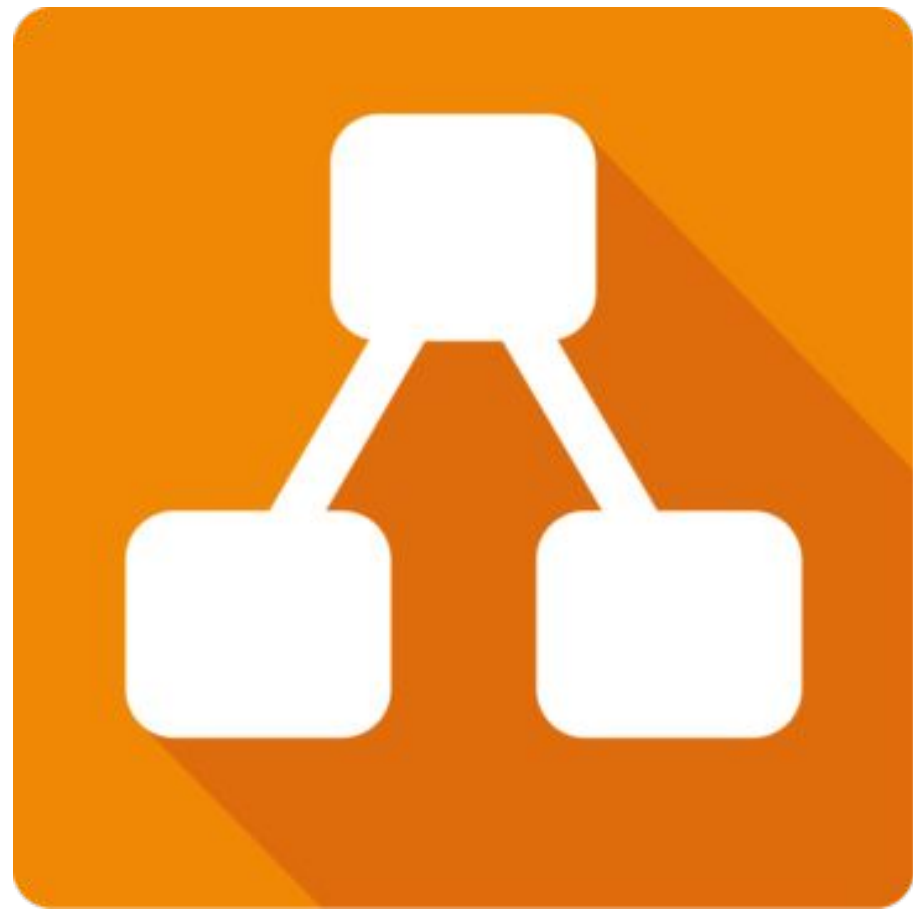


draw.io



mermaid





draw.io



mermaid

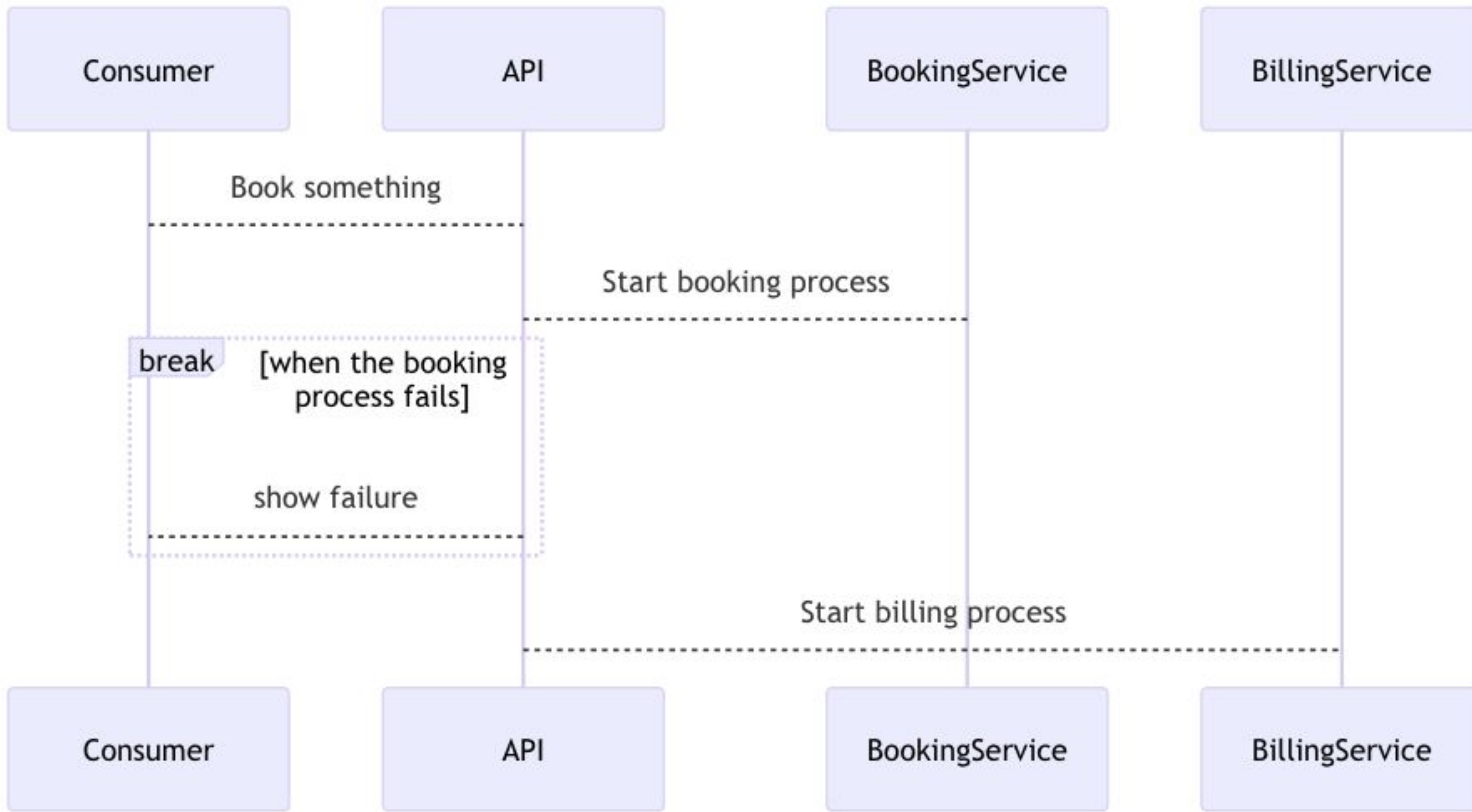


plantuml



d





mermaid

```
sequenceDiagram
```

```
Consumer-->API: Book something
```

```
API-->BookingService: Start booking process
```

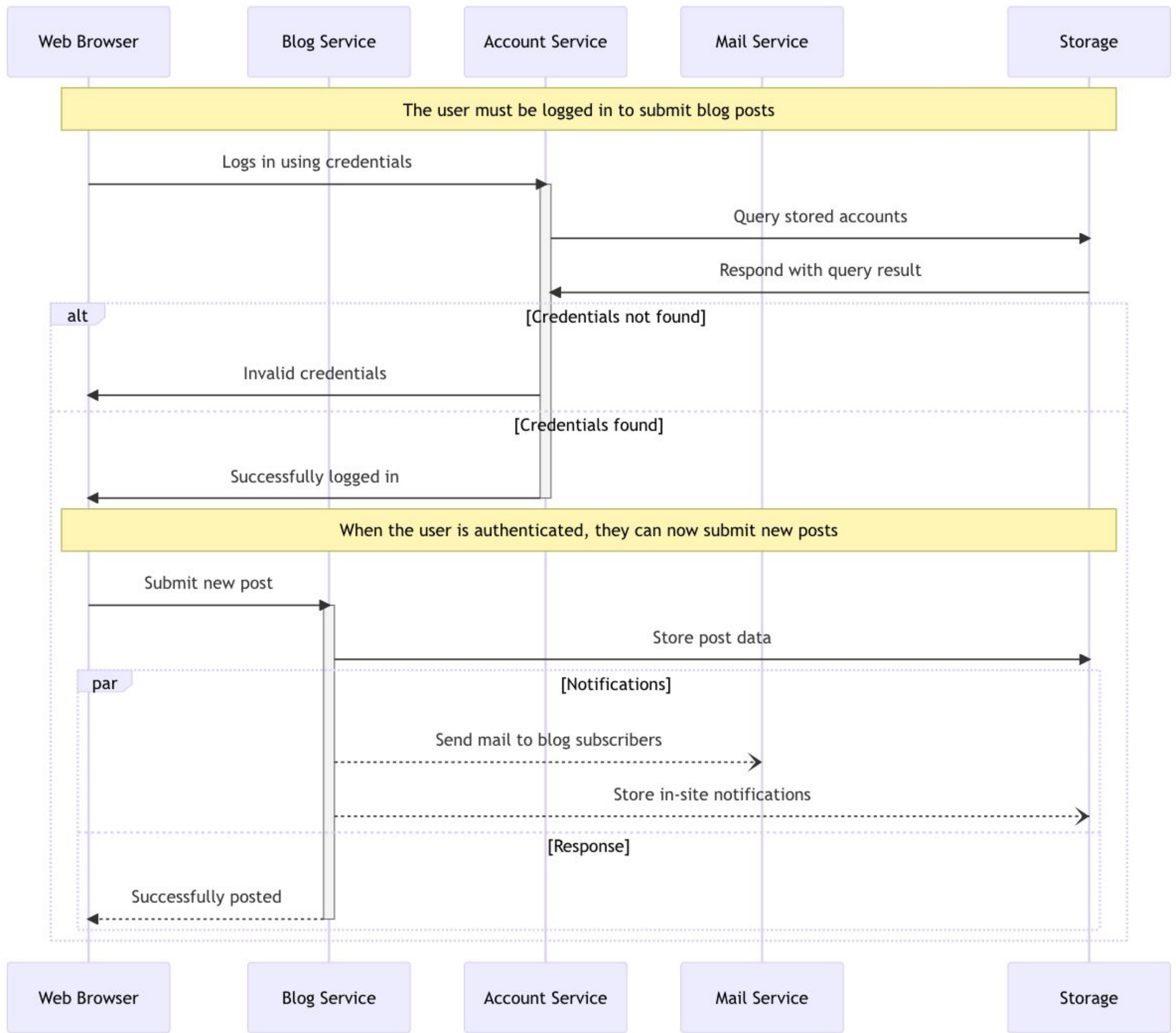
```
break when the booking process fails
```

```
    API-->Consumer: show failure
```

```
end
```

```
API-->BillingService: Start billing process
```





sequenceDiagram

```
Consumer-->API: Book something
```

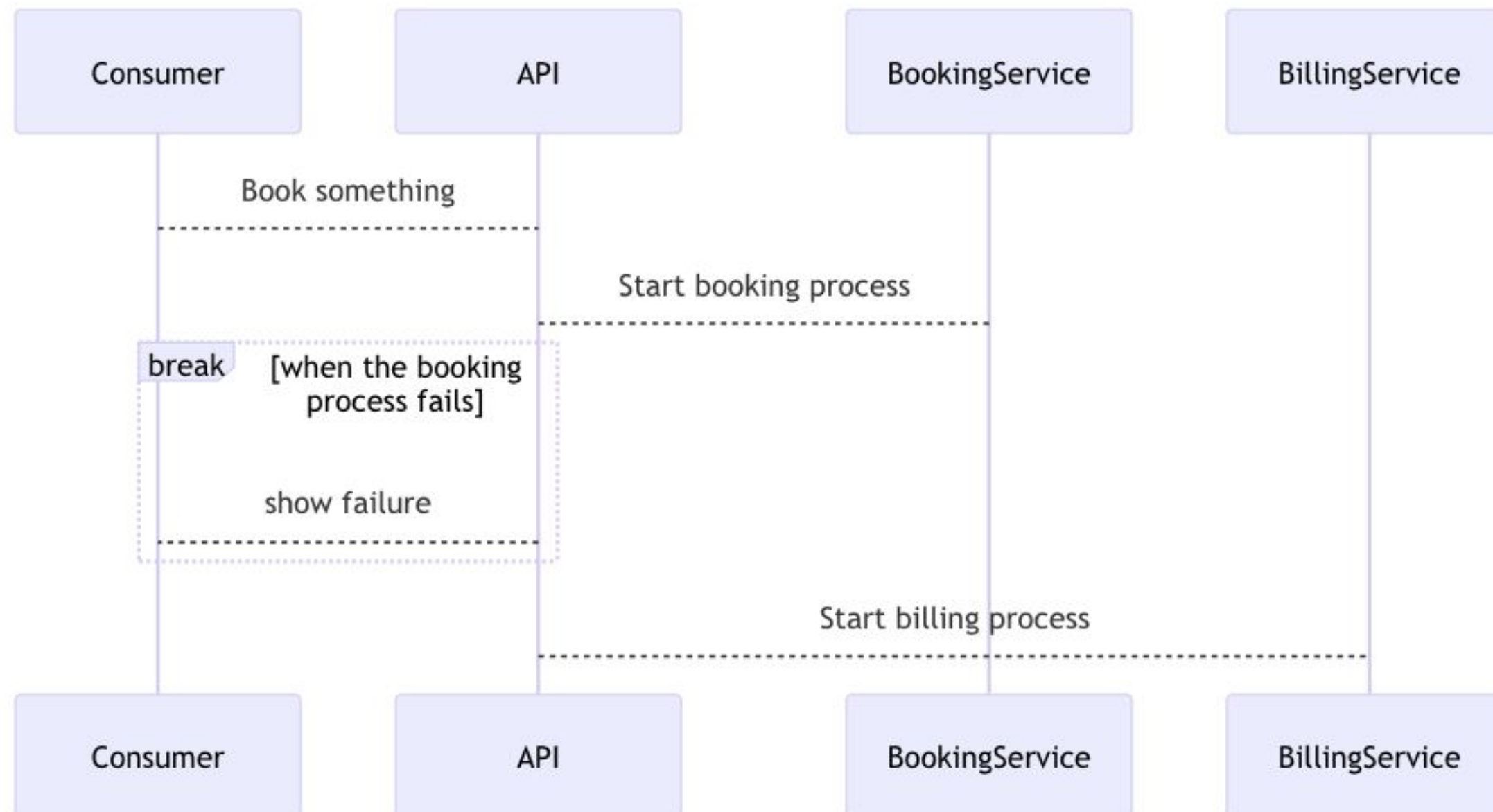
```
API-->BookingService: Start booking process
```

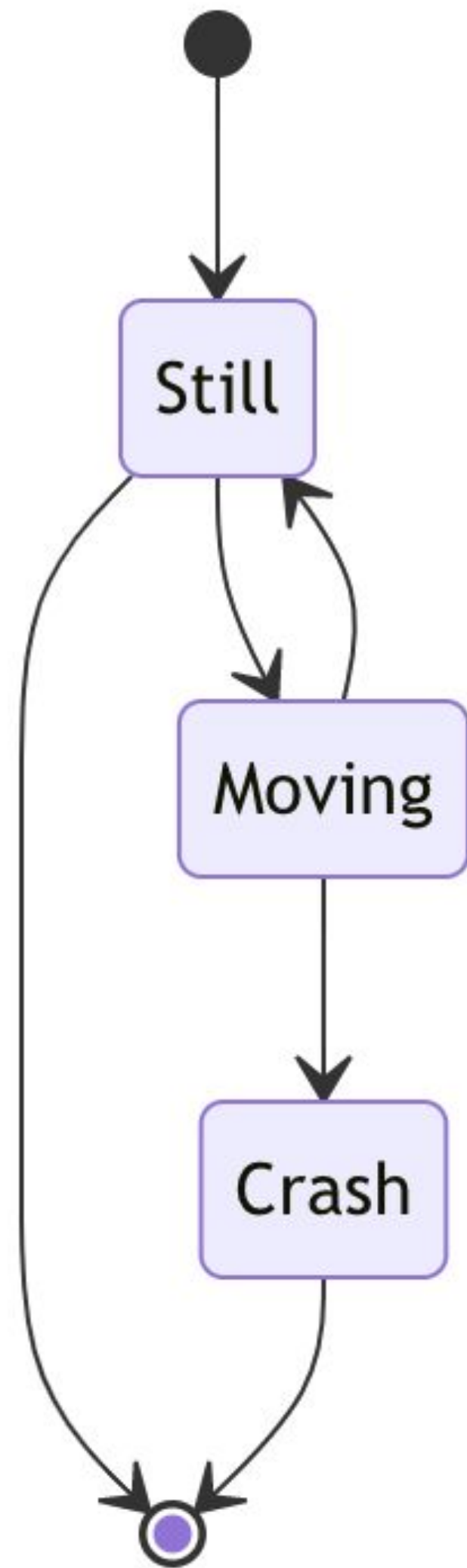
```
break when the booking process fails
```

```
API-->Consumer: show failure
```

```
end
```

```
API-->BillingService: Start billing process
```





mermaid

```
stateDiagram
```

```
  [*] --> Still
```

```
  Still --> [*]
```

```
  Still --> Moving
```

```
  Moving --> Still
```

```
  Moving --> Crash
```

```
  Crash --> [*]
```





High-level overview



Principal

High-level overview





Principal

Me High-level overview



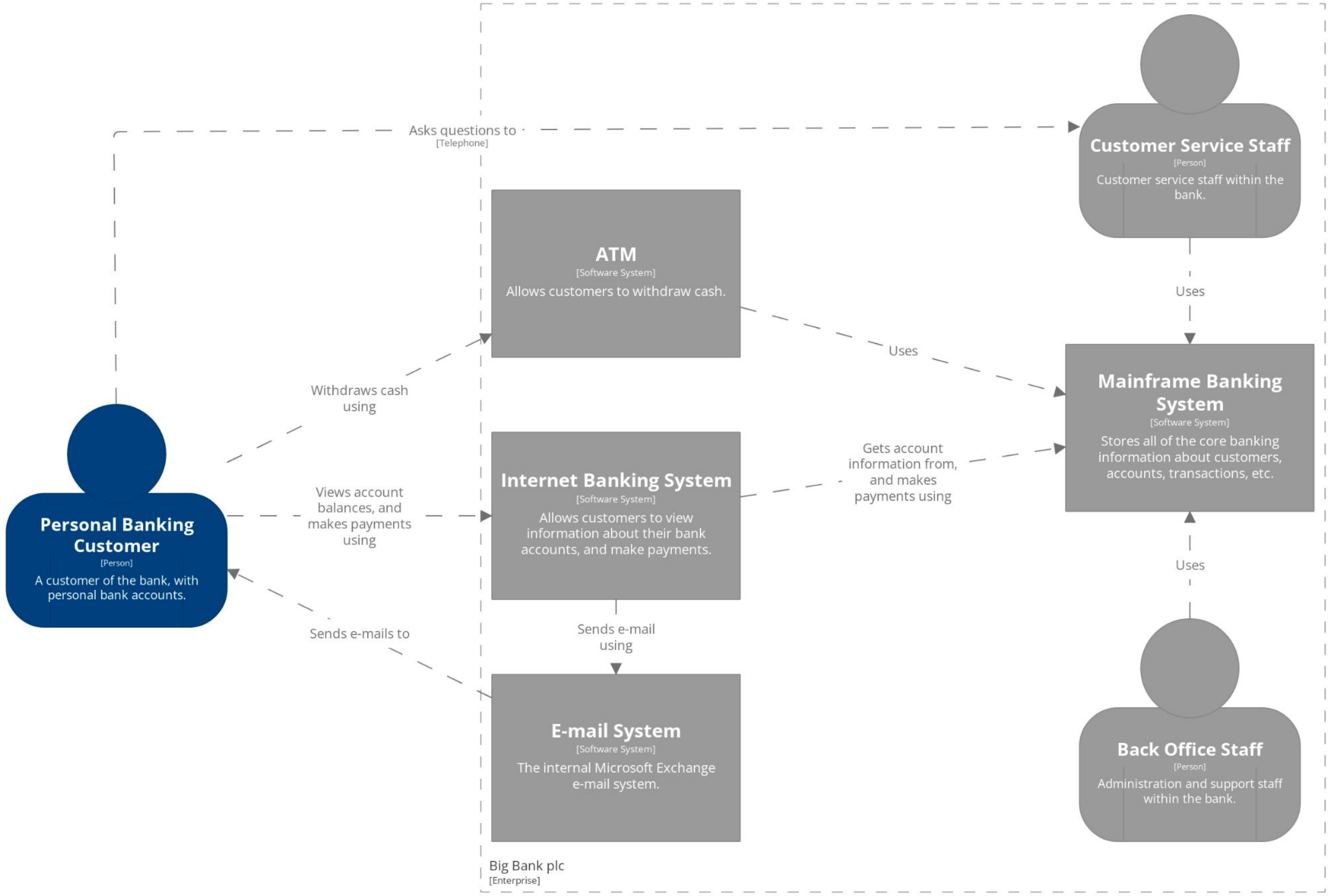


Principal

Me High-level overview

New hire







Architecture Decision Records



Architecture Decision Records


no 'bad' decisions; just unrecorded




Architecture Decision Records

no 'bad' decisions; just unrecorded

How to draw an owl

1. 

2. 

1. Draw some circles 2. Draw the rest of the fucking owl

Design Docs at Google

One of the key elements of Google's software engineering culture is the...

IE industrialempathy.com

How to draw an owl

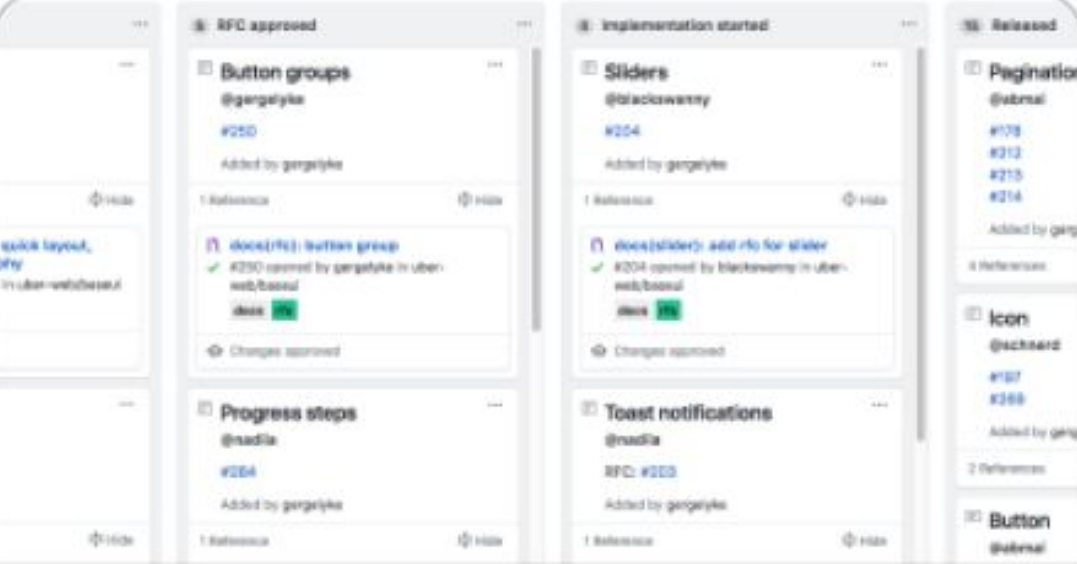


1. Draw some circles 2. Draw the rest of the fucking owl

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Scaling Engineering Teams via RFCs: Writing Things Down

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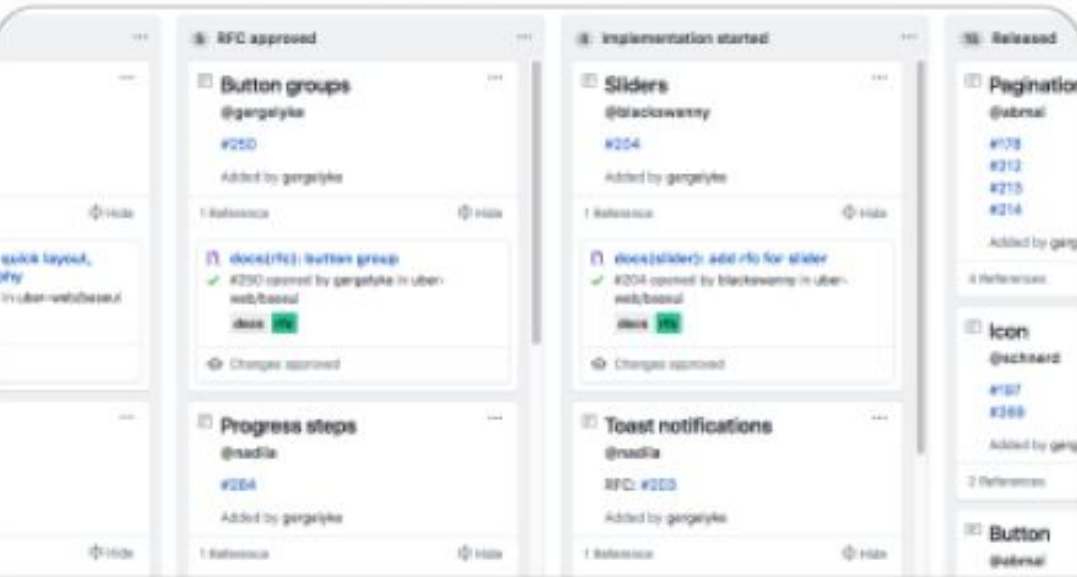
How to draw an owl



1. Draw some circles 2. Draw the rest of the fucking owl


Design Docs at Google
 One of the key elements of Google's software engineering culture is the...


 industrialempathy.com



Scaling Engineering Teams via RFCs: Writing Things Down


I have recently been talking at small and mid-size companies, sharing engi...

 blog.pragmaticengineer.com



Technical Decision-Making and Alignment in a Remote Culture |...

In a world of asynchronous communication, it's more important t...

 multithreaded.stitchfix.com

1.

1.Context and Problem

1.Context and Problem

2.What We Want (and the Deciding Factors)

1. Context and Problem
2. What We Want (and the Deciding Factors)
3. What Options We Have (and Their Consequences)

- 1.Context and Problem
- 2.What We Want (and the Deciding Factors)
- 3.What Options We Have (and Their Consequences)
- 4.Decision

Files

main

Go to file

- doc
- examples
 - 4-day-work-week
 - agile-software-development
 - amazon-web-services
 - api-using-json-v-grpc
 - choosing-a-database-technology
 - continuous-integration
 - css-framework
 - docker-swarm-container-orchestration
 - environment-variable-configuration
 - go-programming-language
 - google-cloud-platform
 - high-trust-teamwork
 - java-programming-language
 - kubernetes-container-orchestration
 - metrics-monitors-alerts
 - microsoft-azure-cloud-infrastructure
 - microsoft-azure-devops
 - monorepo-vs-multirepo
 - README.md
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 - postgresql-database
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 - programming-code-editors
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 - python-programming-language
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 - rust-programming-language
 - secrets-storage

architecture-decision-record / examples / postgresql-database /

README.md

Architecture Decision Record: PostgreSQL database

Title: Use of PostgreSQL Database

Context

Our organization is currently evaluating options for the most suitable database management system to be used in our upcoming project. We have narrowed our search down to two options – PostgreSQL and MySQL. After careful consideration, we have decided to use PostgreSQL due to its advanced features and performance capabilities.

Decision

We will use PostgreSQL as the preferred database management system for our organization's upcoming project.

Justification

After analyzing and comparing the features of both PostgreSQL and MySQL, we have come to the conclusion that PostgreSQL is the better option because of the following reasons:

- Advanced features:** PostgreSQL has a wide range of advanced features like JSON support, full-text search, and spatial data management, which are essential for our project.
- Performance:** PostgreSQL has a proven track record of excellent performance capabilities, which will ensure that our project runs smoothly without any performance issues.
- Community support:** PostgreSQL has a large and active community that provides regular updates and support, making it easier to resolve any issues that arise during the project development phase.
- Scalability:** PostgreSQL is highly scalable, and it can handle large amounts of data with ease, which will be essential for our project.
- Security:** PostgreSQL has a robust security mechanism that will ensure that our project data is secure at all times, and it meets all our organization's security requirements.

Alternatives

The other option that we considered was MySQL. MySQL is also a highly capable database management system, but it lacks some of the advanced features that PostgreSQL offers, and its performance capacity is not as good as that of PostgreSQL.

Conclusion

Based on our analysis, we have decided to use PostgreSQL as the preferred database management system for our upcoming project. This decision has been made after careful consideration, and we believe that it will help us achieve our project goals efficiently and effectively.

Credit: this page is generated by ChatGPT, then edited for clarity and format.

ADR-0044: Duty devs responsibilities

Status: accepted

Deciders: Lukasz Dziekan, Tomasz Szczerba, Mariusz Budzyn, Jakub Dropia, Marcin Malinowski, Marcin Liszewski, Mateusz Pobudejski, Paweł Marcinkowski, Piotr Wiśniewski Date: 2021-04-14

Technical Story: Currently devs responsibilities are unclear

Context and Problem Statement

We have a few following problems:

- it is unclear what developer should or should not do with incidents
- it is unclear whether duty dev should acknowledge and work on incident, if another already acknowledged it
- it is unclear **when** an incident should be **resolved**

Decision Drivers

- we need to maintain support level (we do not cut scope)
- procedures should be clear and as simple as possible
- we need to know whether the solution is good or bad

Current situation

- developers handle all PD calls
- Each monitor always triggers wakeup call
- duty devs more often than not handle #help-allegro-pay issues
- some devs analyze and/or fix code affecting few users at night
- some devs almost do not react at night, if the issue is not critical
- [current metrics situation](#)

Current understanding of duty devs responsibilities:

- official instructions are [here](#)
- not everyone handles tickets in the same manner
- there is no official information about WHO handles #help-allegro-pay
- there is no procedure how to create proper bug if duty dev can't fix the issue with provided tools mentioned in instructions, leading to handovers of vaguely described issues with close to none analysis.
- there is no instruction when an incident can be resolved

Considered Improvements

1. Write down [flow for handling PD alerts](#).
2. We should [improve monitoring on lower environments](#) to detect potential issues faster
3. Propose [new, slightly improved responsibilities](#)

Considered Improvements

1. Write down [flow for handling PD alerts](#).
2. We should [improve monitoring on lower environments](#) to detect potential issues faster
3. Propose [new, slightly improved responsibilities](#)

Conclusion and suggested approach:

- Babajaga takes care of #help-allegro-pay
- Take [duty manual](#) and [incident workflow](#) **seriously**
- Fix duty on UAT
 - fix monitoring to not call PD, but create slack alerts
 - duty dev is not expected to fix issues on UAT, but monitor if all issues are taken care of - it can be checked once or twice a day if all issues are taken care of on slack by having proper icon added.
- Remove duty on DEV
- Implement the above for 2 months, and check metrics again.

Expected improvements in [metrics](#):

- HAP
 - clarity of duty responsibilities
 - understanding duty responsibilities
 - are duty responsibilities too narrow/too wide
 - organization of duty
- HLP A
 - reduced time to acknowledge for p90
- HLP R
 - reduced time to resolve for p90

What needs to be done:


- Babajaga takes course in bookkeeping 101 - align with Firewatch
- Prepare workflow on #allegropay-alerts-prod to hand over duty and keep track of overtime hours in excel sheet **without keeping track who, when and how many** overtime hours had
- Announce that Babajaga takes care of #help-allegro-pay
- Announce [new duty responsibilities](#)
- Announce incident [workflow manual](#) along with PD Inc Work Item Type and incident dashboard
- Change monitoring on UAT to generate slack notifications
- Remove monitoring on DEV

.NET 7 in Allegro Pay

.NET 7 release date is November 2022. The LTS version remains .NET 6, and the next one will be .NET 8 next year. Therefore, in order not to unnecessarily use developers' time, the Aard team has decided not to carry out a global migration of services to .NET 7.

Rules regarding .NET 7:

- We do not ban the use of .NET 7, but you do so at your own risk - Aard's support for this will be limited.
- Your migration cannot force migration to other teams (if you are issuing nuget packages for other services / teams, they must target .NET 6).
- By targeting .NET 6 in each case we mean both runtime and core Microsoft.* And System.* packages (they follow the same publishing cycle as the whole .NET, and a higher major version may introduce breaking changes). List of packages is available [here](#).
- To reduce the impact of a possible mistake, before the .NET 7 release, there is an additional build step, which will check if the .NET 6 targeting package does not contain core packages in the 7.x version (but while targeting .NET 7, we can use 7.x packages). For recommendations on pinning the package versions, see recommendations below.
- The package versions in group Build of `paket.lock` are irrelevant - 7.y.z is acceptable here.

In case of any questions or doubts, we remain at your disposal at [#help-aard](#) .

Package version pinning - recommendations

To prevent bumping MS packages to 7.0.0 consider following recommendations:

1. Use `paket update --keep-major` flag to prevent bumping from 6.y.z to 7.0.0. Note: this will pin all packages' major versions.
2. Add following package to `paket.dependencies` (group Main):

```
nuget AllegroPay.PackageVersionLock
```

This will prevent paket from updating MS packages to 7.0.0. Do not add this package to any `paket.references` file, `paket.dependencies` is enough.

ADR \neq RFC

ADR $\langle \rangle$ RFC

More use cases





More use cases

Playbookki / FAQ - on call

More use cases

Playbooki / FAQ - on call

Getting started



More use cases

Playbooki / FAQ - on call

Getting started

How to build, run, run tests



More use cases

Playbooki / FAQ - on call

Getting started

How to build, run, run tests

Access Management



More use cases

Playbooki / FAQ - on call

Getting started

How to build, run, run tests

Access Management

Service's clients



More use cases

Playbooki / FAQ - on call

Getting started

How to build, run, run tests

Access Management

Service's clients

Researches/PoC results

More use cases

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Getting started

How to build, run, run tests

Access Management

Service's clients

Researches/PoC results

Summaries of tech initiatives

Tooling - “how”

When you start coding in a new language without reading the documentation



Where?



VS



Confluence



VS



MkDocs

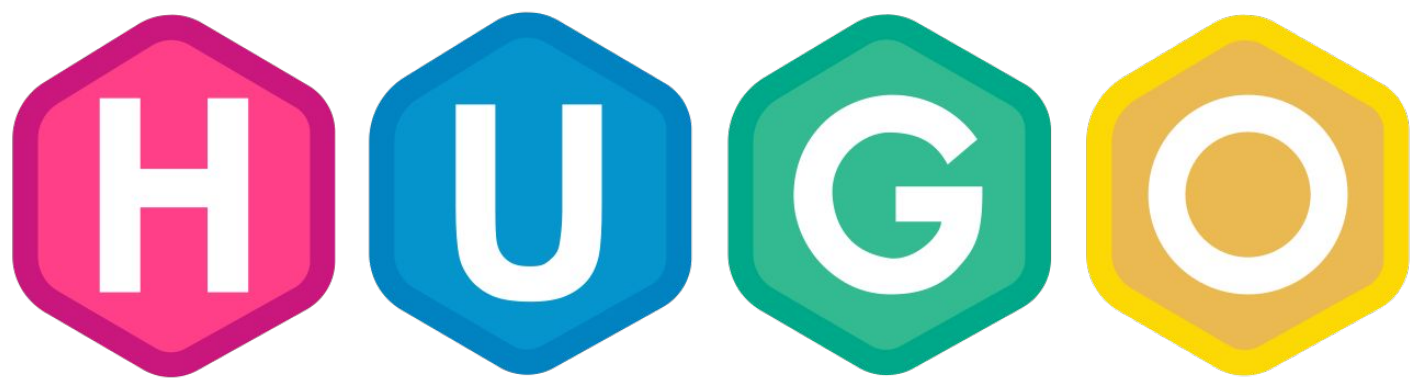
Project documentation with Markdown.



VS



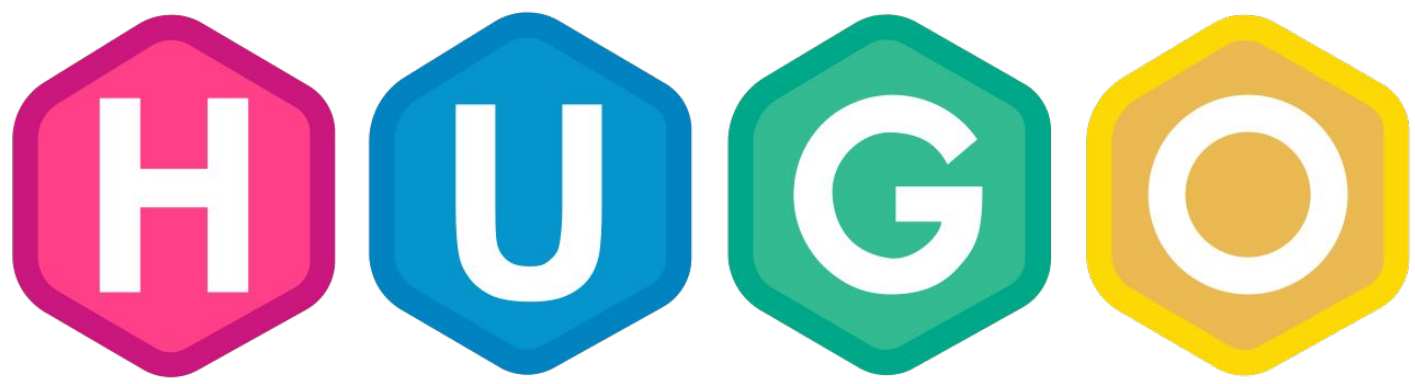
MkDocs
Project documentation with Markdown.



VS



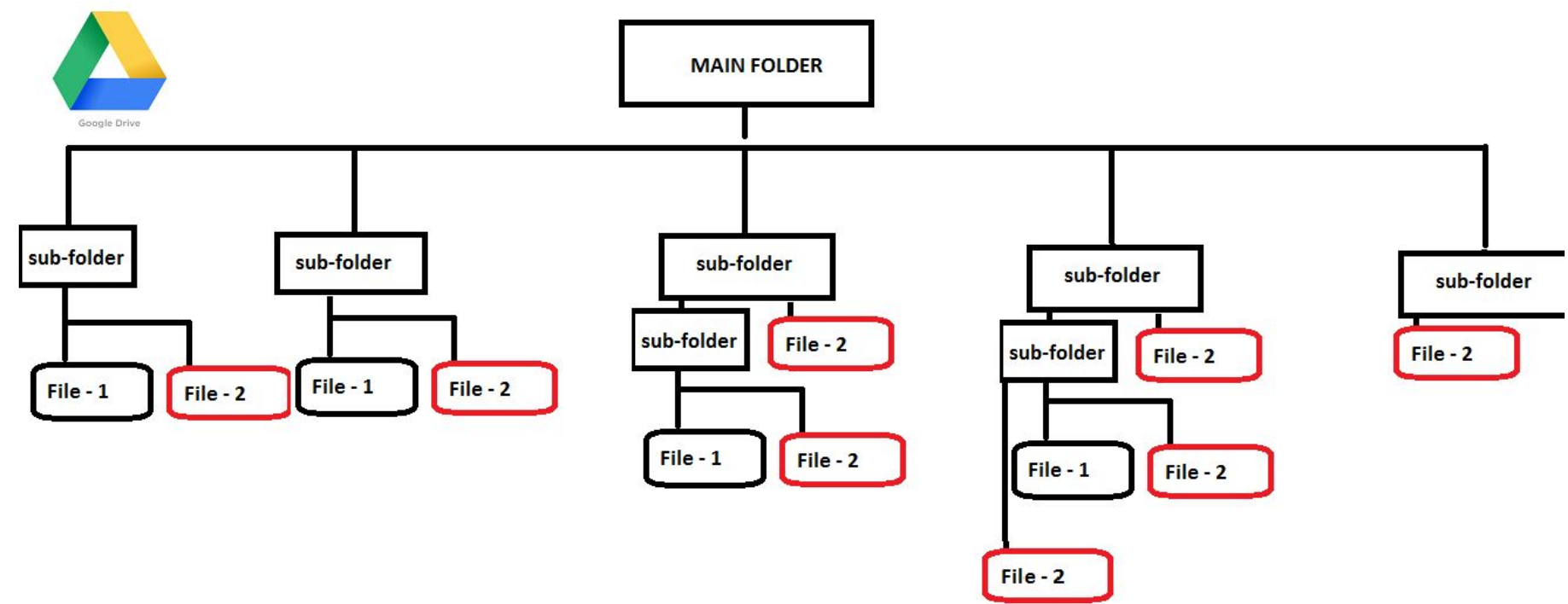
MkDocs
Project documentation with Markdown.



VS



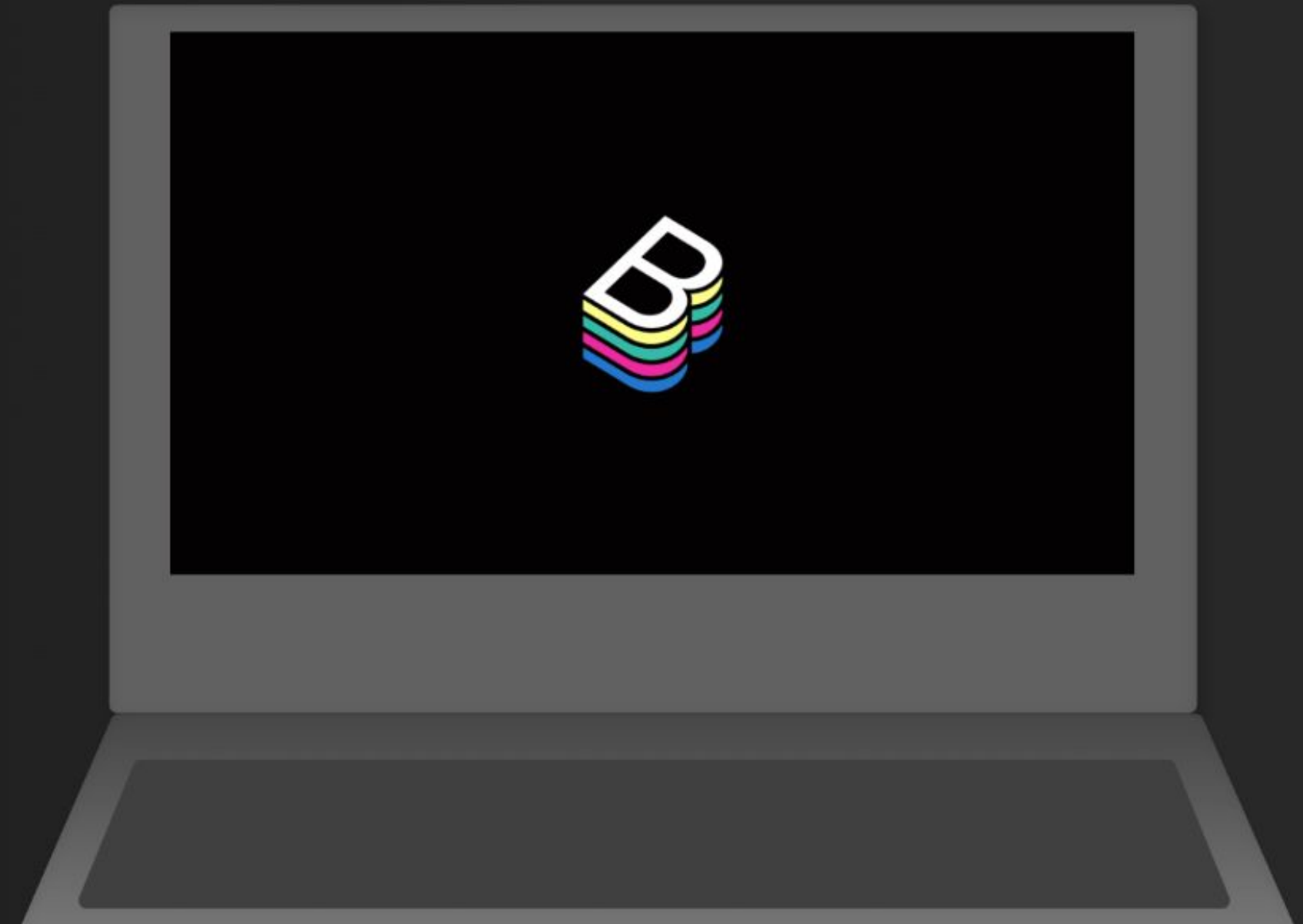
MkDocs
Project documentation with Markdown.



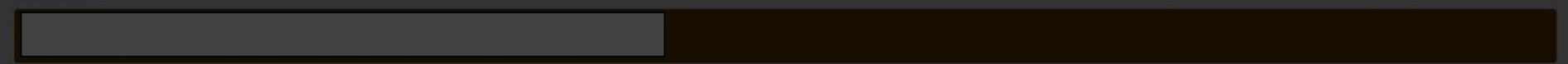
Catalog

An open platform for building developer portals

Powered by a centralized software catalog, Backstage restores order to your infrastructure and enables your product teams to ship high-quality code quickly — without compromising autonomy.

[GITHUB](#)[OFFICE HOURS](#)

All components (232)



About

VIEW SOURCE VIEW TECHDOCS

DESCRIPTION
Handles a range of account-related tasks

OWNER: carebears
LIFECYCLE: production
SYSTEM: [Placeholder]
TYPE: service
No Tags

Relations

View graph →

Links

- AccountService Dev
- AccountService Uat
- AccountService Xyz

Has subcomponents

| NAME | OWNER | TYPE | LIFECYCLE | DESCRIPTION |
|--|-------|------|-----------|-------------|
| No subcomponent is part of this component
Learn how to change this. | | | | |

General entity health checks

Collection of general quality checks, related to standardized way to describe any component

- Group Owner Check**
Verifies that a Group has been set as the owner for this entity. ✔
- Title Check**
Verifies that a Title, used to improve readability, has been set for this entity. ✔
- Entity up to date Check**
Verifies that entity was confirmed up to date max 6 months ago. ✔
- TechDocs Check**
Verifies that TechDocs has been enabled for this entity. ❌

PagerDuty

SERVICE DIRECTORY CREATE INCIDENT ESCALATION POLICY

Incidents Change Events

Nice! No incidents found!

ON CALL

Rafal Schmidt
rafal.schmidt@allegro.com

Readme

TLDL: AccountService is microservice responsible for managing account details, transaction history, generating bank statements, transferring money, handling Vodeno webhooks regarding transfers, and adding initial account details after customer onboarding.

AccountService is microservice is designed to handle various banking operations and account management tasks. Its main responsibilities include:

- Account Details: The microservice stores and manages important account information such as IBAN (International Bank Account Number), status, balance, and available funds.
- Transaction History: It maintains a record of past transactions, including details such as dates, types, groups, and categories. This allows for easy tracking and analysis of a customer's financial activities.
- Generate Statement: The microservice integrates with Vodeno, a third-party banking platform, to generate monthly bank statements. Using the provided information, it creates a statement summarizing the account's activities for a specific month.
- Transfer Money/Create Payment: After verifying the transaction with P24 (likely a payment gateway or provider), this microservice facilitates the transfer of funds or creation of payments through integration with Vodeno. This allows customers to initiate transfers securely and efficiently.
- Vodeno Webhook Integration: The microservice handles Vodeno webhooks, which are HTTP callbacks triggered by events in the Vodeno platform. Specifically, it captures webhook notifications related to changes in account balances and performs the necessary actions to update the account balance accordingly.
- Add Initial Account Details: After a customer completes the onboarding process, this microservice is responsible for adding the necessary details of the newly onboarded customer's main account. These details are essential for establishing a functional and personalized banking relationship with the customer.

Getting Started

[Readme →](#)

COMPONENT — SERVICE

AccountService ☆

Owner
carebears

Lifecycle
production



OVERVIEW

CI/CD

API

KUBERNETES

ARGO CD

DEPENDENCIES

DOCS

HEALTH CHECKS

PULL REQUESTS

GIT TAGS

AZURE

Q&A

About



VIEW
SOURCE



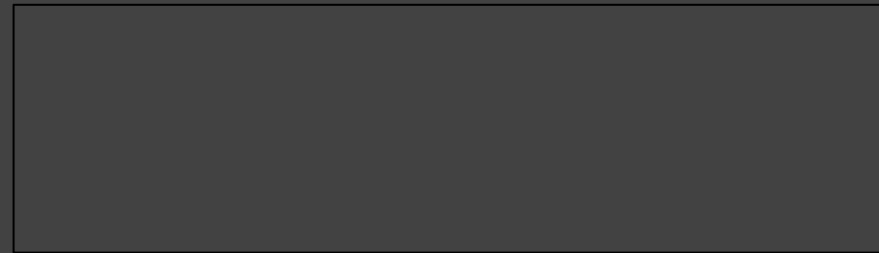
VIEW
TECHDOCS

DESCRIPTION

Handles a range of account-related tasks

OWNER

carebears



TYPE

service

LIFECYCLE

production

TAGS

No Tags

Catalog Graph

component:acash-accountservice

FILTERS

SUPPORT

MAX DEPTH

1



KINDS

API Component

Domain Group +3



RELATIONS

ownerOf ownedBy

consumesApi

apiConsumedBy +10



Direction

Left to right



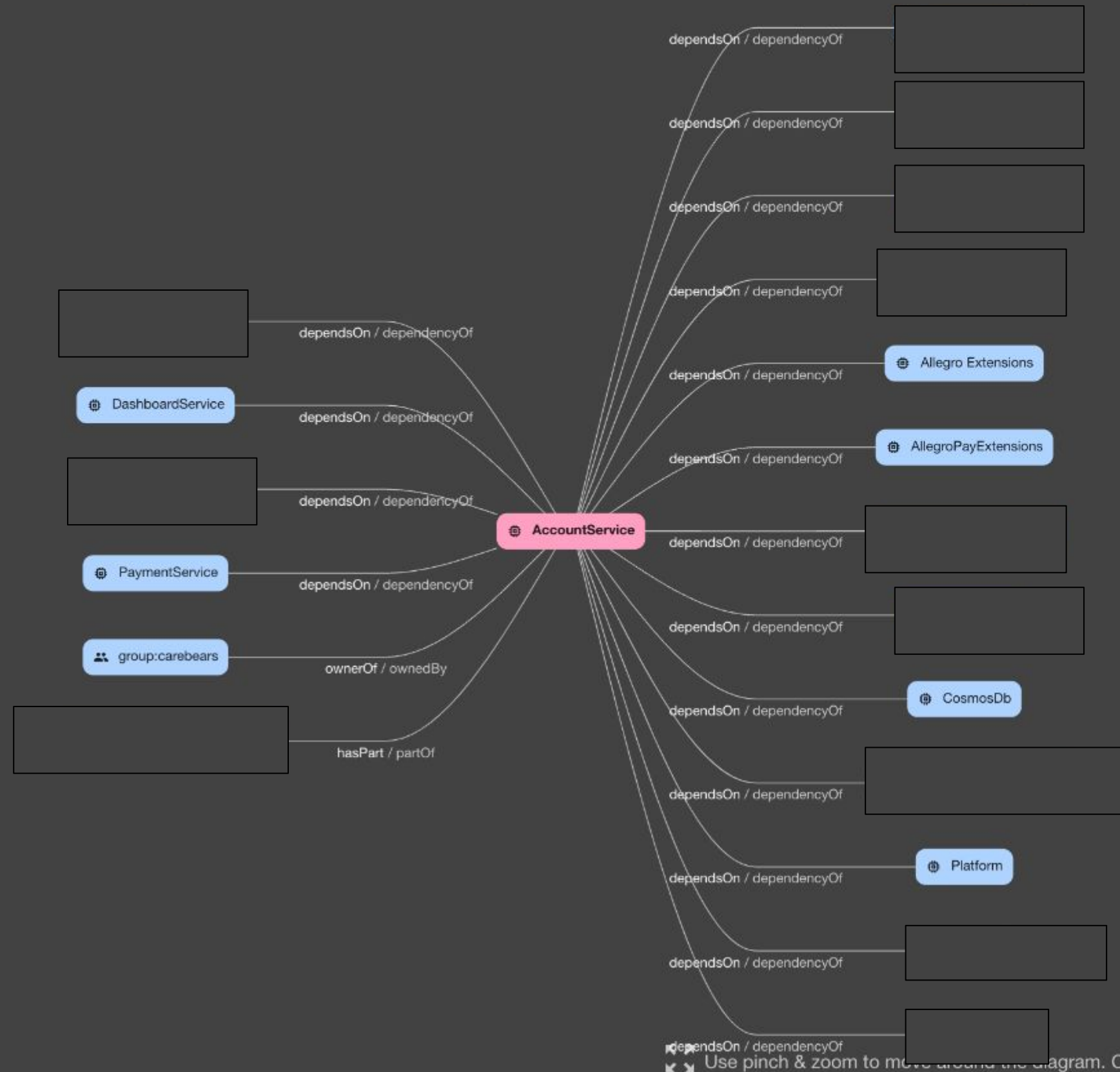
Curve

Monotone X

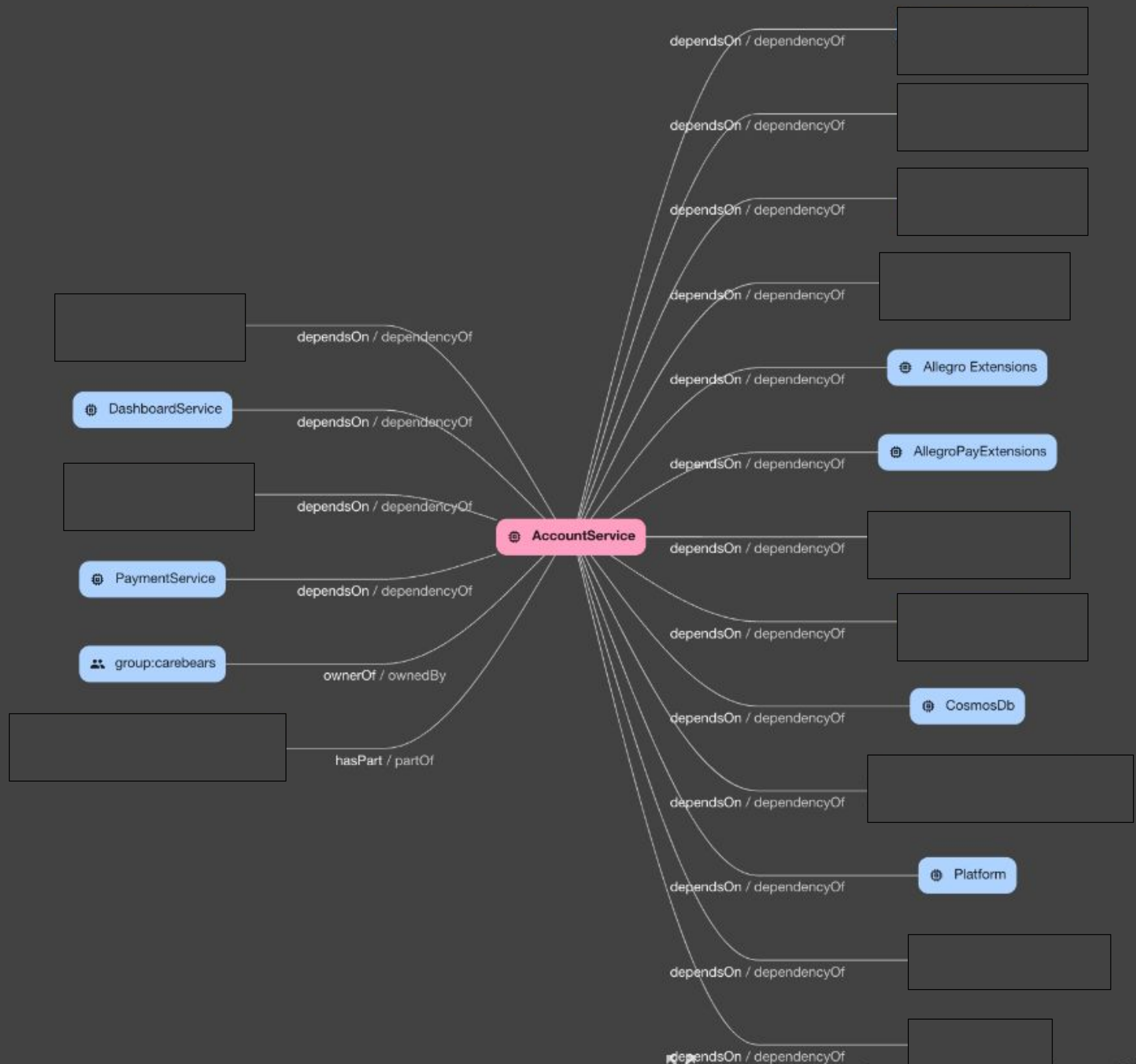


Simplified

Merge Relations



Use pinch & zoom to move around the diagram. Click to change active node, shift click to navigate to entity.



PagerDuty



SERVICE
DIRECTORY



CREATE
INCIDENT



ESCALATION
POLICY

Incidents

Change Events

Nice! No incidents found!



ON CALL



Rafal Schmidt

rafal.schmidt@allegro.com



Catalog entities

Data in the catalog are gathered via integrations with:

- Azure DevOps (services, documentation, libraries, API, etc.)
- Azure AD (organization data)

Organization data

We have two main organization entity kinds:

- [group](#) (team)
- [user](#)

Only users that are in Azure Active Directory with the company name `Allegro Pay sp. z o.o.` are added to the catalog. Based on that users can log in with elevated permissions. Other users might access Backstage with a `guest` account.

Only listed teams are added via integration to the catalog, as there is no easy way to figure out what groups are teams in Allegro Pay. If you need to add a new team please go to [#help-aard](#)

Entities

The main entities kinds that we use are:

- component - service - web-site - library
- system

Table of contents

[Organization data](#)

[Entities](#)

[Component](#)

[Common annotations](#)

`dev.azure.com/projec
repo: <project-
name>/<repo-name>`

`allegropay/entity-
updated-at: '<yyyy-
MM-ddThh:mm>'`

[Service & Website](#)

`azure.com/tag-
selector: <tag-
name>/<tag-value>`

`argocd/app-name:
<argo-app-name>`

`backstage.io/kuberne
label-selector: <aks-
label-selector>`

`pagerduty.com/integr
key: <pager-duty-
integration-key>`

[Library](#)

[API](#)

[System](#)

Service & Website

There are not many differences between `service` and `website` in case of functionalities other than purpose, so we describe them together.

Example:

```
1  apiVersion: backstage.io/v1alpha1
2  kind: Component
3  metadata:
4    name: entity-name
5    description: entity-description
6    title: entity-title
7    annotations:
8      dev.azure.com/project-repo: <project-name>/<repo-name>
9      azure.com/tag-selector: <tag-name>/<tag-value>
10     backstage.io/techdocs-ref: dir:.
11     argocd/app-name: <argo-app-name>
12     backstage.io/kubernetes-namespace: <aks-namespace>
13     backstage.io/kubernetes-label-selector: <label>=<label-value>
14     allegropay/entity-updated-at: '<yyyy-MM-ddThh:mm>'
15     pagerduty.com/integration-key: <pager-duty-integration-key>
16  links:
17    - url: https://backstage.westeurope.dev.devops.fintech.allegrogroup.com/
18      title: Backstage Dev
19      icon: dashboard
20      type: website
21    - url: https://backstage.westeurope.xyz.devops.fintech.allegrogroup.com/
22      title: Backstage Xyz
23      icon: dashboard
24      type: website
25    - url: https://dev.azure.com/AllegroTechies/AllegroPay.DevOps/_git/ops-k8s-infrastructure?path=/backstage
26      title: Backstage Argo Helm Chart repository
27      icon: github
28      type: repository
29  spec:
30    type: website | service
31    owner: team-name
32    lifecycle: production | experimental | deprecated
33    consumesApis:
34      - consumed-api
35    providesApis:
36      - entity-name-api
```



```
29 spec:
30     type: website | service
31     owner: team-name
32     lifecycle: production | experimental | deprecated
33     consumesApis:
34         - consumed-api
35     providesApis:
36         - entity-name-api
```

```
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8     dev.azure.com/project-repo: <project-name>/<repo-name>
9     azure.com/tag-selector: <tag-name>/<tag-value>
10    backstage.io/techdocs-ref: dir:.
11    argocd/app-name: <argo-app-name>
12    backstage.io/kubernetes-namespace: <aks-namespace>
13    backstage.io/kubernetes-label-selector: <label>=<label-value>
14    allegropay/entity-updated-at: '<yyyy-MM-ddThh:mm>'
15    pagerduty.com/integration-key: <pager-duty-integration-key>
```



Code search and an AI assistant with the context of the code graph.

🕒 context:global Search for code or files...

Aa .* []



I can help with that.

Meet Cody, your AI assistant

Install Cody for your IDE

Cody for your IDE provides the power of LLMs to help you generate and fix code, right where you commit.

[View editor extensions →](#)

Cody for Sourcegraph.com

A free, helpful AI assistant, that explains, generates, and transpiles code, in the Sourcegraph web interface.

[Try Cody chat →](#)

[Try Cody on a file →](#)

Introduction to Batch Changes

Overview

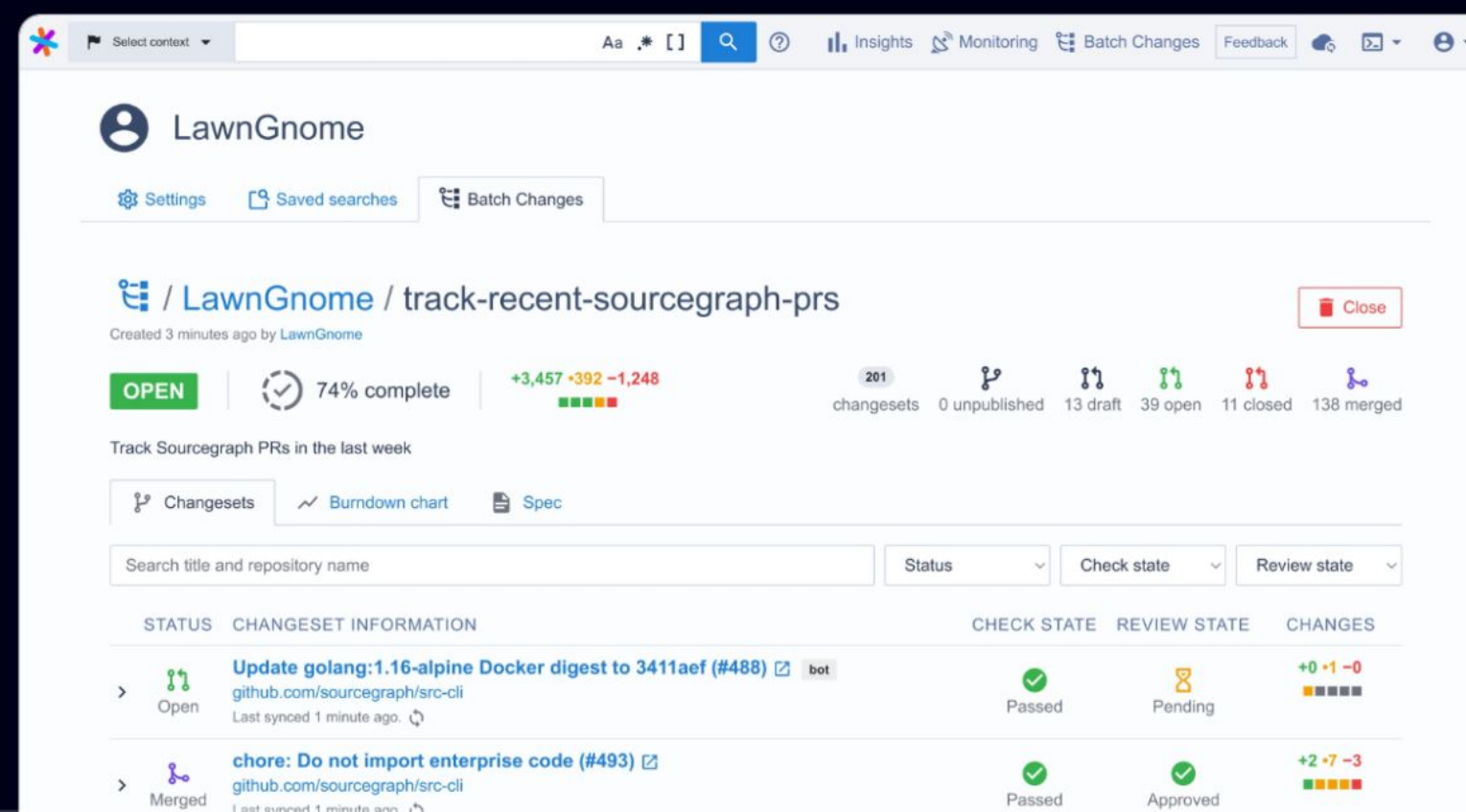
Batch Changes let you make large-scale code changes across many repositories and code hosts. Batch Change lets you create pull requests on all affected repositories, and it tracks their progress until they're all merged. You can preview the changes and update them at any time.

People usually use Batch Changes to make the following kinds of changes:

- Cleaning up common problems using linters.
- Updating uses of deprecated library APIs.
- Upgrading dependencies.
- Patching critical security issues.
- Standardizing build, configuration, and deployment files.

A batch change tracks all of its changesets (a generic term for pull requests or merge requests) for updates to:

- Status: open, merged, or closed
- Checks: passed (green), failed (red), or pending (yellow)
- Review status: approved, changes requested, pending, or other statuses (depending on your code host or code review tool)



The screenshot shows the LawnGnome web interface for a Batch Change. The user is 'LawnGnome'. The batch change is titled 'LawnGnome / track-recent-sourcegraph-prs' and was created 3 minutes ago. It is currently 'OPEN' and 74% complete, with a net change of +3,457 lines and -1,248 lines. The interface shows a list of changesets with columns for Status, Check State, Review State, and Changes. Two changesets are visible: one for updating golang:1.16-alpine Docker digest to 3411aef (#488) which is Open, Passed, and Pending; and another for chore: Do not import enterprise code (#493) which is Merged, Passed, and Approved.

| STATUS | CHANGESET INFORMATION | CHECK STATE | REVIEW STATE | CHANGES |
|--------|--|-------------|--------------|----------|
| Open | Update golang:1.16-alpine Docker digest to 3411aef (#488) <small>bot</small>
github.com/sourcegraph/src-cli
Last synced 1 minute ago | Passed | Pending | +0 +1 -0 |
| Merged | chore: Do not import enterprise code (#493)
github.com/sourcegraph/src-cli
Last synced 1 minute ago | Passed | Approved | +2 +7 -3 |

 Search in Allegro Pay Backstage

CLEAR





<type>[optional scope]: <description>

[optional body]

[optional footer]

Change Log

All notable changes to this project will be documented in this file. See [standard-version](#) for commit guidelines.

1.2.1 (2019-04-25)

Bug Fixes

- typo in readme ([ba3bd01](#))

1.2.0 (2019-04-25)

Bug Fixes

- crash on connection reset ([43957f3](#))

Features

- docker ([804017a](#))
- readme ([398a63c](#))

1.1.0 (2019-04-25)

Features

- first implementation of telnet server [e7a98a5](#)

Change Log

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- crash on connection reset ([43957f3](#))

Features

- docker ([804017a](#))
- readme ([398a63c](#))

1.1.0 (2019-04-25)

Features

- first implementation of telnet server [e7a98a5](#)



Conventional Changelog [↗](#)

build passing coverage 94%

Generate a CHANGELOG from git metadata.

About this Repo [↗](#)

The conventional-changelog repo is managed as a [monorepo](#); it's composed of many npm

The original `conventional-changelog/conventional-changelog` API repo can be found in [changelog](#).

Getting started [↗](#)

It's recommended you use the high level [standard-version](#) library, which is a drop-in replacement for the `version` command, handling automated version bumping, tagging and CHANGELOG generation.

Alternatively, if you'd like to move towards completely automating your release process as an output from CI/CD, consider using [semantic-release](#).

You can also use one of the plugins if you are already using the tool:







example.http x



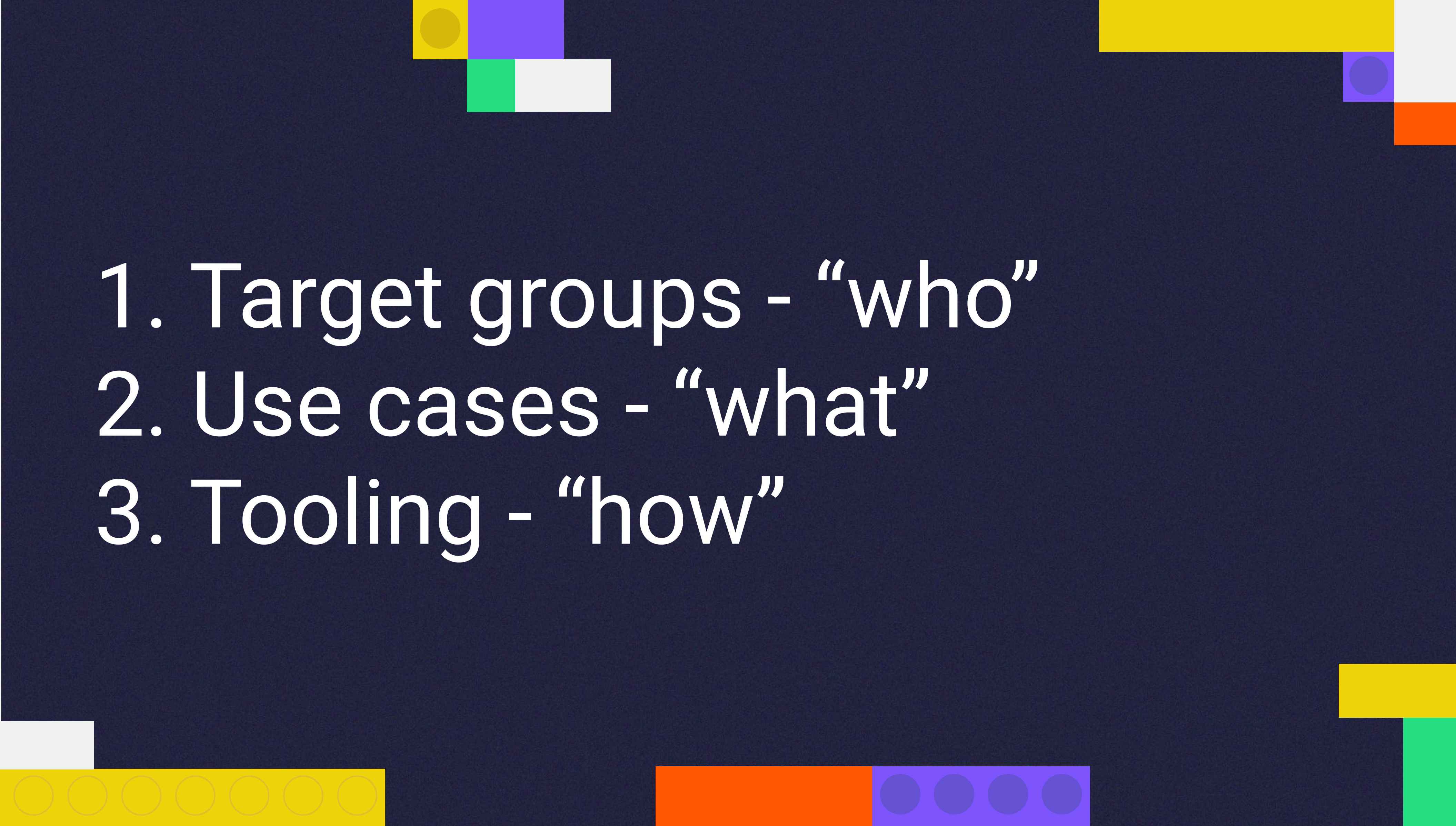
```
1 GET https://api.github.com/users/Huachao
2
3 ###
4
5 GET https://api.github.com/repos/Huachao/vscode-restclient HTTP/1.1
6
7 ###
8
9 POST http://requestb.in/tcdce4tc?k=a%20bc
10 Date: {{$guid}}
11
12 {
13     "key": "{{$guid}}",
14     "key2": "{{$timestamp -1 d}}",
15     "key3": "{{$guid}}",
16     "key4": "{{$Guid}}"
17     #rest
18     "key5": "{{$timestamfasdfa}}",
19     "key6": "{{$}}",
20     "key7": "{{$d}}",
21     "key8": "{{$timestamp}}",
22     "key9": "{{$randomInt 1 19}}"
23     "key10": "{{$randomInt 21 19}}",
24 }
```





1. Target groups - “who”

- 
1. Target groups - “who”
 2. Use cases - “what”

- 
1. Target groups - “who”
 2. Use cases - “what”
 3. Tooling - “how”

MenziesTheHeretic · 5 yr. ago

- making the parent dirty
- marking a single child as touched
- killing first child, then spawning a new one

Thank god for the garbage collector

Thank you!

Got any questions?

rafal.schmidt@allegro.com

[linkedin.com/in/rafalschmidt](https://www.linkedin.com/in/rafalschmidt)

Jakie narzędzia pomagają w budowaniu dokumentacji?

23.01.2024

Co dokumentujemy, a co powinniśmy.

22.01.2024

Dla kogo piszemy dokumentację?

03.01.2024

rafalschmidt.com

Thank you!

Got any questions?

rafal.schmidt@allegro.com

[linkedin.com/in/rafalschmidt](https://www.linkedin.com/in/rafalschmidt)