

RAILS_ENV=demo

New 401(k) participant
Conversion plan
~\$10K balance
Goals require setup
No taxable goals
No external accounts

Sign In

RAILS_ENV=demo

RAILS_ENV=demo bundle exec rails s

RAILS_ENV=development bundle exec rails s

RAILS_ENV=test bundle exec rails s

RAILS_ENV=production bundle exec rails s

RAILS_ENV=staging bundle exec rails s

~~RAILS_ENV=staging bundle exec rails s~~

RAILS_ENV={development, production, test}

```
$ ls config/environments/
```

```
development.rb
```

```
production.rb
```

```
test.rb
```

config/environments/production.rb

```
Rails.application.configure do
  config.cache_classes = true
  config.eager_load = true

  config.consider_all_requests_local = false
  config.action_controller.perform_caching = true

  config.assets.compile = false

  config.log_level = :info
  config.log_tags = %i(request_id)

  # ...
end
```

RAILS_ENV={demo, development, production, test}

A man in a light-colored shirt and dark pants stands on a stage, pointing towards a large projection screen. The screen displays the text "(Your App)" inside a dashed rectangular border. The stage is set in a large, dark hall with a high ceiling and exposed structural elements. A large audience is seated in the foreground, facing the stage. The lighting is focused on the stage and the screen.

(Your App)



Volkswagen

PROFESSIONAL MEN'S SOCCER LEAGUE.
FOR CANADIANS, BY CANADIANS.

INAUGURAL MATCH
27-19

MILWAUKEE, WISCONSIN
OCTOBER 27, 2019

Arteon

Golf



Source: reddit.com


```
$ ls config/environments/
```

```
demo.rb
```

```
development.rb
```

```
production.rb
```

```
test.rb
```


A photograph of an iceberg floating in a deep blue ocean. The tip of the iceberg is visible above the water line, while the much larger, submerged portion is visible below. The sky is a clear, pale blue. The text "Demoability" is overlaid in white, centered horizontally and positioned between the water line and the submerged part of the iceberg.

"Demoability"



Nathan Griffith

(he/him/his)



@smudge



@smudgethefirst



ngriffith.com



Betterment

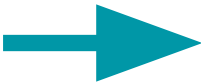
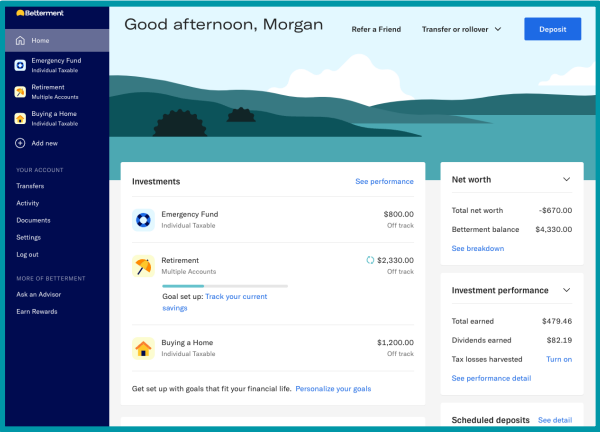
We're Hiring!

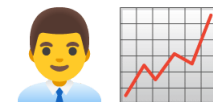
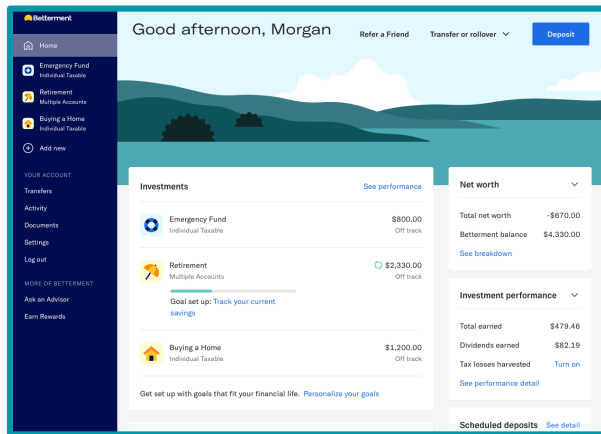




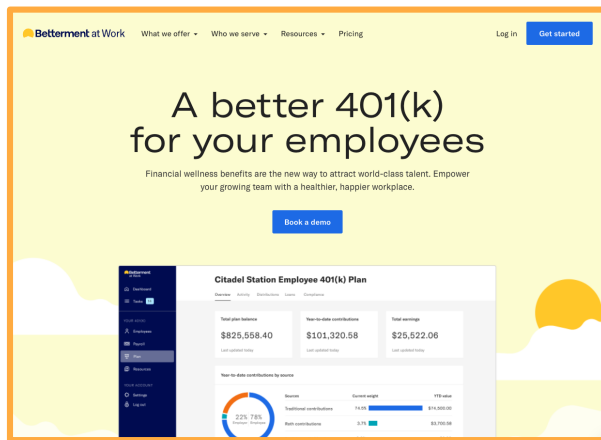


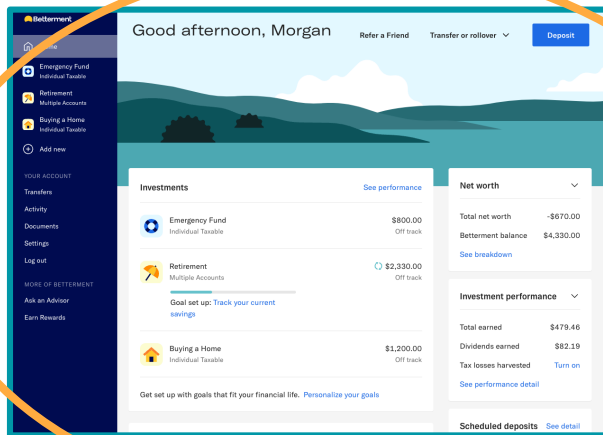
Betterment
at Work



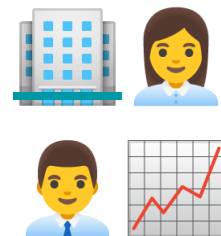
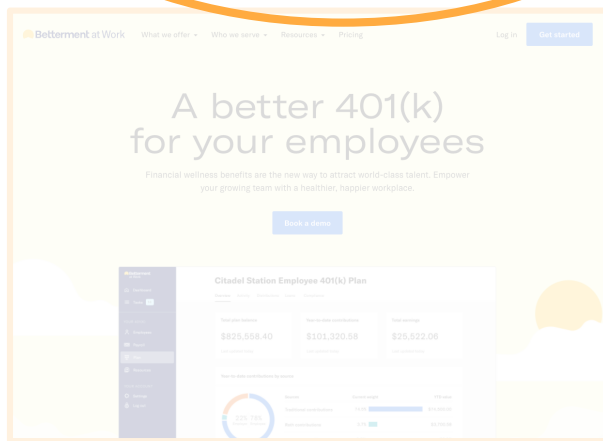


Betterment
at Work

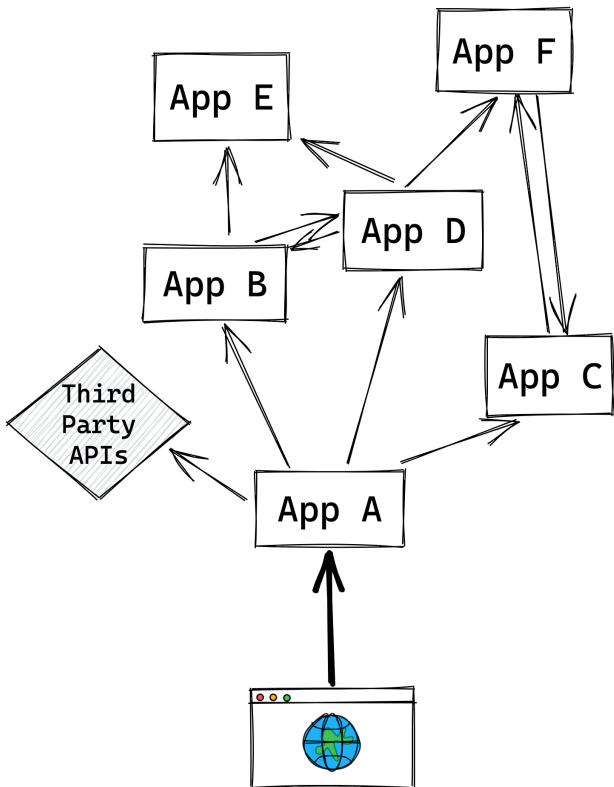




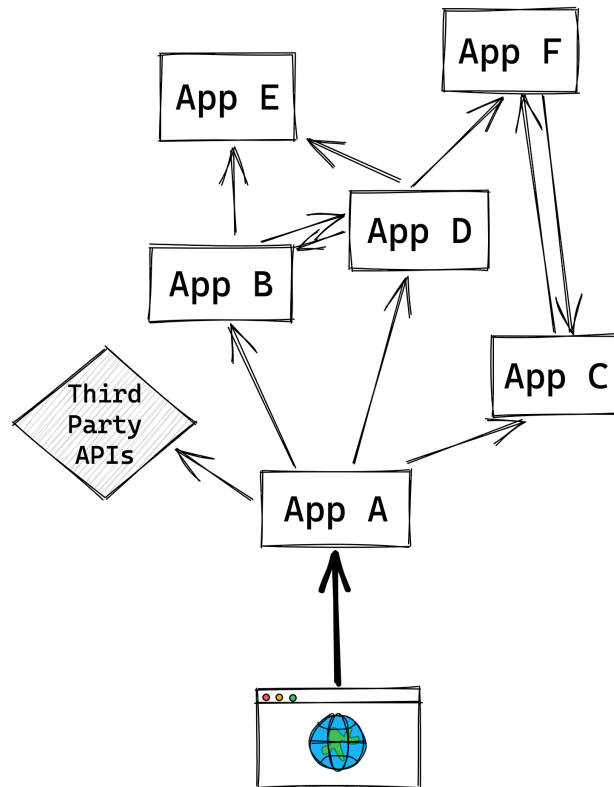
Betterment
at Work



RAILS_ENV=production



RAILS_ENV=staging



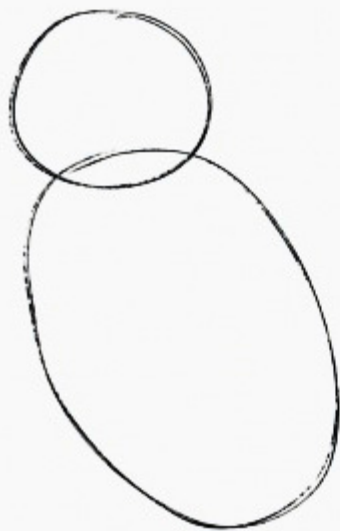


Fig 1. Draw two circles



Fig 2. Draw the rest of the damn Owl

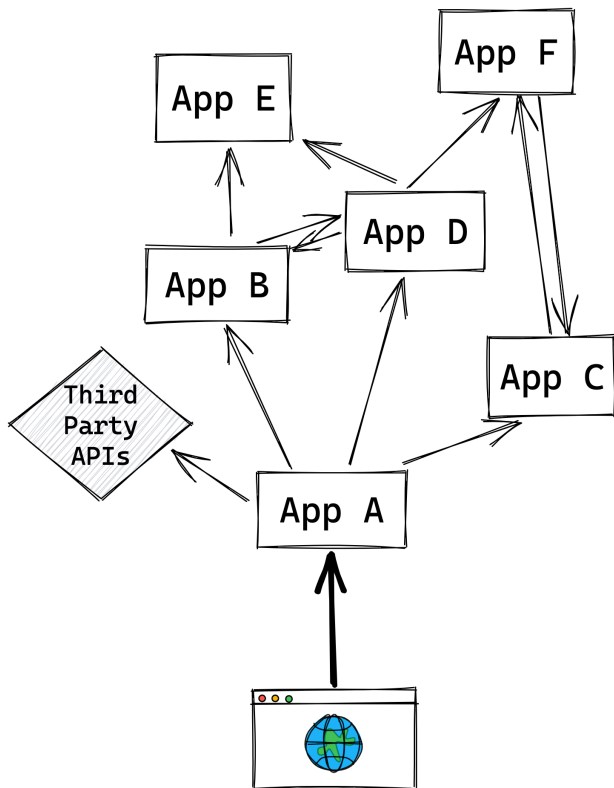
RAILS_ENV=staging



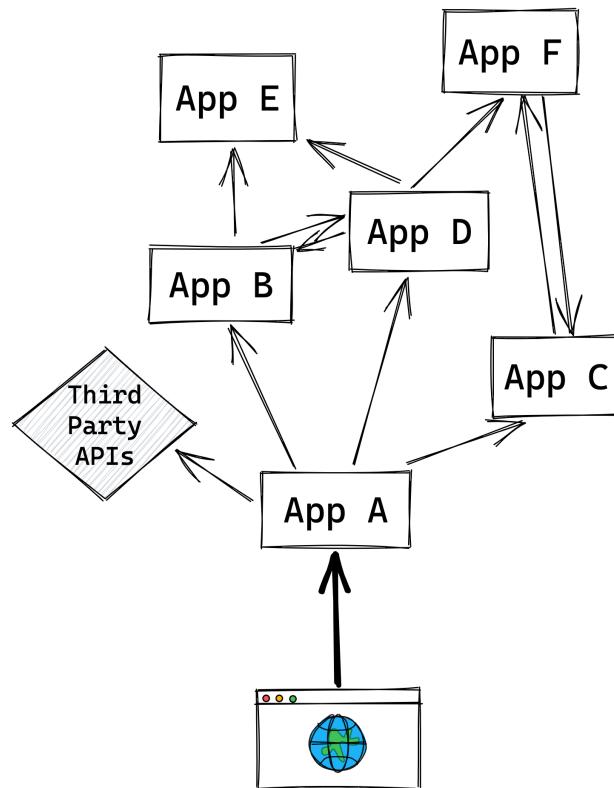
RAILS_ENV=demo



RAILS_ENV=staging



RAILS_ENV=demo



Betterment

Good afternoon, Morgan

[Refer a Friend](#) [Transfer or rollover](#) [Deposit](#)

[Home](#)

[Emergency Fund](#)
Individual Taxable

[Retirement](#)
Multiple Accounts

[Buying a Home](#)
Individual Taxable

[Add new](#)

YOUR ACCOUNT

[Transfers](#)

[Activity](#)

[Documents](#)

[Settings](#)




[Log out](#)

MORE OF BETTERMENT

[Ask an Advisor](#)

[Earn Rewards](#)

Investments [See performance](#)

	Emergency Fund Individual Taxable	\$800.00 Off track
	Retirement Multiple Accounts	\$2,330.00 Off track
Goal set up: Track your current savings		
	Buying a Home Individual Taxable	\$1,200.00 Off track

Net worth [See breakdown](#)

Total net worth	~\$670.00
Betterment balance	\$4,330.00

Investment performance [Turn on](#)

Total earned	\$479.46
Dividends earned	\$82.19
Tax losses harvested	Turn on





Q1

Redesign

Improve CSV upload

Add views

Jira

Map Tree due da

Mobile App

Rights management

Improve Trello integration

Build NPS survey

Launch new website

Q3

Zendesk integration

in-app notifications

Restructure onboarding flow

Azure integration

Auth0 integration

Trello integration

Connect integration

Q4

SSO/SAML

MS Teams integration

Checklist

Github integration

Pusher

Allow dependencies

10:49 PM
Retail demo

d new code since April 11

Screen Shot 2017-07-13 at 9:59 AM

and getting the

still seeing this i
Screen Shot 201

This page is currently experiencing an issue.
Our apologies for the inconvenience. Our team is aware and working to restore it as quickly as possible.
As always, your money is safe and secure. If you have any questions, please contact our support team at support@betterment.com or (888) 428-9482.

This page
Our apologies for
As always, your money is

I have a demo
2 replies
participant demo

al times
great and i need

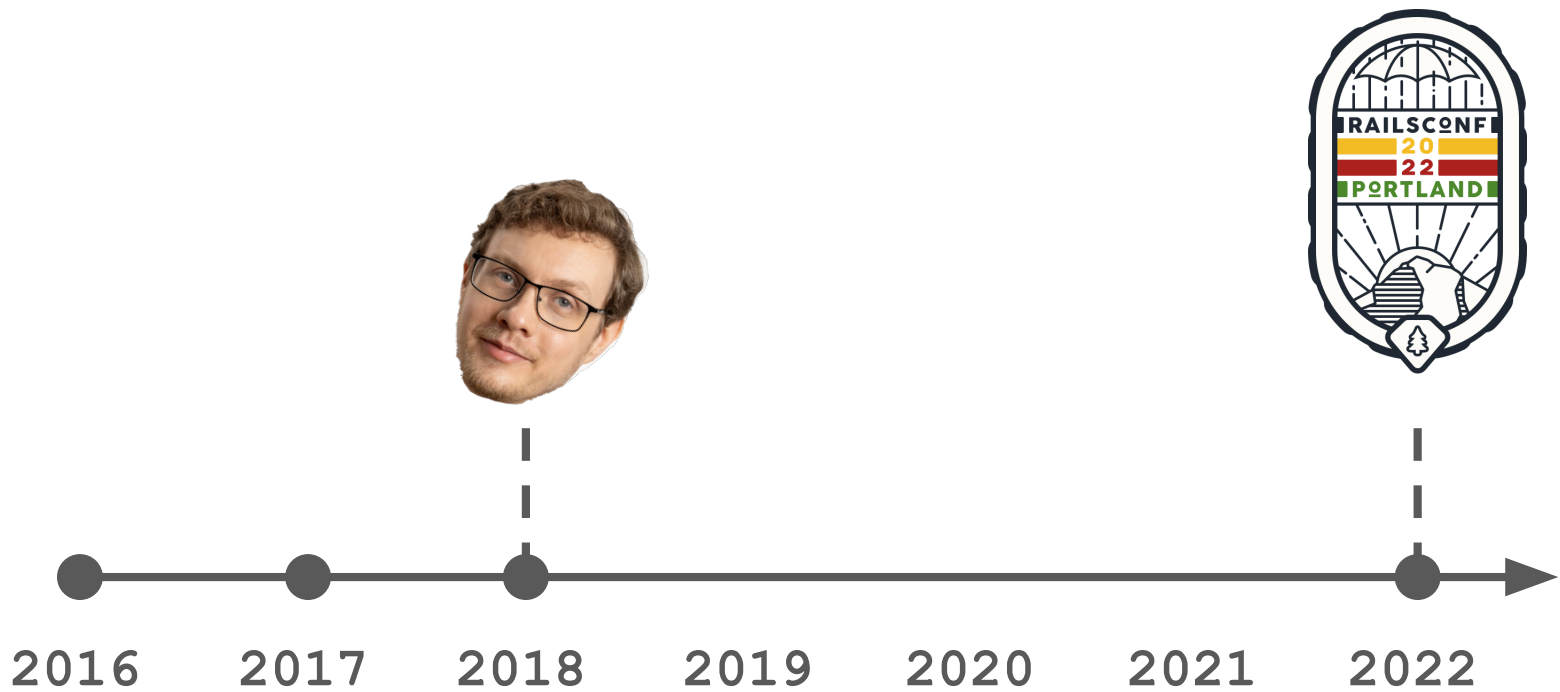
This page is currently not available.

Our apologies for the inconvenience. Our team is aware and working to restore it as quickly as possible.
As always, your money is safe and secure. If you have any questions, please contact our support team at support@betterment.com or (888) 428-9482.



9:42 AM

Yeah, I think demo is in a really bad state right now

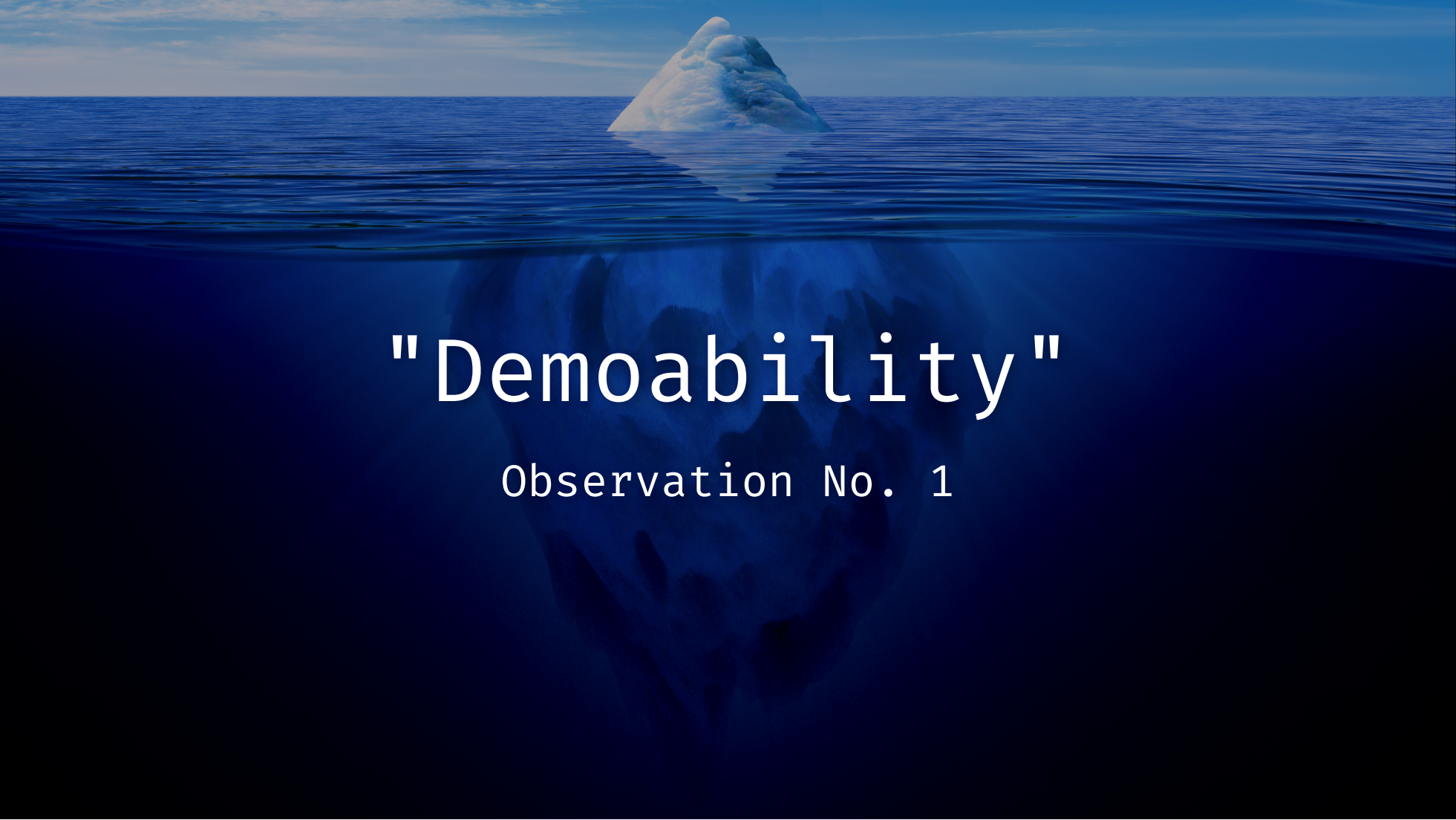




Build History


[trend](#)

find	x
<u>#41</u>	Jul 29, 2018 10:41 AM 23 KB
<u>#40</u>	Jun 17, 2018 8:36 PM 22 KB
<u>#39</u>	Jun 7, 2018 6:24 PM 23 KB
<u>#38</u>	Jun 7, 2018 5:27 PM 22 KB
<u>#37</u>	Jun 7, 2018 4:37 PM 23 KB
<u>#36</u>	Jun 6, 2018 9:32 AM 14 KB
<u>#35</u>	Dec 15, 2017 2:08 PM 24 KB
<u>#34</u>	Dec 15, 2017 12:50 PM 23 KB
<u>#33</u>	Dec 15, 2017 11:18 AM 22 KB
<u>#32</u>	Dec 15, 2017 10:45 AM 22 KB
<u>#31</u>	Oct 30, 2017 7:42 PM 22 KB
<u>#30</u>	Oct 27, 2017 7:02 PM 16 KB
<u>#29</u>	Sep 30, 2017 12:23 PM 22 KB

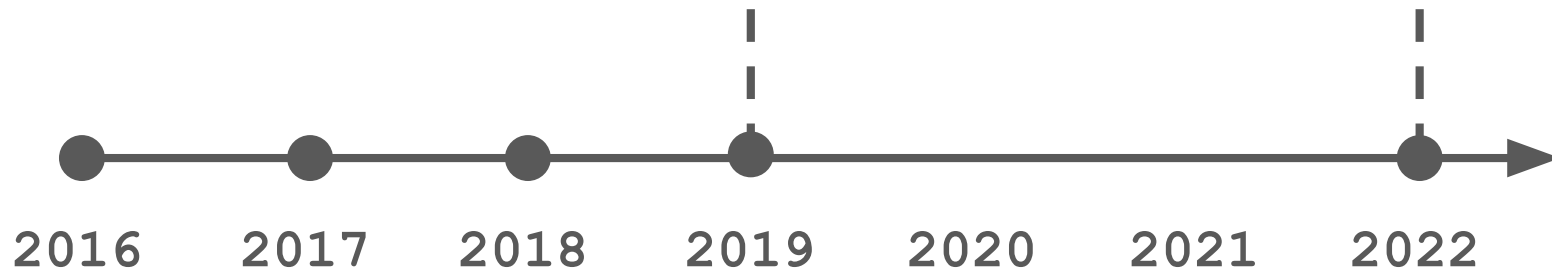
A photograph of an iceberg floating in a deep blue ocean. The visible tip of the iceberg is small and white, while the much larger, submerged portion is dark blue and jagged, illustrating the concept of hidden information or 'demoability'.

"Demoability"

Observation No. 1

A photograph of an iceberg floating in a deep blue ocean. The tip of the iceberg is visible above the water surface, while the much larger, jagged base is submerged underwater. The sky is a clear, pale blue. The text is overlaid on the submerged portion of the iceberg.

deployment
≠
maintenance



Consisted of **multiple apps/services**

Populated with **seed/fixture data**

Relied on **short-lived databases**

Deployed via **push-button (and)**

Owned by **one team**

Consisted of ~~multiple apps/services~~

Populated with seed/fixture data

Relied on short-lived databases

Deployed via push-button (and)

Owned by one team



Betterment/ **webvalve**



Betterment's framework for locally developing and testing service-oriented apps in isolation with WebMock and Sinatra-based fakes

 7

Contributors

 4

Used by

 97

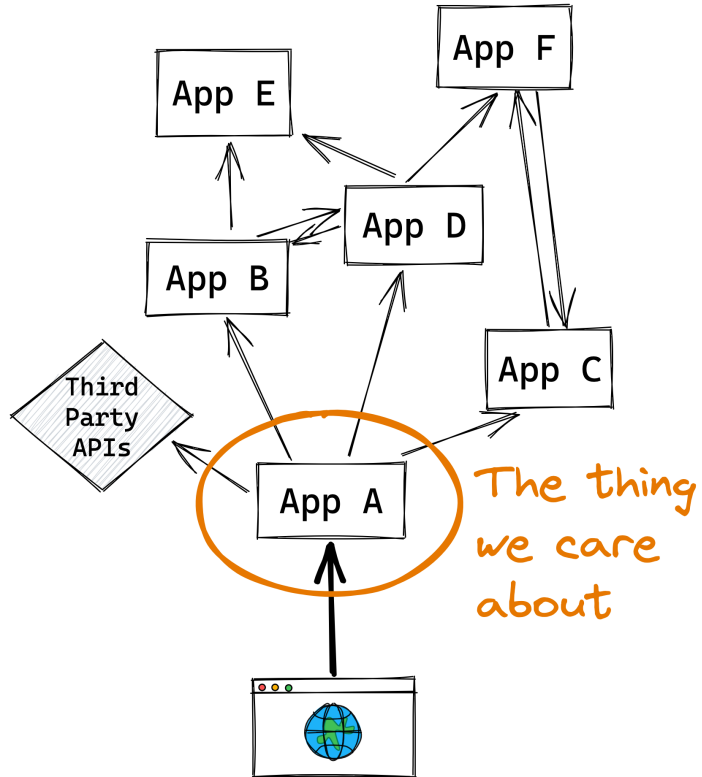
Stars

 12

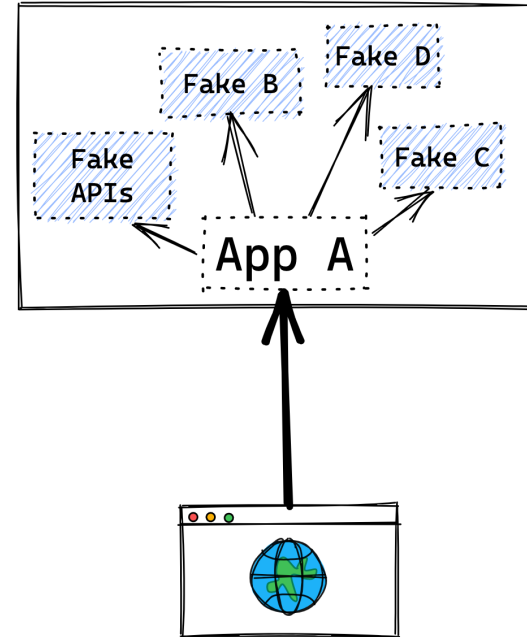
Forks



Without WebValve:



With WebValve:



```
class FakeBank < WebValve::FakeService
  get '/widgets' do
    json result: { value: 9.99, message: 'it works!' }
  end
end
```



Rails @Scale

Sam Moore

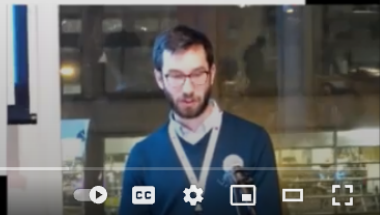
Integrate HTTP Services like a Boss

February 21, 2017


Takeaways

WebValve -- ^I<https://github.com/Betterment/webvalve>

- Integrated at the network layer -- **use it with existing API integrations**
- Rides on top of WebMock -- **writing tests is the same as it ever was**
- Uses Sinatra for fakes -- **fakes are easy to write, read, and maintain**
- Individual fakes can be toggled on/off -- **it works in development**
- It's easy to migrate an existing application -- **we've migrated a dozen**



<https://github.com/Betterment/webvalve>

 Search or jump to... Pull requests Issues Marketplace Explore

Betterment / webvalve Public Unwatch 6 Fork 12 Starred 97

<> Code Issues 6 Pull requests Discussions Actions Security Insights Settings

main 2 branches 19 tags Go to file Add file <> Code -

README.md


WebValve

CI passing gem v1.2.0

WebValve is a tool for defining and registering fake implementations of HTTP services and toggling between the real services and the fake ones in non-production environments.

This library is made possible by the incredible gems [WebMock](#) and [Sinatra](#).

Check out [the Rails at Scale talk](#) for some background on why we built it and some of the key design decisions behind WebValve:



Rails @Scale

Sam Moore

Integrate HTTP Services like a Boss

February 21, 2017

About

Betterment's framework for locally developing and testing service-oriented apps in isolation with WebMock and Sinatra-based fakes

rubygems.org/gems/webvalve

rails testing http sinatra fake

fakeweb

Readme

MIT License

97 stars

6 watching

12 forks

Releases

19 tags

[Create a new release](#)

Packages

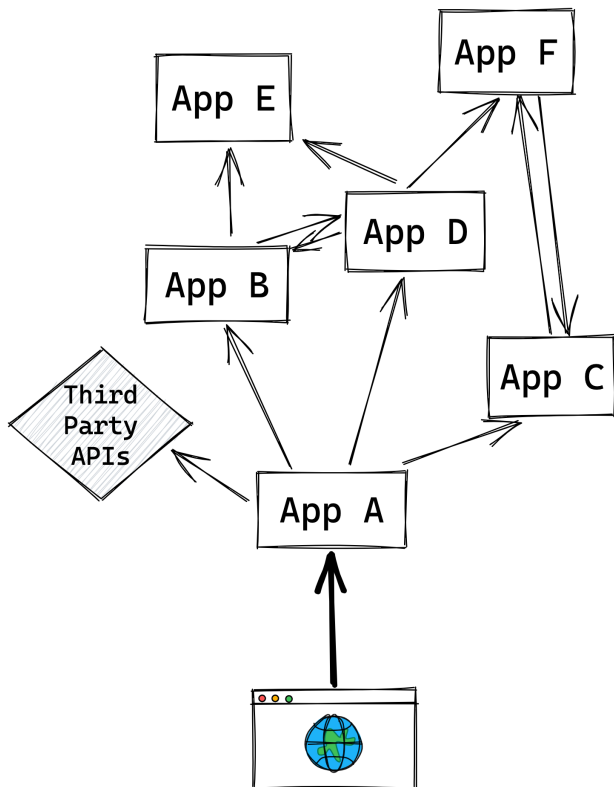
No packages published

[Publish your first package](#)

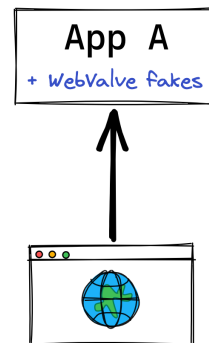
Used by 4


@coreyja / package-tracker

Before





After





Betterment

Home

Emergency Fund
Individual Taxable

Retirement
Multiple Accounts

Buying a Home
Individual Taxable

Add new

YOUR ACCOUNT

Transfers

Activity

Documents

Settings


Log out

MORE OF BETTERMENT

Ask an Advisor

Earn Rewards


Good afternoon, Morgan

[Refer a Friend](#) [Transfer or rollover](#) 


Deposit


Investments

[See performance](#)


Emergency Fund
Individual Taxable

\$800.00
Off track

Retirement
Multiple Accounts



Goal set up: [Track your current savings](#)

Buying a Home
Individual Taxable

\$1,200.00
Off track

Net worth

Total net worth-\$670.00

Betterment balance\$4,330.00

[See breakdown](#)

Investment performance

Total earned\$479.46

Dividends earned\$82.19

Tax losses harvested[Turn on](#)

Performance

Date range

All time

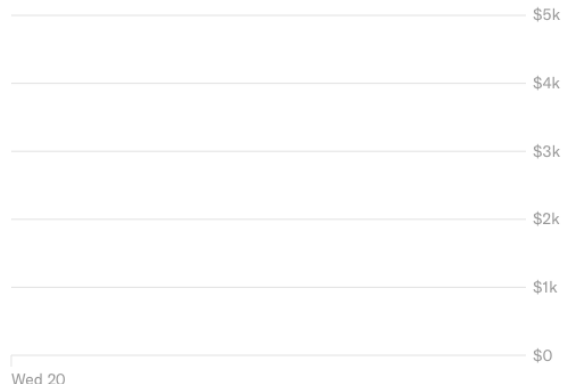
Filter

3 Goals

Balance ?

\$4,330.00

Apr 20th, 2020–Apr 20th, 2022



Description

Value

Starting balance

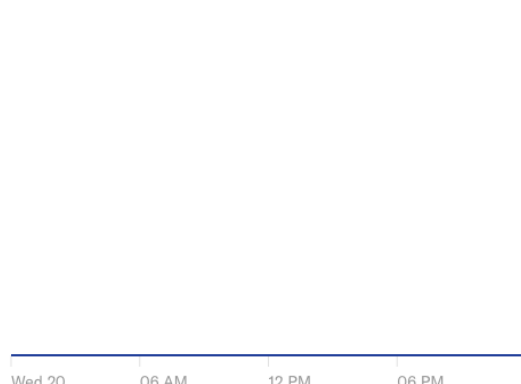
\$4,330.00

Balance on April 20th, 2022

\$4,330.00

Time-weighted Investment Returns ?

Apr 20th, 2020–Apr 20th, 2022



Goal

Cumulative | Annualized

 ● Emergency Fund

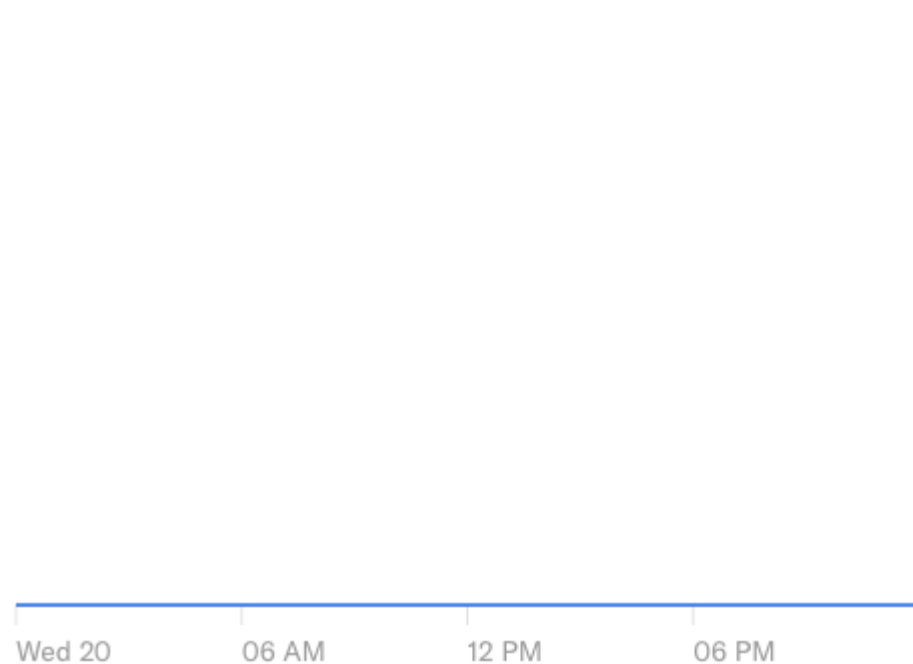
0.0% >

 ● Retirement

0.0% >

Time-weighted Investment Returns ⓘ

Apr 20th, 2020–Apr 20th, 2022

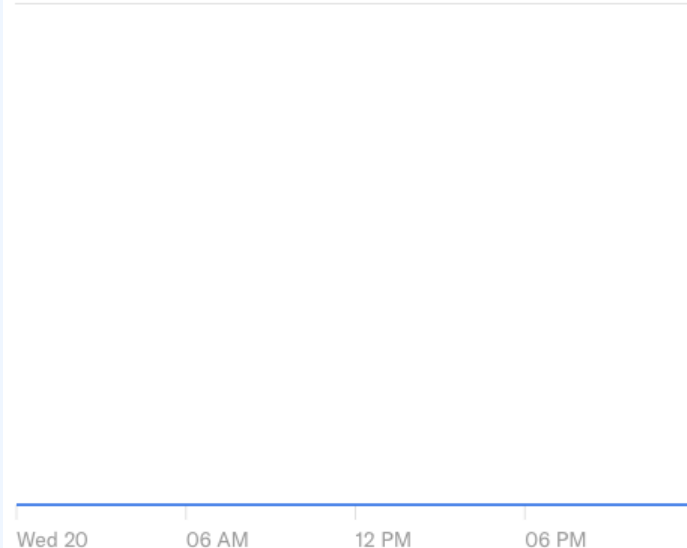




```
class FakeBalanceService < WebValve::FakeService
  get '/api/daily_returns' do
    json([
      {
        date: Date.yesterday.to_s(:iso8601),
        balance_cents: 1_000_00,
        starting_balance_cents: 1_000_00,
        market_change_amount_cents: 0,
        dividend_amount_cents: 0,
        fees_cents: 0
      }
    ])
  end
end
```

Time-weighted Investment Returns ⓘ

Apr 20th, 2020–Apr 20th, 2022



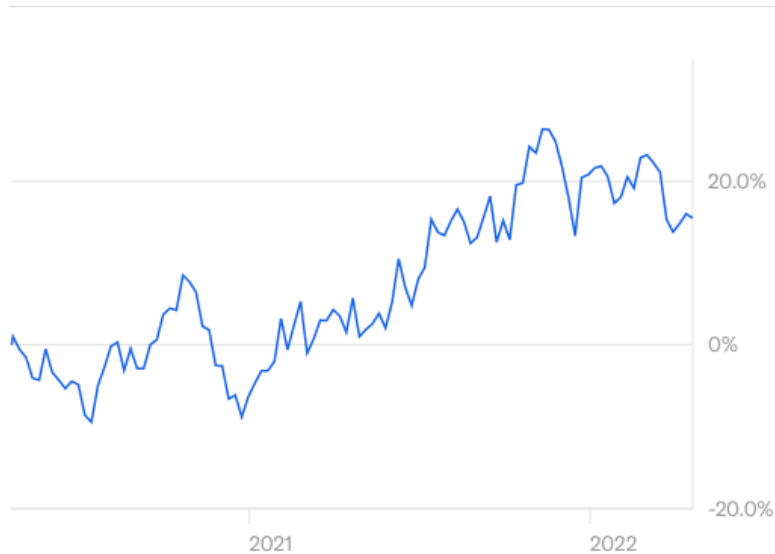
```

class FakeBalanceService < WebValve::FakeService
  get '/api/daily_returns' do
    date_range = dates(params[:from], params[:to])
    bal = Money.new(1_000_00)
    json(date_range.map.with_index do |date, idx|
      starting_bal = bal
      buys = deposit?(date) ? random_buy : 0
      sells = withdraw?(date) ? random_sell : 0
      mkt_changes = bal * random_market_change
      divs = dividend?(date) ? bal * 0.01 : 0
      fees = fee?(date) ? bal * 0.0025 : 0
      bal += buys - sells + mkt_changes + divs - fees
      {
        date: date.to_s(:iso8601),
        balance_cents: bal.cents,
        starting_balance_cents: starting_bal.cents,
        market_change_amount_cents: mkt_changes.cents,
        dividend_amount_cents: divs.cents,
        fees_cents: fees.cents,
      }
    end)
  end
end

```

Time-weighted Investment Returns ?

Apr 20th, 2020–Apr 20th, 2022



YOUR ACCOUNT

Transfers

Activity

Documents

Settings

Log out

MORE OF BETTERMENT

Ask an Advisor

Earn Rewards

Performance

Date range

All time

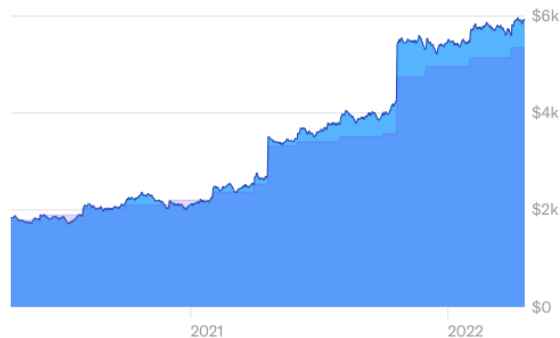
Filter

3 Goals

Balance

Apr 20th, 2020–Apr 20th, 2022

\$5,933.08



● Balance ● Invested

Description

Value

Starting balance

\$1,831.20

Balance on April 21st, 2020

\$1,831.20

Time-weighted Investment Returns

Apr 20th, 2020–Apr 20th, 2022



Goal

Cumulative | [Annualized](#)

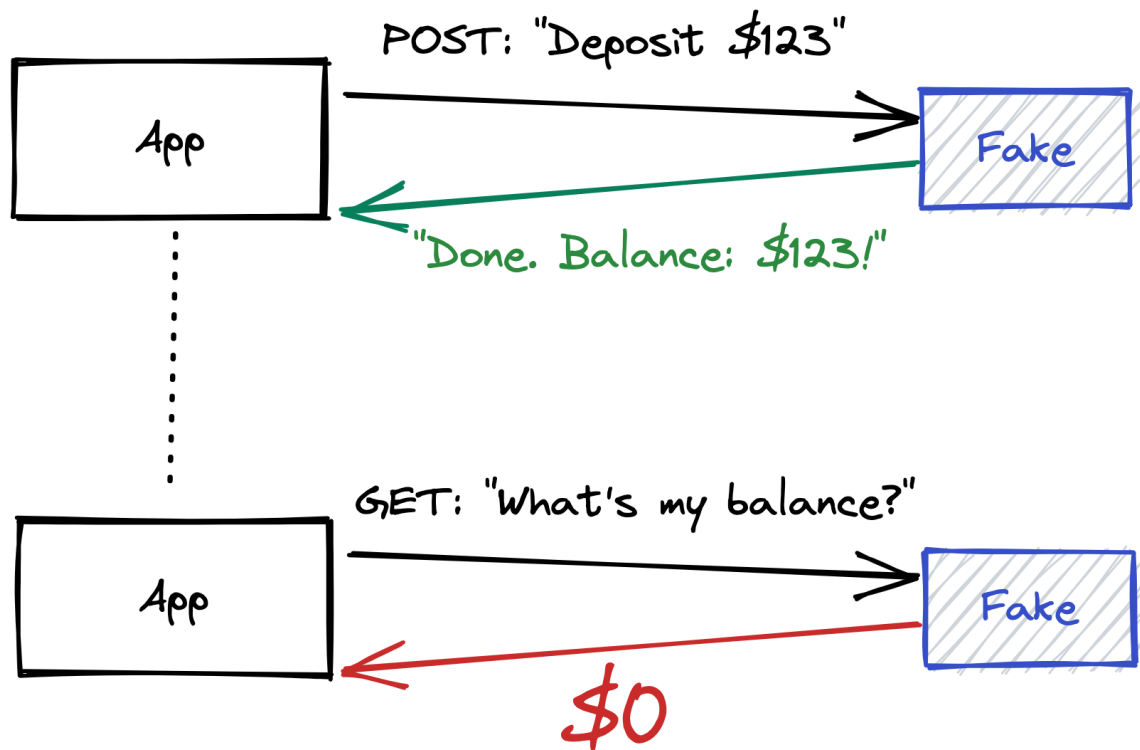
 Emergency Fund

5.2% >

 Retirement

15.5% >





"Stateful" Fakes

Finley
New 401(k) plan
Conversion plan
~\$16K balance
Goals require setup
No taxable goals
No external accounts

Sign In

Morgan

Early Cash
Early Withdrawal
Savings for a Home Downpayment
Outstanding Student Loans

Sign In

```
class FakeBalanceService < WebValve::FakeService
  class FakeAccount < ActiveRecord::Base
    money :balance
  end

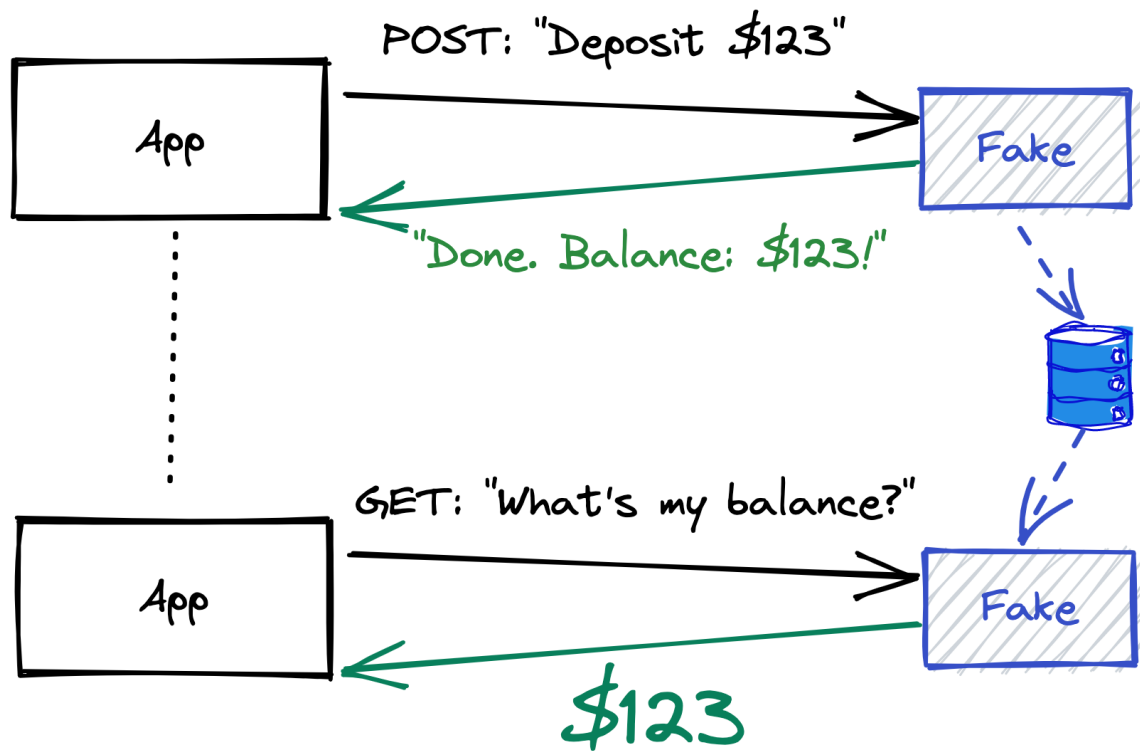
  get '/api/balance' do
    fake_account = FakeAccount
      .find_by(account_id: params[:account_id])

    json balance_cents: fake_account&.balance.cents || 0
  end

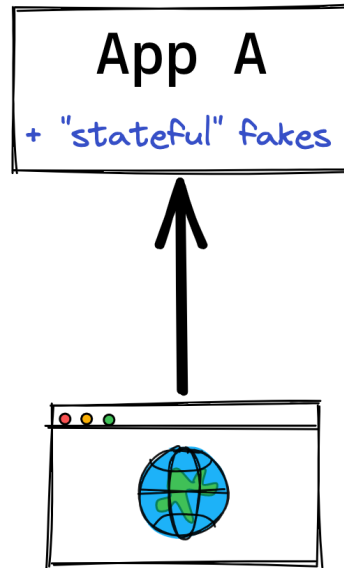
  post '/api/deposit' do
    fake_account = FakeAccount
      .where(account_id: params[:account_id])
      .first_or_create!(balance_cents: 0)

    deposit = params[:amount_cents].to_money
    fake_account.update!(balance: fake_account.balance + deposit)

    json balance_cents: fake_account.balance.cents
  end
end
```



RAILS_ENV=demo



→ **one app** (+ stateful fakes)

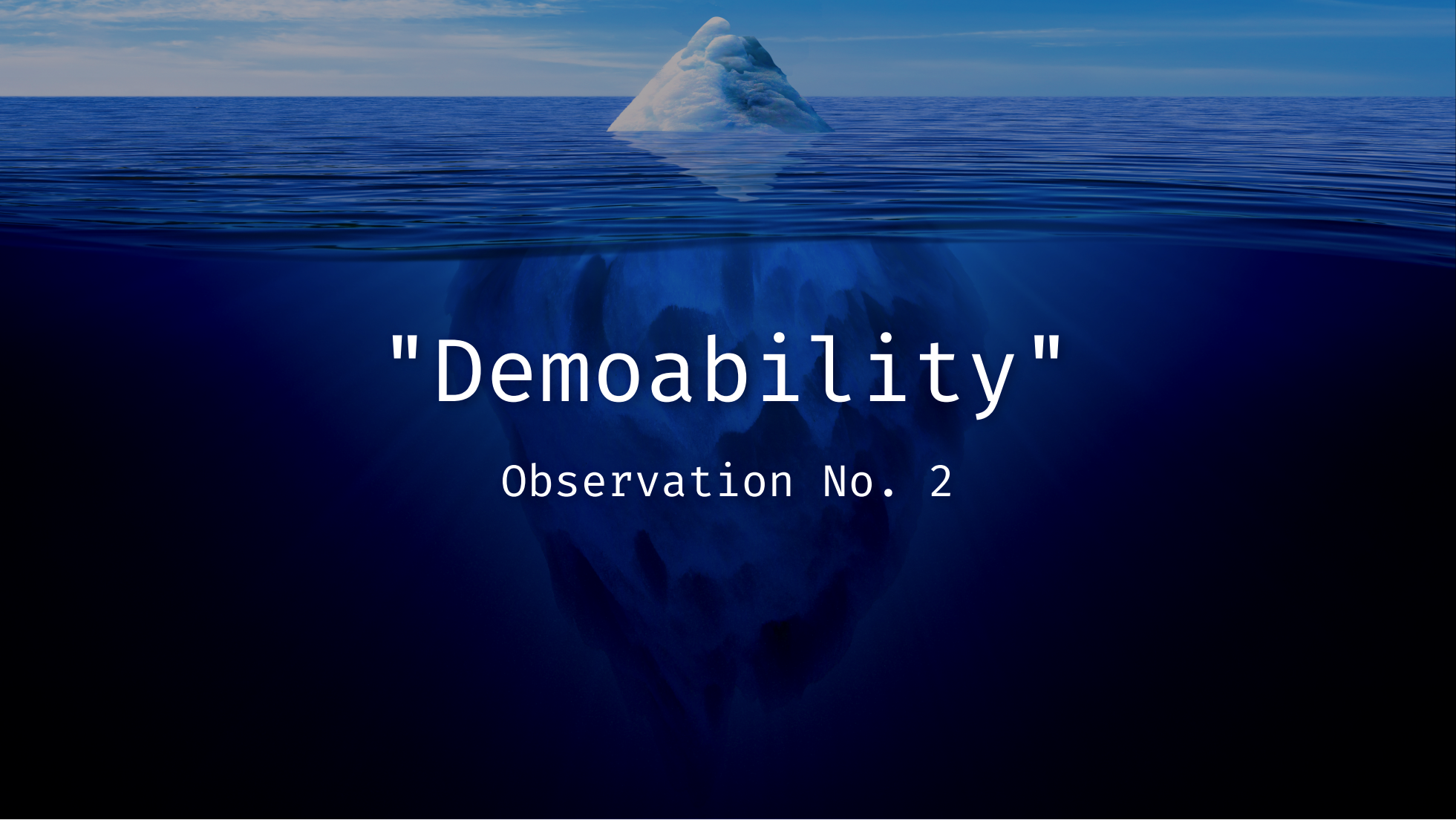
Consisted of ~~multiple apps/services~~

Populated with **seed/fixture** data

Relied on **short-lived** databases

Deployed via **push-button** (and)

Owned by **one team**

A photograph of an iceberg floating in a calm, deep blue ocean. The visible tip of the iceberg is small and white, while the much larger, submerged portion is visible through the clear water, illustrating the concept of hidden potential or 'demoability'.

"Demoability"

Observation No. 2

A photograph of an iceberg floating in a calm blue ocean under a clear sky. The visible tip of the iceberg is small and white, while the much larger, submerged portion is visible through the dark blue water, illustrating the concept of isolation.

an app should (mostly)
work in isolation

→ **one app** (+ stateful fakes)

Consisted of ~~multiple apps/services~~

Populated with **seed/fixture data**

Relied on **short-lived databases**

Deployed via **push-button** (and)

Owned by **one team**

→ **one app** (+ stateful fakes)

Consisted of ~~multiple apps/services~~

Populated with ~~seed/fixture data~~

Relied on **short-lived** databases

Deployed via **push-button** (and)

Owned by **one team**



Email

Password

Log in

[Forgot password?](#)

[Sign Up](#)

👤 user_1@example.org

pwd: great SCOTT 123

👤 user_2@example.org

pwd: ET phone HOME 88

👤 user_4@example.org

pwd: I have THE power 456



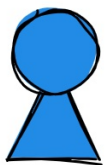
Email

Password

Log in

[Forgot password?](#)

[Sign Up](#)



Retail Investor

SIGN IN



401(k) User

SIGN IN



Advised User

SIGN IN



Retail Investor

SIGN IN



401(k) User

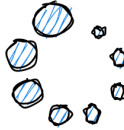
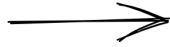
SIGN IN



Advised User

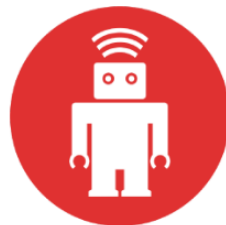
SIGN IN







thoughtbot/ **factory_bot**



A library for setting up Ruby objects as test data.

 235

Contributors

 112k

Used by

 7k

Stars

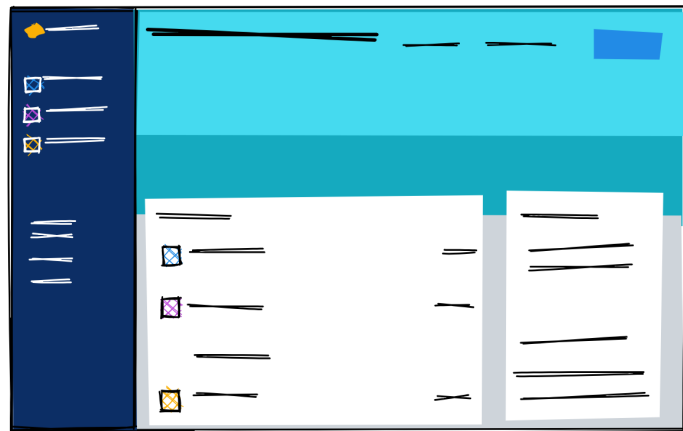
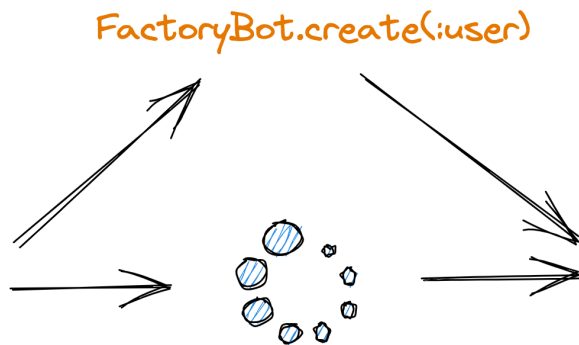
 3k

Forks



```
FactoryBot.define do
  factory :user do
    first_name { "John" }
    last_name  { "Doe" }
    sequence(:email) { |i| "user_#{i}@example.org" }
  end
end
```

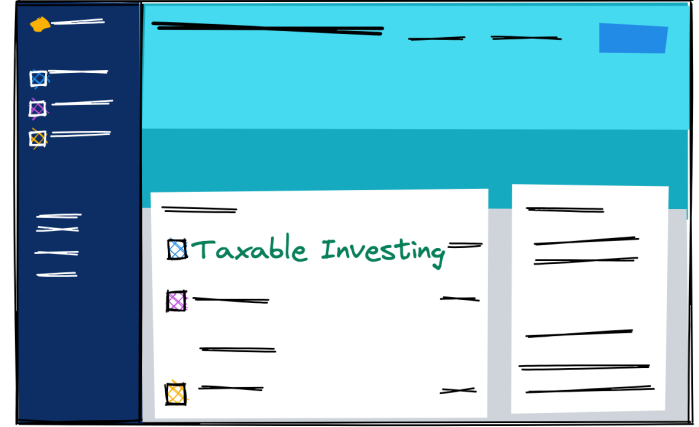
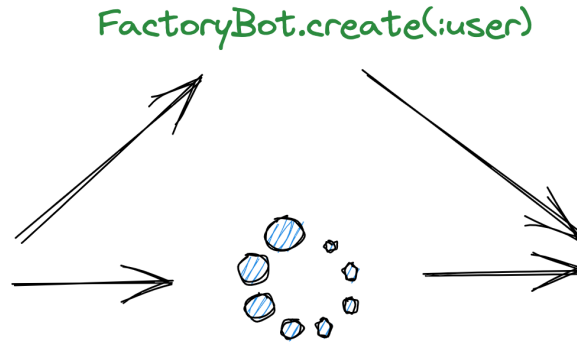
```
user_1 = FactoryBot.create(:user)
user_2 = FactoryBot.create(:user)
user_3 = FactoryBot.create(:user)
```




```
FactoryBot.define do
  factory :user do
    first_name { "John" }
    last_name  { "Doe" }
    sequence(:email) { |i| "user_#{i}@example.org" }

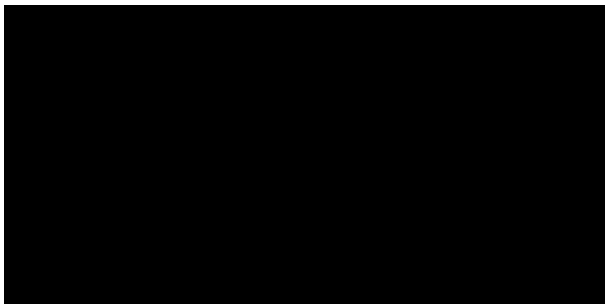
    trait :with_roth_401k do
      after(:create) do |user, _|
        FactoryBot.create(:account, :roth_401k, user: user)
      end
    end
  end
end
```

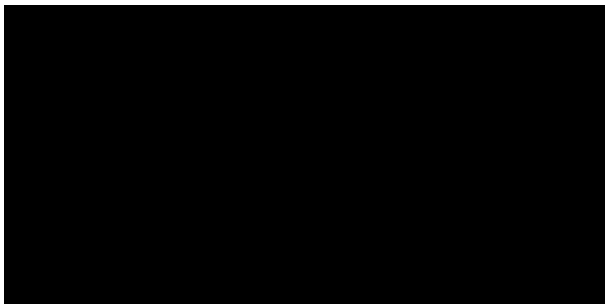
```
FactoryBot.create(:user, :with_roth_401k)
```



```
DemoMode.add_persona :nathans_test_persona do
  features << 'Retirement Goal'
  features << 'Roth 401(k)'

  sign_in_as do
    FactoryBot.create(:user, :with_roth_401k)
  end
end
```





This page is currently experiencing an issue.

Our apologies for the inconvenience. Our team is aware and working to restore it as quickly as possible.

As always, your money is safe and secure. If you have any questions, please contact our support team at support@betterment.com or (646) 600-8263.



deployment 1

user_1@example.org

user_2@example.org

user_3@example.org

deployment 2

user_1@example.org

```
FactoryBot.define do
  factory :user do
    first_name { "John" }
    last_name  { "Doe" }
    sequence(:email) { |i| "user_#{i}@example.org" }
  end
end
```




```
module FactoryBot
  class DefinitionProxy
    def sequence(name, &block)
      add_attribute(name) do
        find_next_in_sequence(@instance&.class, name, &block)
      end
    end

    def find_next_in_sequence(klass, name, &block)
      # ???
    end
  end
end
```

```
module FactoryBot
  class DefinitionProxy
    def sequence(name, &block)
      add_attribute(name) do
        find_next_in_sequence(@instance&.class, name, &block)
      end
    end
  end

  def find_next_in_sequence(klass, name, &block)
    klass.select("MAX(#{name})") + 1
  end
end
end
```

```
sequence(:short_id) { |i| 10000009 - i }
```



10000009
10000008
10000007
...

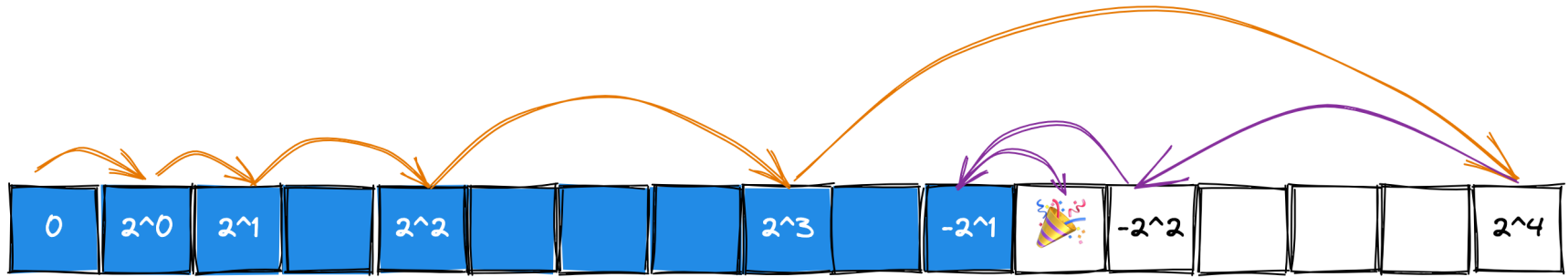
```
sequence(:ssn) { |i| i.to_s.rjust(9, '0') }
```

↓
decrypt("342lk9s ... ") ⇒ 000-00-0000

decrypt("jf9893d ... ") ⇒ 000-00-0001

decrypt("j52c5ag ... ") ⇒ 000-00-0002

...



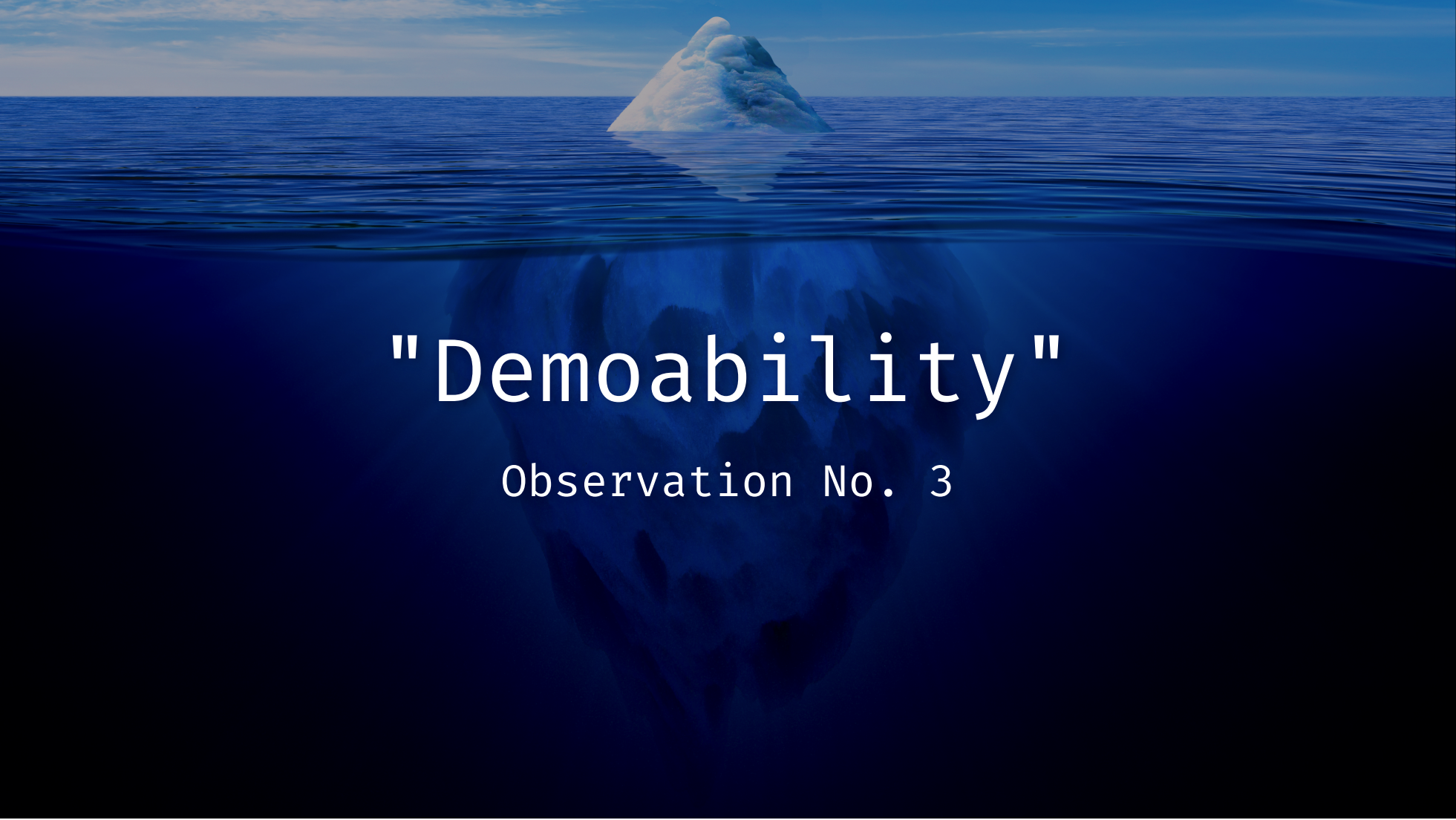
$O(\log n)$

```
module FactoryBot
  class DefinitionProxy
    def sequence(name, &block)
      add_attribute(name) do
        find_next_in_sequence(@instance&.class, name, &block)
      end
    end
  end

  def find_next_in_sequence(klass, name, &block)
    CleverSequence.lookup(klass, name, &block).next
  end
end
end
```



(this is definitely a real demo)

A photograph of an iceberg floating in a deep blue ocean. The visible tip of the iceberg is small and white, while the much larger, submerged portion is dark blue and jagged, illustrating the concept of hidden potential or 'demoability'.

"Demoability"

Observation No. 3

A photograph of an iceberg floating in a calm blue ocean. The tip of the iceberg is visible above the water line, while the much larger, submerged portion is visible below. The sky is a clear, pale blue. The text "Start with the UX" is overlaid in white, centered horizontally, with the word "UX" being larger than the others.

Start with the UX

↳ **one app** (+ stateful fakes)

Consisted of ~~multiple apps/services~~

↳ **personas** (+ factories)

Populated with ~~seed/fixture data~~

Relied on **short-lived** databases

Deployed via **push-button** (and)

Owned by **one team**

↳ **one app** (+ stateful fakes)

Consisted of ~~multiple apps/services~~

↳ **personas** (+ factories)

Populated with ~~seed/fixture data~~

Relied on **short-lived databases**

Deployed via **push-button** (and)

Owned by **one team**

↳ **one app** (+ stateful fakes)

Consisted of ~~multiple apps/services~~

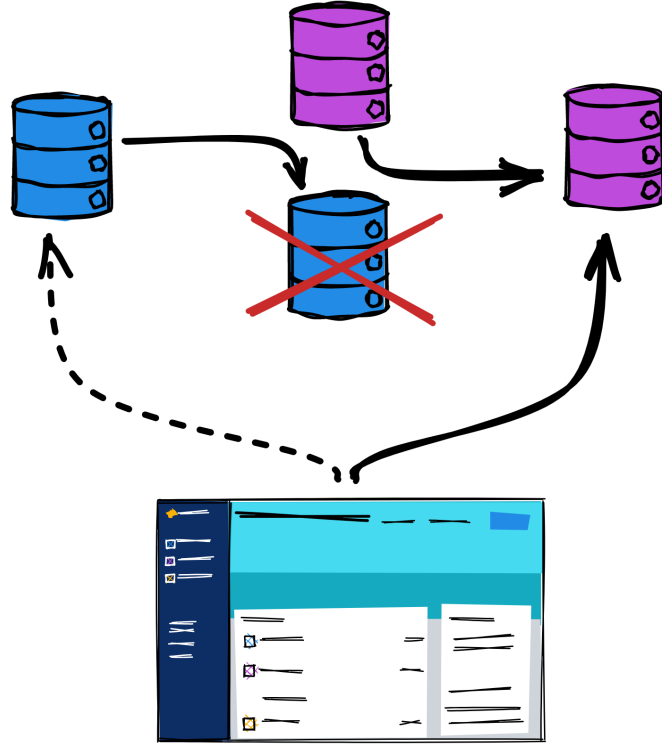
↳ **personas** (+ factories)

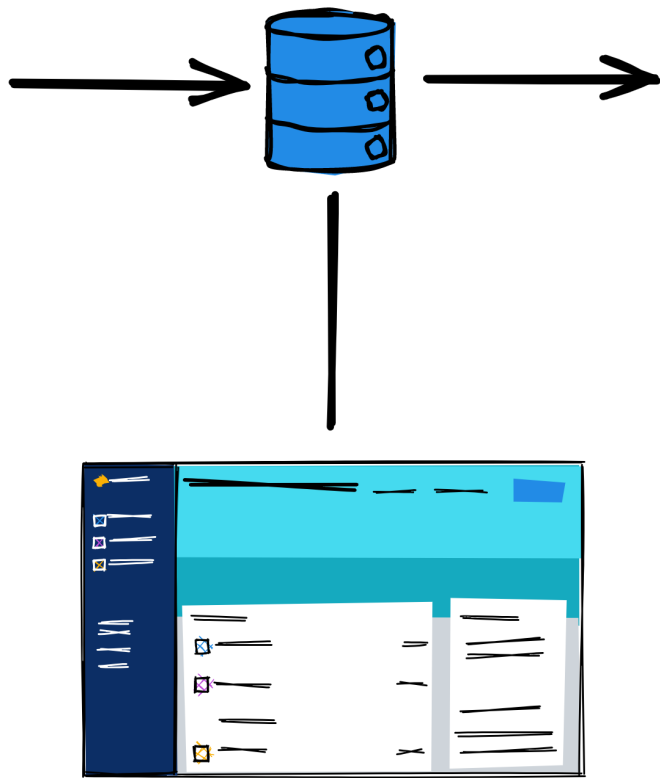
Populated with ~~seed/fixture data~~

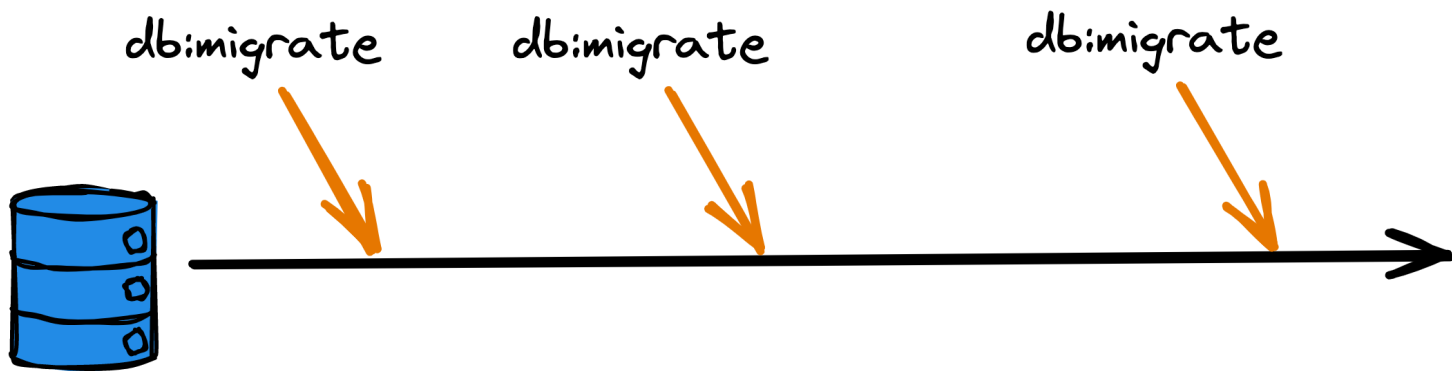
Relied on ~~short-lived databases~~

Deployed via **push-button** (and)

Owned by **one team**







↳ **one app** (+ stateful fakes)

Consisted of ~~multiple apps/services~~

↳ **personas** (+ factories)

Populated with ~~seed/fixture data~~

↳ **a long-lived database**

Relied on ~~short-lived databases~~

Deployed via **push-button** (and)

Owned by **one team**

↳ **one app** (+ stateful fakes)

Consisted of ~~multiple apps/services~~

↳ **personas** (+ factories)

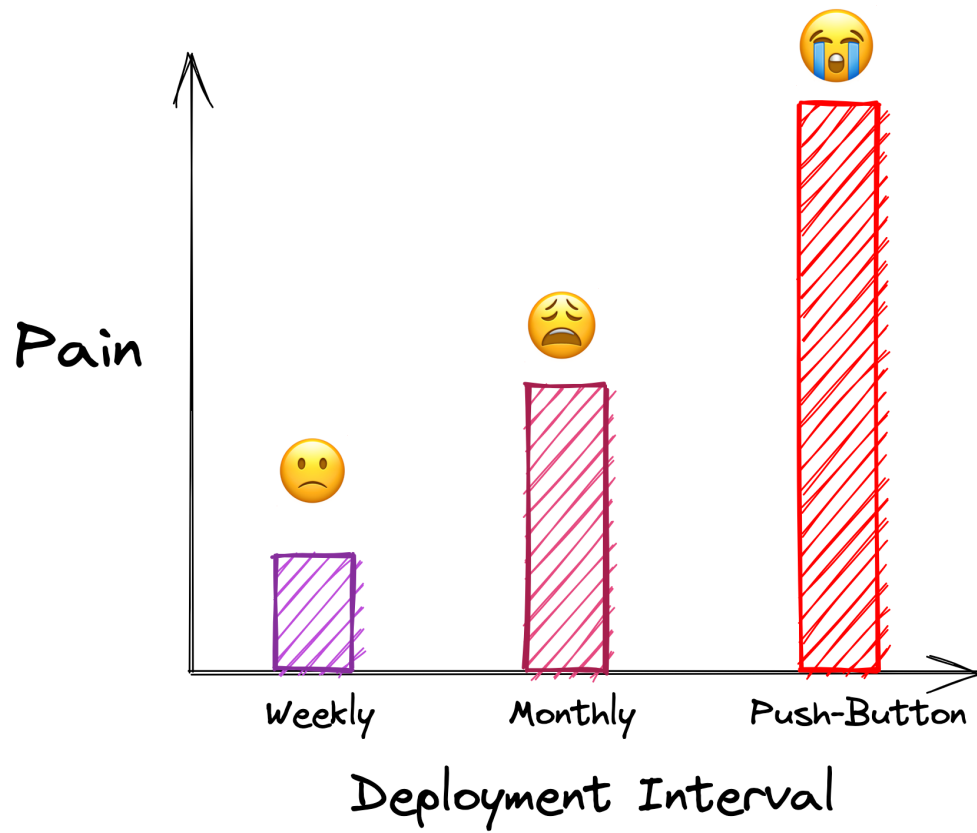
Populated with ~~seed/fixture data~~

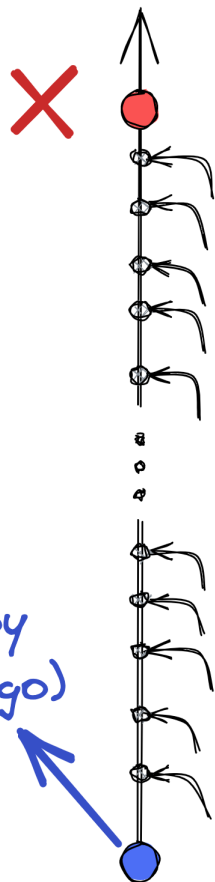
↳ **a long-lived database**

Relied on ~~short-lived databases~~

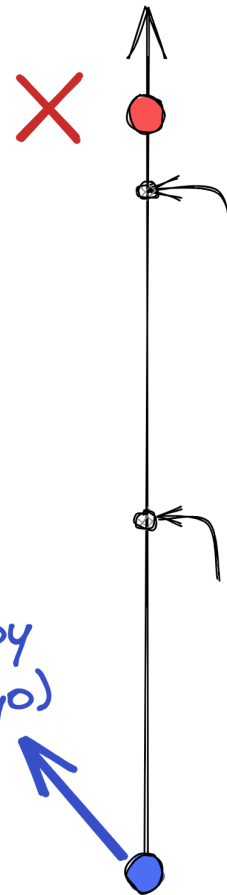
Deployed via ~~push-button (and)~~

Owned by **one team**

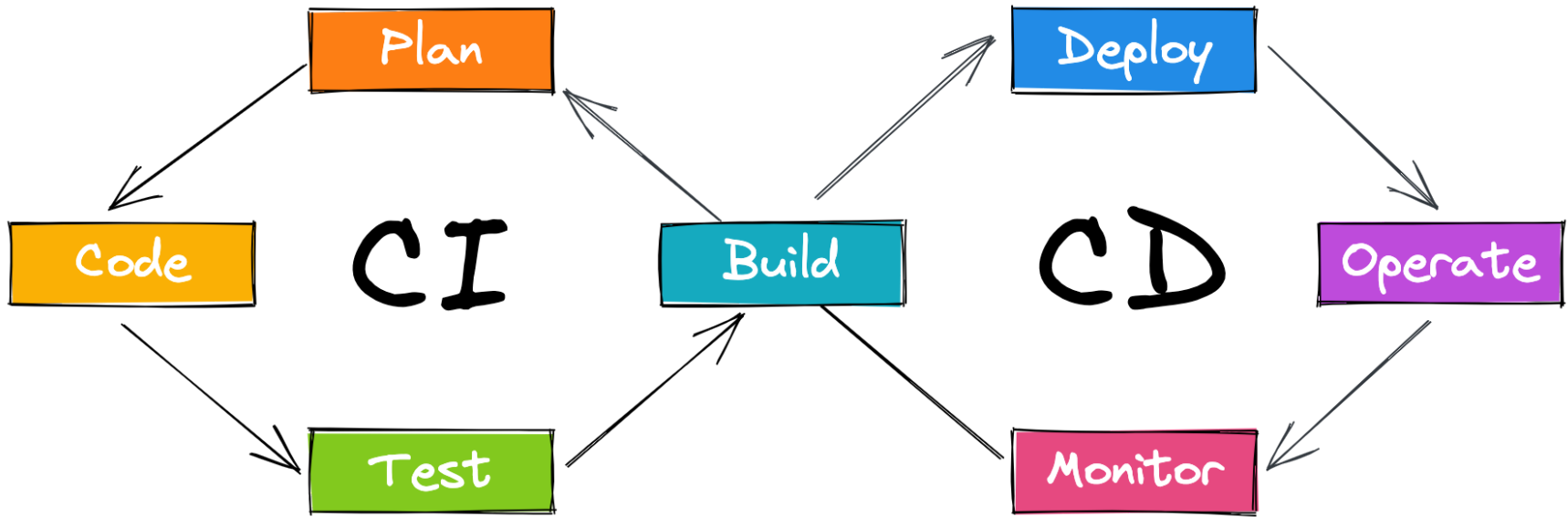


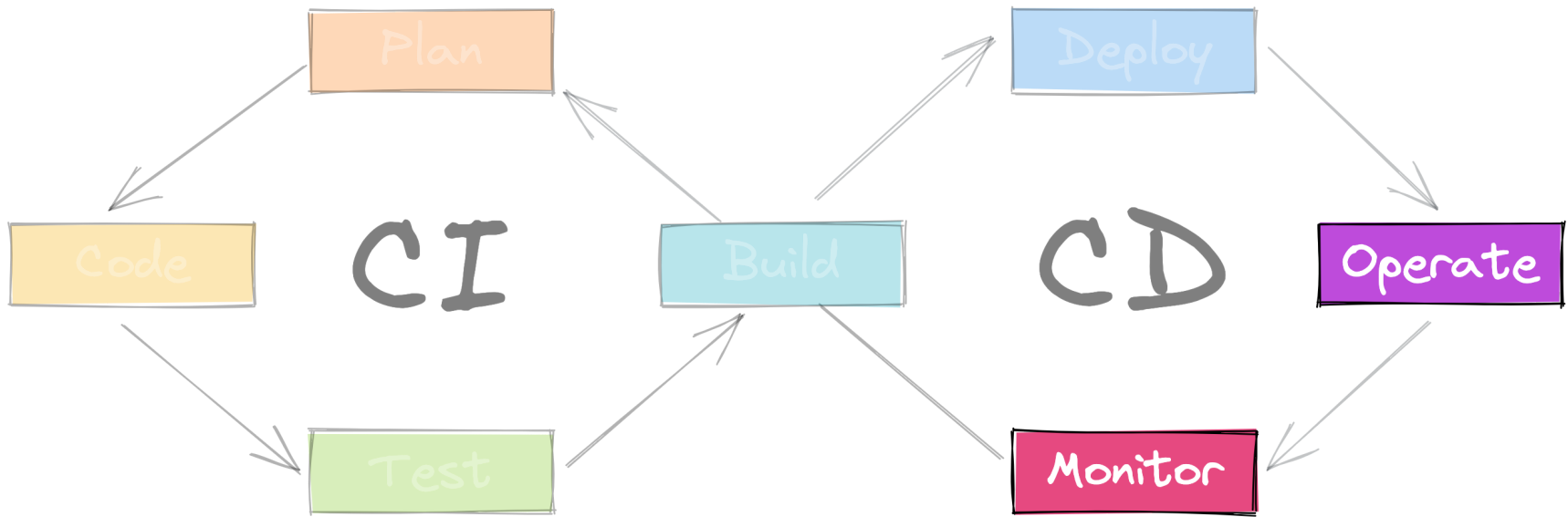


Last Deploy
(3 Months Ago)




Last Deploy
(3 Hours Ago)






September 30th, 2021





Coach Bot


10:11 AM


Deployment failed. 🤖

 main

 1dd223b8d...68fa16b07

 retail-demo-deploy#1dff49ed


 skipper logs


 @nathan


B


Betterment


Nathan Griffith


 Projects


 Issues


 Performance

 Releases

 User Feedback

 Alerts

 Discover

 Dashboards

Issues

All Unresolved 5

For Review

Ignored

Saved Searches

retail

demo

24H

is:unres

☐ Resolve

☒ Ignore

...

↑↓ Last Seen

☐ ActionView::Template::Error

Apl...

undefined method "zero?" for "0.49":Stri...

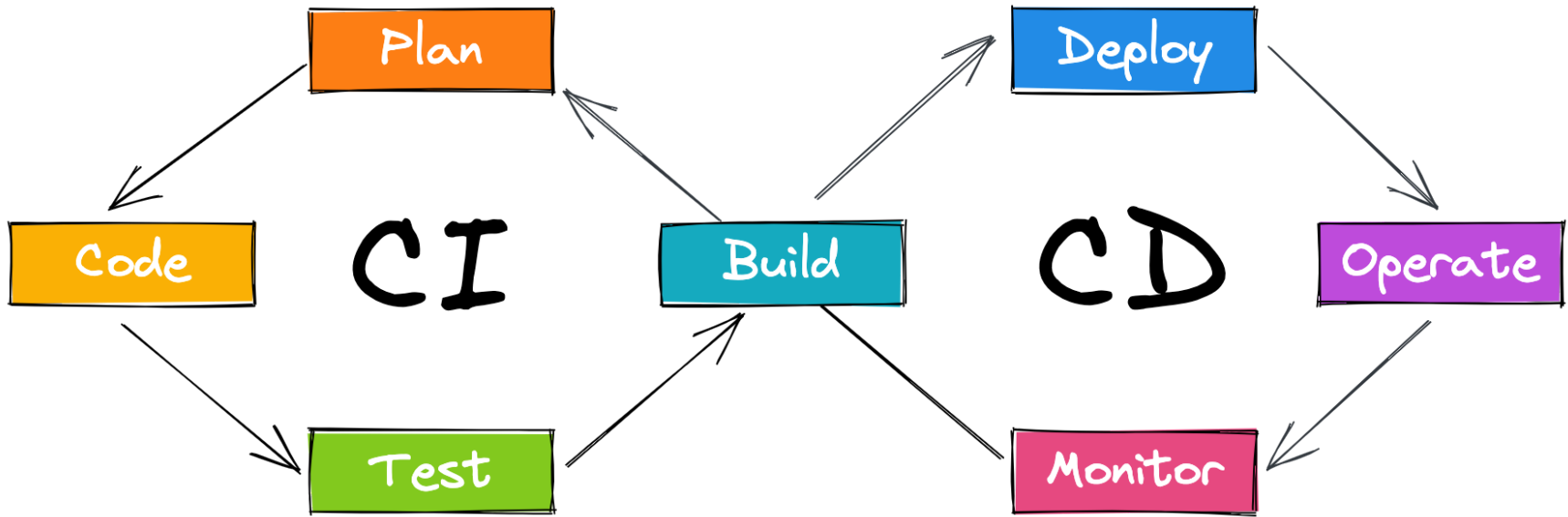
New Issue

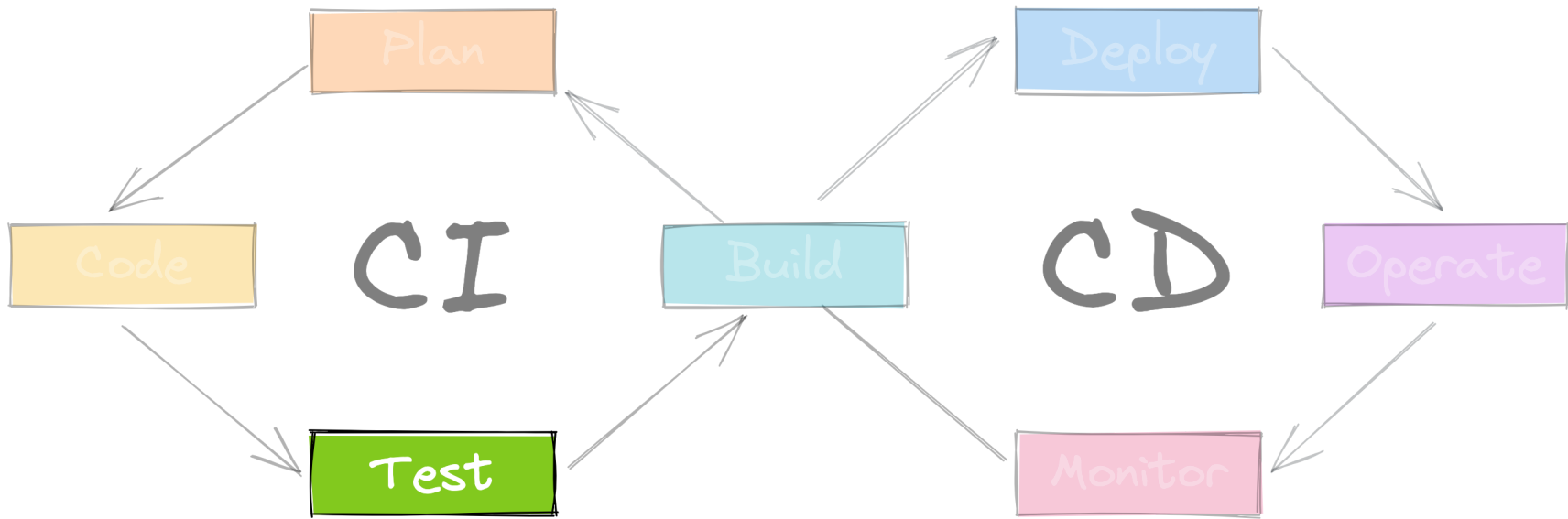
RETAIL-1180

6min ago | 6m

☐ ActionView::Template::Error

Apl...



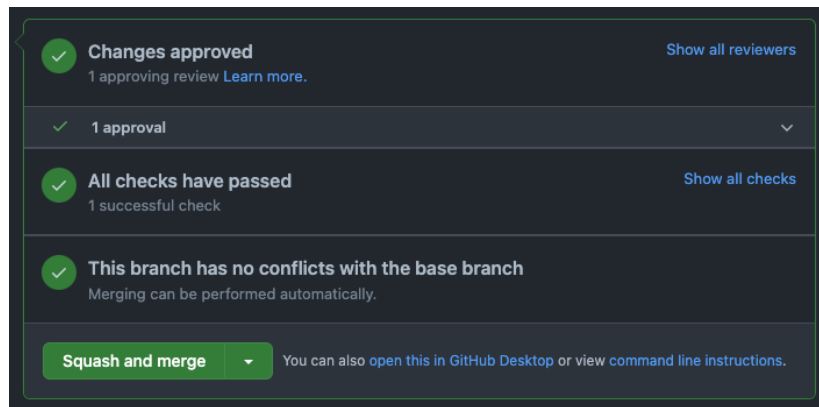


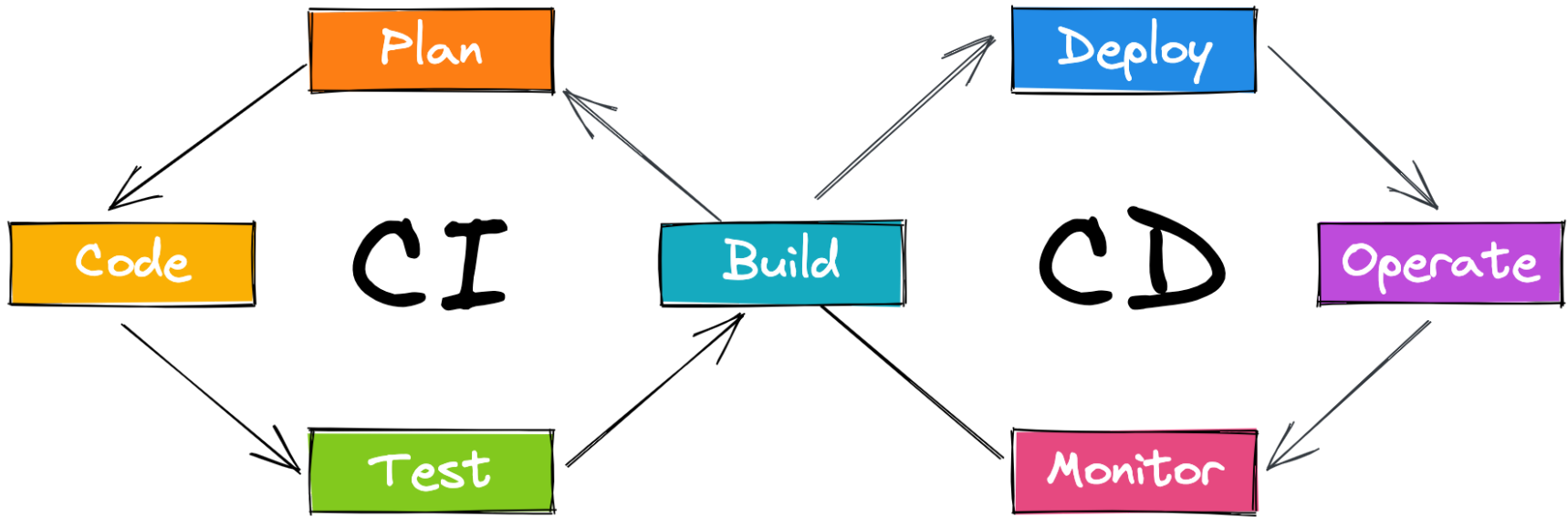
```
before do
  with_env('DEMO_MODE', 'true')
end

scenario 'visitor selects the "finley" persona' do
  demo_session_new_page.finley.sign_in.click
  expect(demo_loading_page).to be_loaded
  work_off_jobs!

  expect(summary_page).to be_loaded
  expect(summary_page).to have_goal_cards(count: 1)
  summary_page.goal_cards[0].tap do |goal|
    expect(goal.type).to have_content('Retirement')
    expect(goal).to have_content('$16,245.94')
  end
  summary_page.performance_tab.click

  expect(performance_page).to be_loaded
end
```





↳ **one app** (+ stateful fakes)

Consisted of ~~multiple apps/services~~

↳ **personas** (+ factories)

Populated with ~~seed/fixture data~~

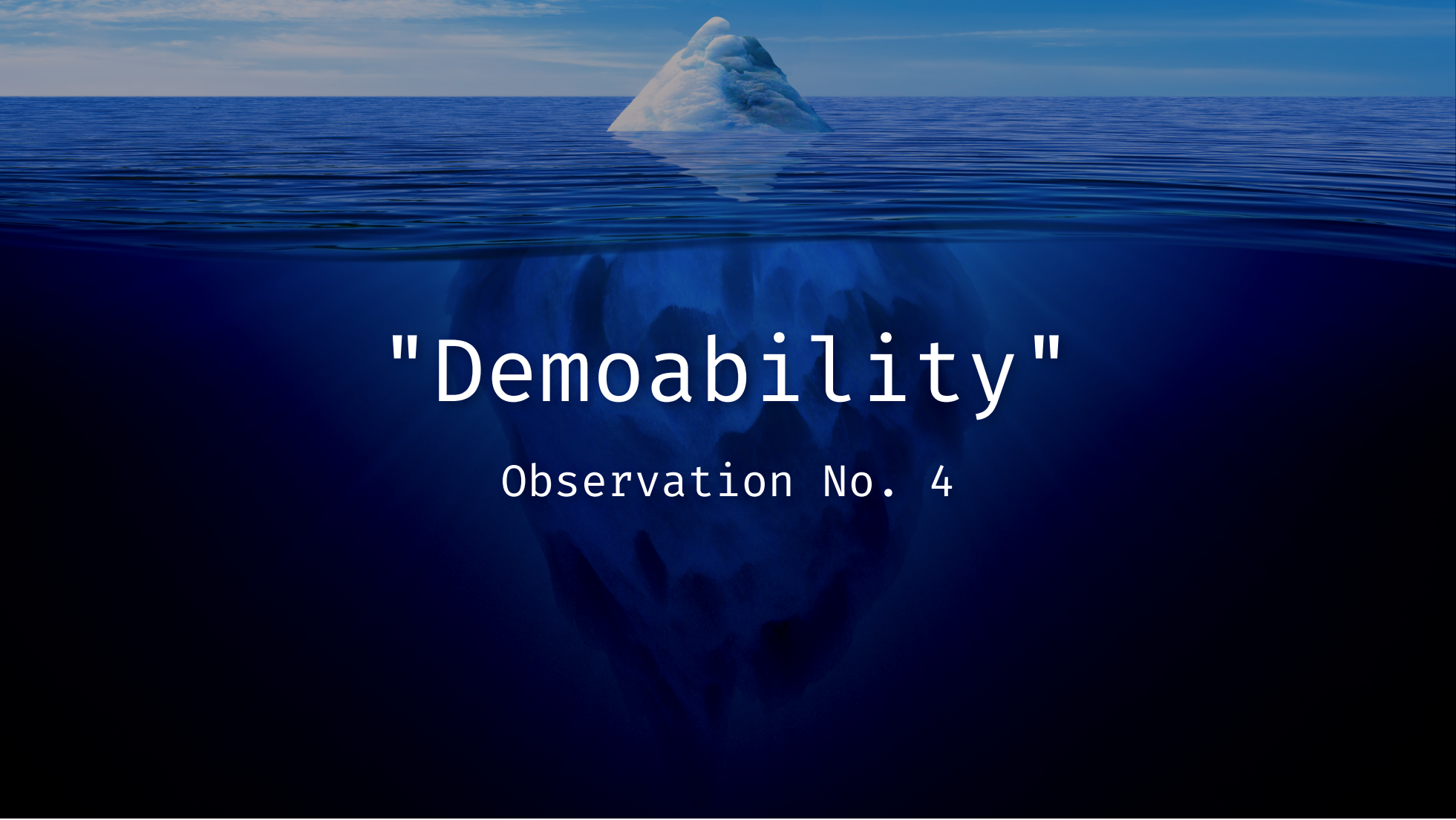
↳ **a long-lived database**

Relied on ~~short-lived databases~~

↳ **continuously**

Deployed ~~via push-button (and)~~

Owned by **one team**

A photograph of an iceberg floating in a deep blue ocean. The visible tip of the iceberg is small and white, while the much larger, submerged portion is visible through the clear water, illustrating the concept of hidden potential or 'demoability'.

"Demoability"

Observation No. 4



the demo env
is
a production env

↳ **one app** (+ stateful fakes)

Consisted of ~~multiple apps/services~~

↳ **personas** (+ factories)

Populated with ~~seed/fixture data~~

↳ **a long-lived database**

Relied on ~~short-lived databases~~

↳ **continuously**

Deployed ~~via push-button (and)~~

Owned by **one team**

↳ **one app** (+ stateful fakes)

Consisted of ~~multiple apps/services~~

↳ **personas** (+ factories)

Populated with ~~seed/fixture data~~

↳ **a long-lived database**

Relied on ~~short-lived databases~~

↳ **continuously**

Deployed ~~via push-button (and)~~

~~Owned by one team~~

↳ **one app** (+ stateful fakes)

Consisted of ~~multiple apps/services~~

↳ **personas** (+ factories)

Populated with ~~seed/fixture data~~

↳ **a long-lived database**

Relied on ~~short-lived databases~~

↳ **continuously**

Deployed ~~via push-button (and)~~

~~Owned by one team~~

↳ **one app** (+ stateful fakes)

Consisted of ~~multiple apps/services~~

↳ **personas** (+ factories)

Populated with ~~seed/fixture data~~

↳ **a long-lived database**

Relied on ~~short-lived databases~~

↳ **continuously**

Deployed ~~via push-button (and)~~

~~Owned by one team~~

↳ **one app** (+ stateful fakes)

Consisted of ~~multiple apps/services~~

↳ **personas** (+ factories)

Populated with ~~seed/fixture data~~

↳ **a long-lived database**

Relied on ~~short-lived databases~~

↳ **continuously**

Deployed ~~via push-button (and)~~

~~Owned by one team~~

↳ **one app** (+ stateful fakes)

Consisted of ~~multiple apps/services~~

↳ **personas** (+ factories)

Populated with ~~seed/fixture data~~

↳ **a long-lived database**

Relied on ~~short-lived databases~~

↳ **continuously**

Deployed ~~via push-button (and)~~

~~Owned by one team~~

↳ **one app** (+ stateful fakes)

Consisted of ~~multiple apps/services~~

↳ **personas** (+ factories)

Populated with ~~seed/fixture data~~

↳ **a long-lived database**

Relied on ~~short-lived databases~~

↳ **continuously**

Deployed ~~via push-button (and)~~

↳ **Maintained by everyone**

~~Owned by one team~~

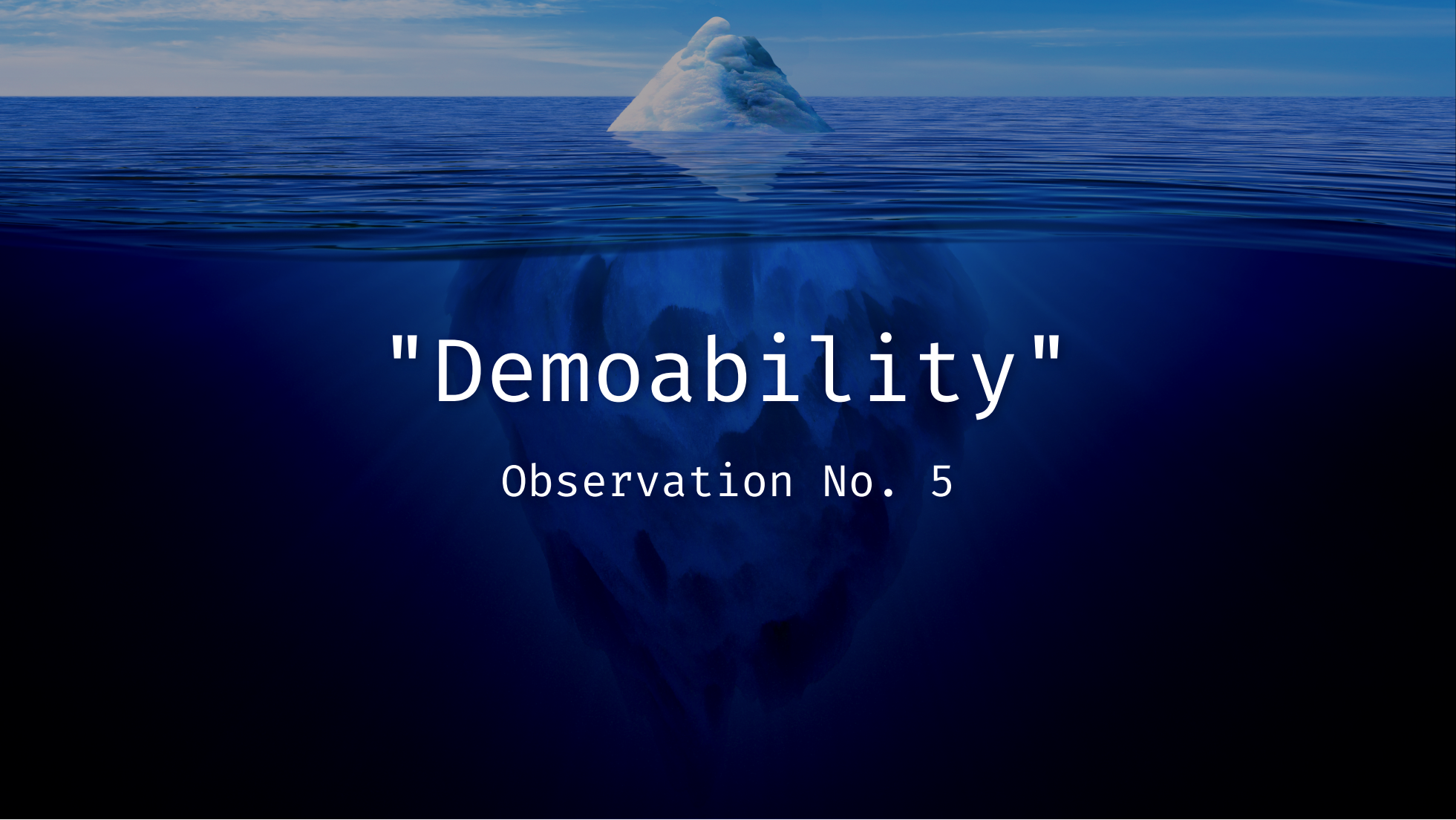
Consisted of **one app**

Populated with **personas**

Relied on a **long-lived database**

Deployed **continuously**

Maintained by **everyone**

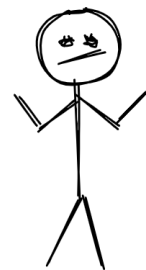
A photograph of an iceberg floating in a deep blue ocean. The tip of the iceberg is visible above the water, while the much larger, submerged part is visible below the surface. The sky is a clear, light blue. The text is overlaid on the submerged part of the iceberg.

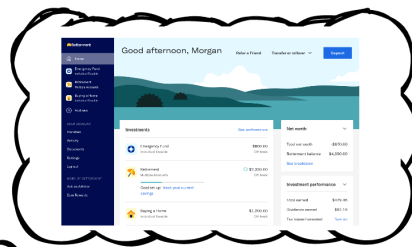
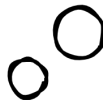
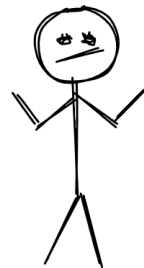
"Demoability"

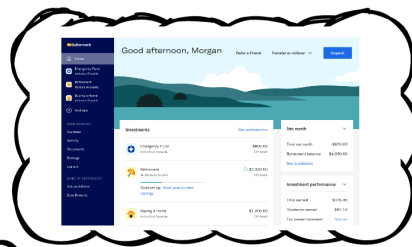
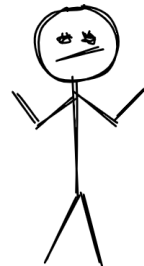
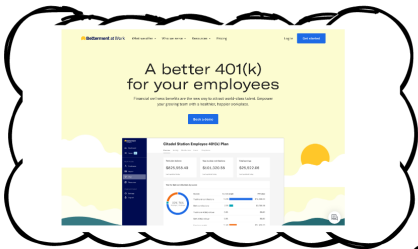
Observation No. 5

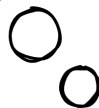
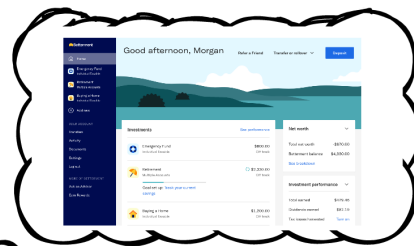
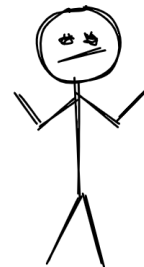
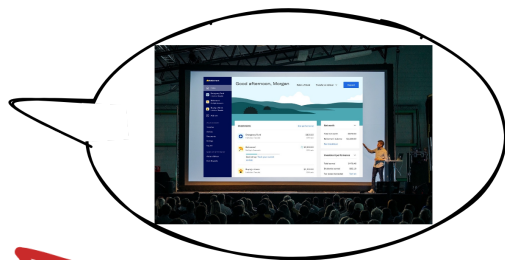
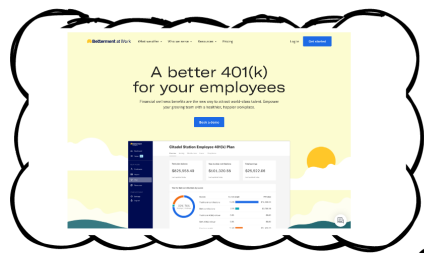
A photograph of an iceberg floating in a deep blue ocean. The tip of the iceberg is visible above the water line, while the much larger, submerged portion is visible below. The sky is a clear, light blue. The text "Incentives Matter" is overlaid in white, centered horizontally and positioned between the water line and the submerged part of the iceberg.

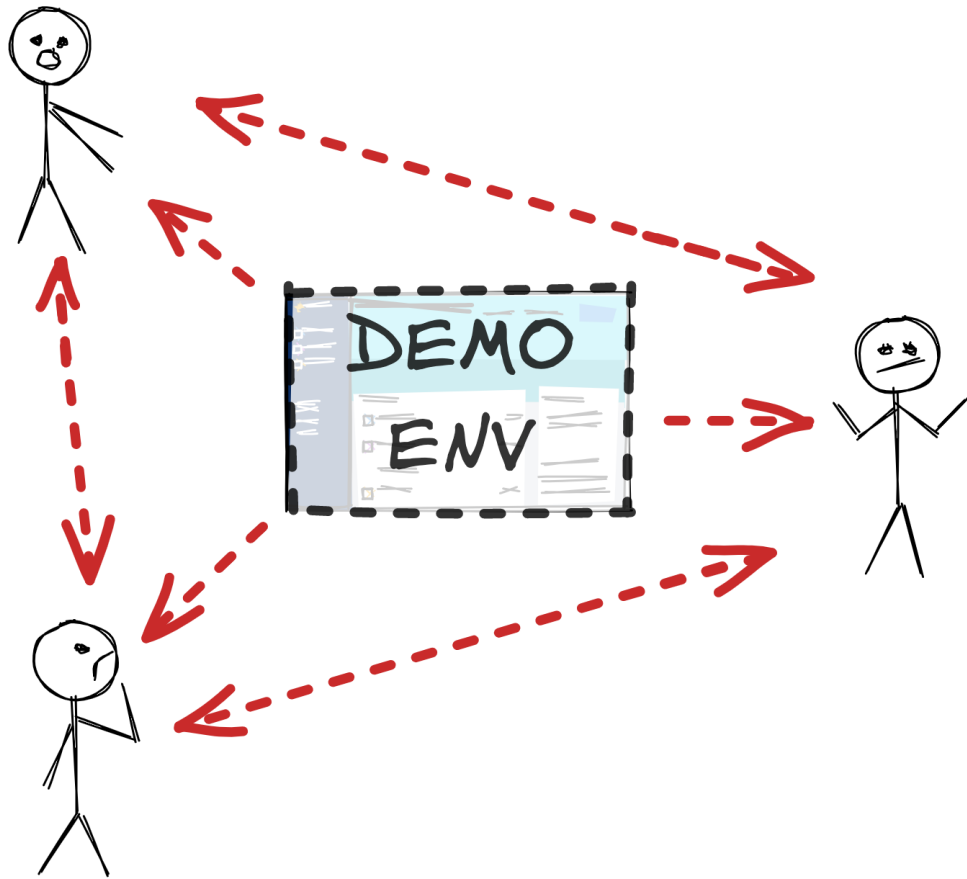
Incentives Matter

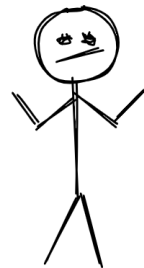




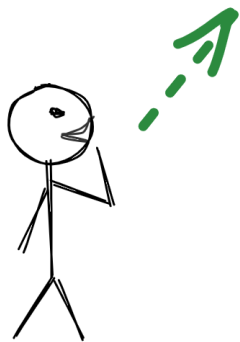
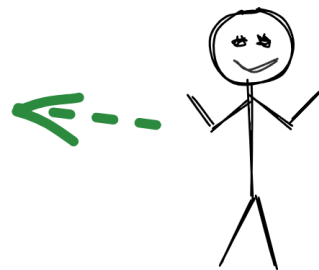


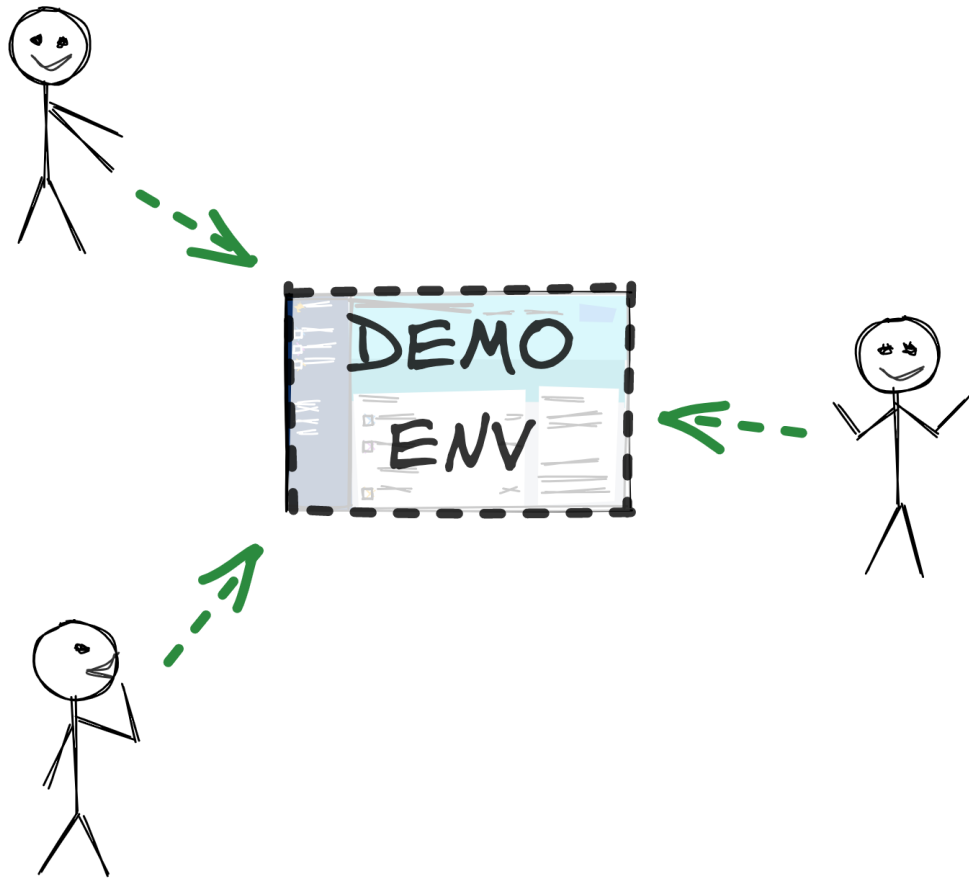


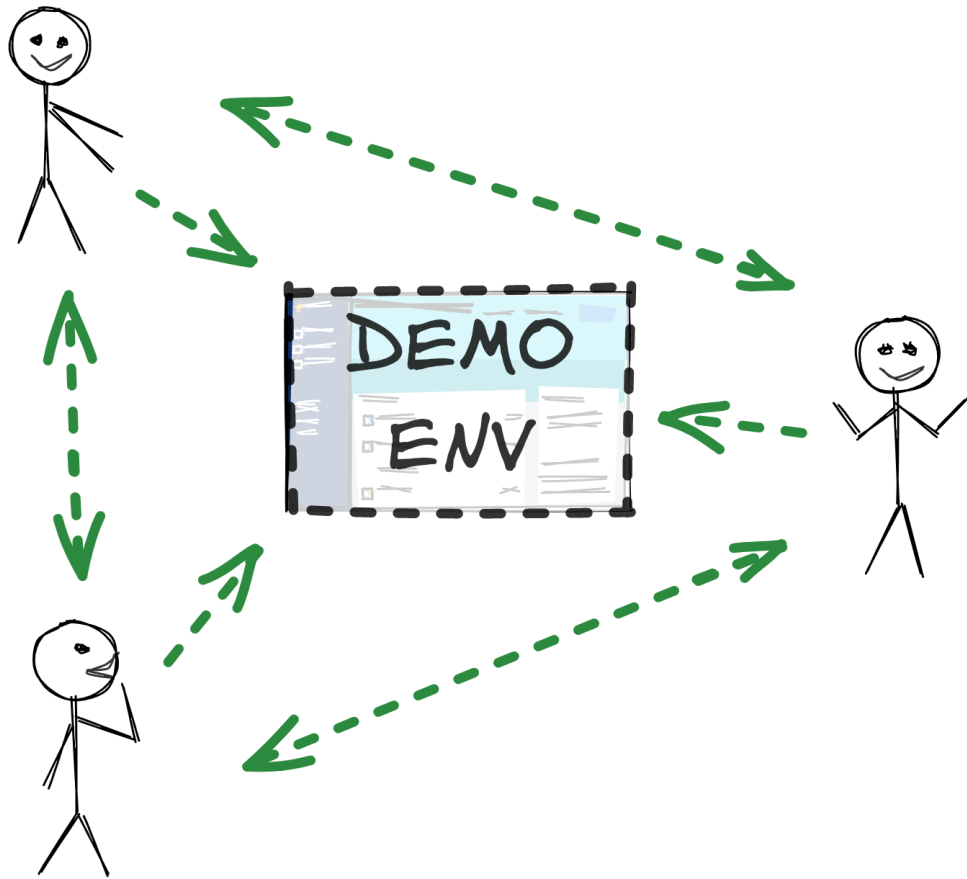


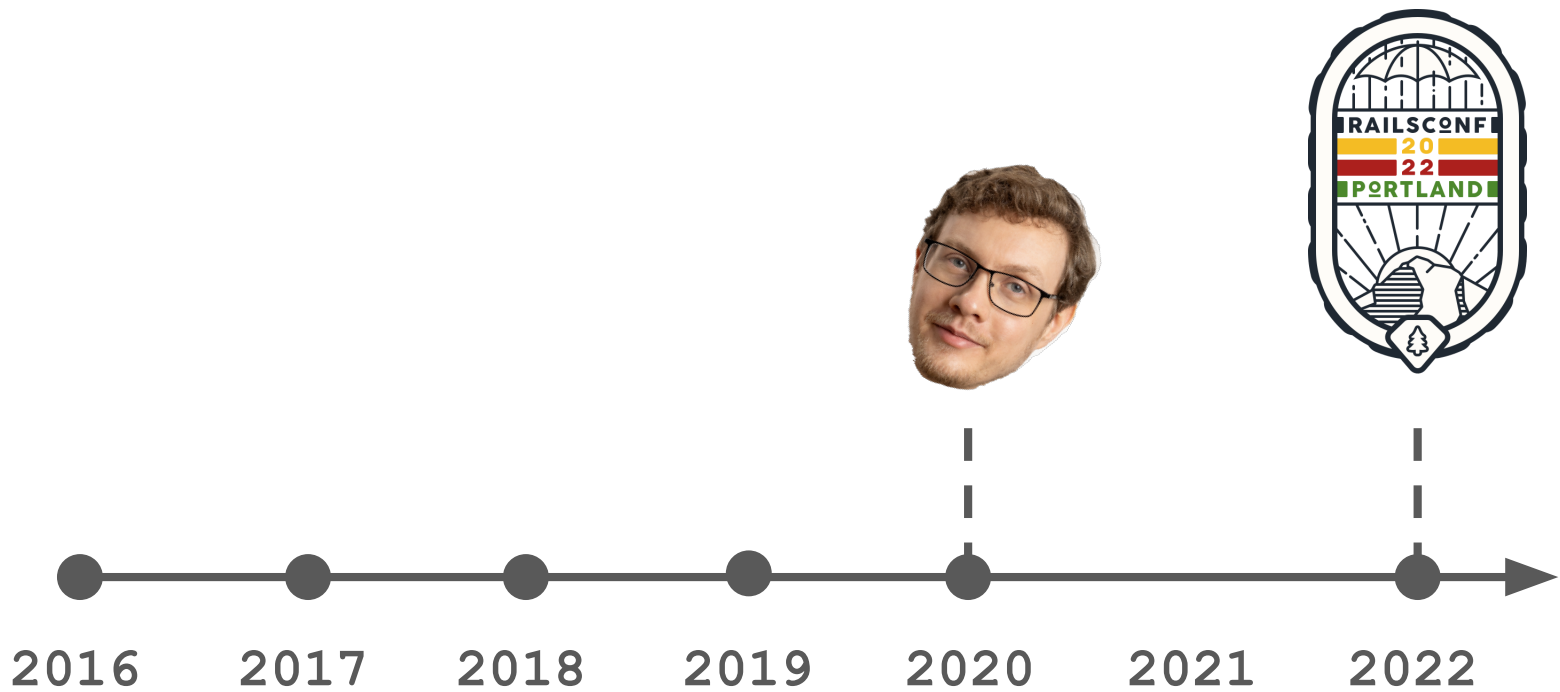
















Finley

New 401(k) participant
Conversion plan
~\$50k balance
Goals require setup
No taxable goals
No external accounts


Sign In



Morgan

Early Career
\$45K Base Salary
\$1,027 in Roth IRA
Starting for an Emergency Fund
Saving for a Home Downpayment
Outstanding Student Loans


Sign In



Pete And Melissa

Mid Career
\$400K Household Income
Roth Account Retirement Goal
College Fund for 2 Children
Fully Funded Emergency Goal
Diversified Investing with External Accounts


Sign In



Conversion Plan

600 Employees
~\$2MM AUM
No Match
No Vesting
Payroll Integrated
Loans Allowed


Sign In



Self Serve Plan

10 Active Employees
0 AUM (prior to first payroll)
No Match
No Vesting
Self Serve Zenefits Payroll Integration
No Loans Allowed


Sign In



Starter Plan

25 Active Employees
~\$500K AUM
No Match
No Vesting
No Payroll Integration
No Loans Allowed


Sign In



401k Advisor

Advisor 401(k)


Sign In



401k Only Advisor

Advisor 401(k) Only

Sign In

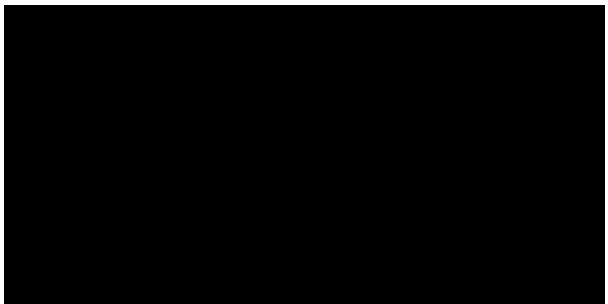


Advisor

Firm admin
TCP and retired clients
Open Co-pilot items
13 total clients

Sign In





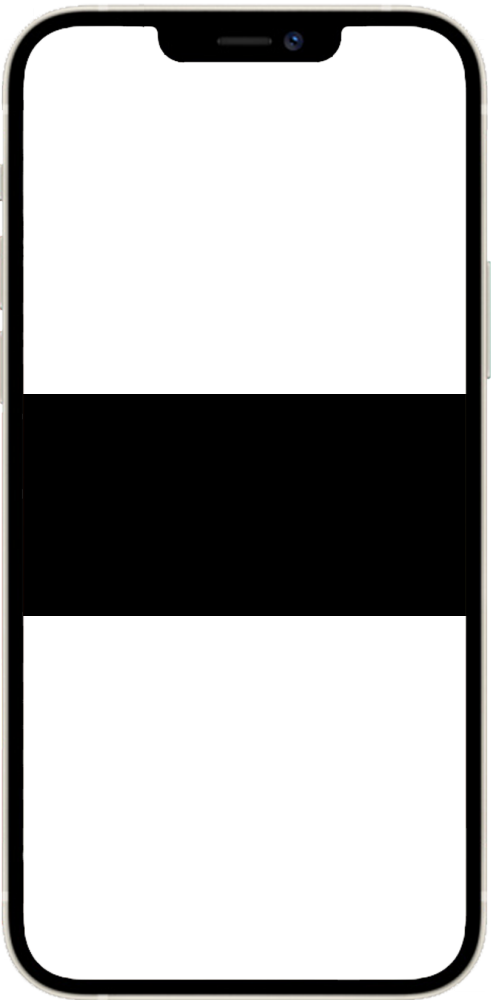
Terminal

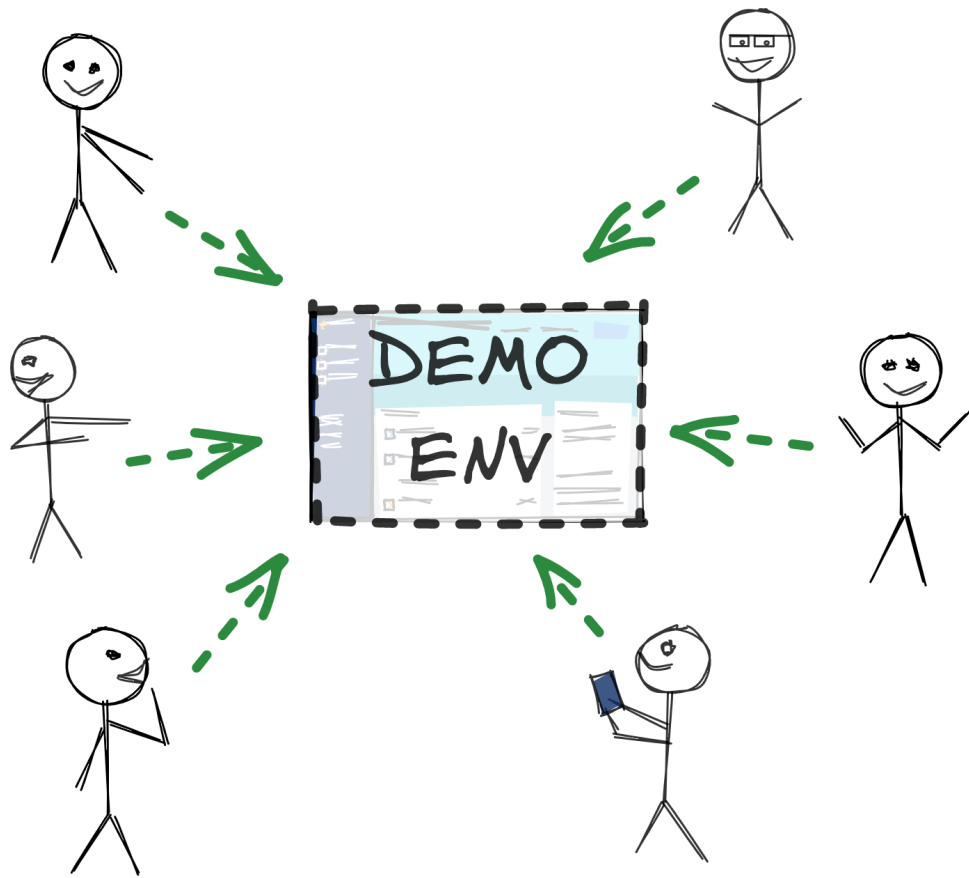
Nathan-Griffith-MBP13:retail nathangriffith\$ bundle exec rake create_user

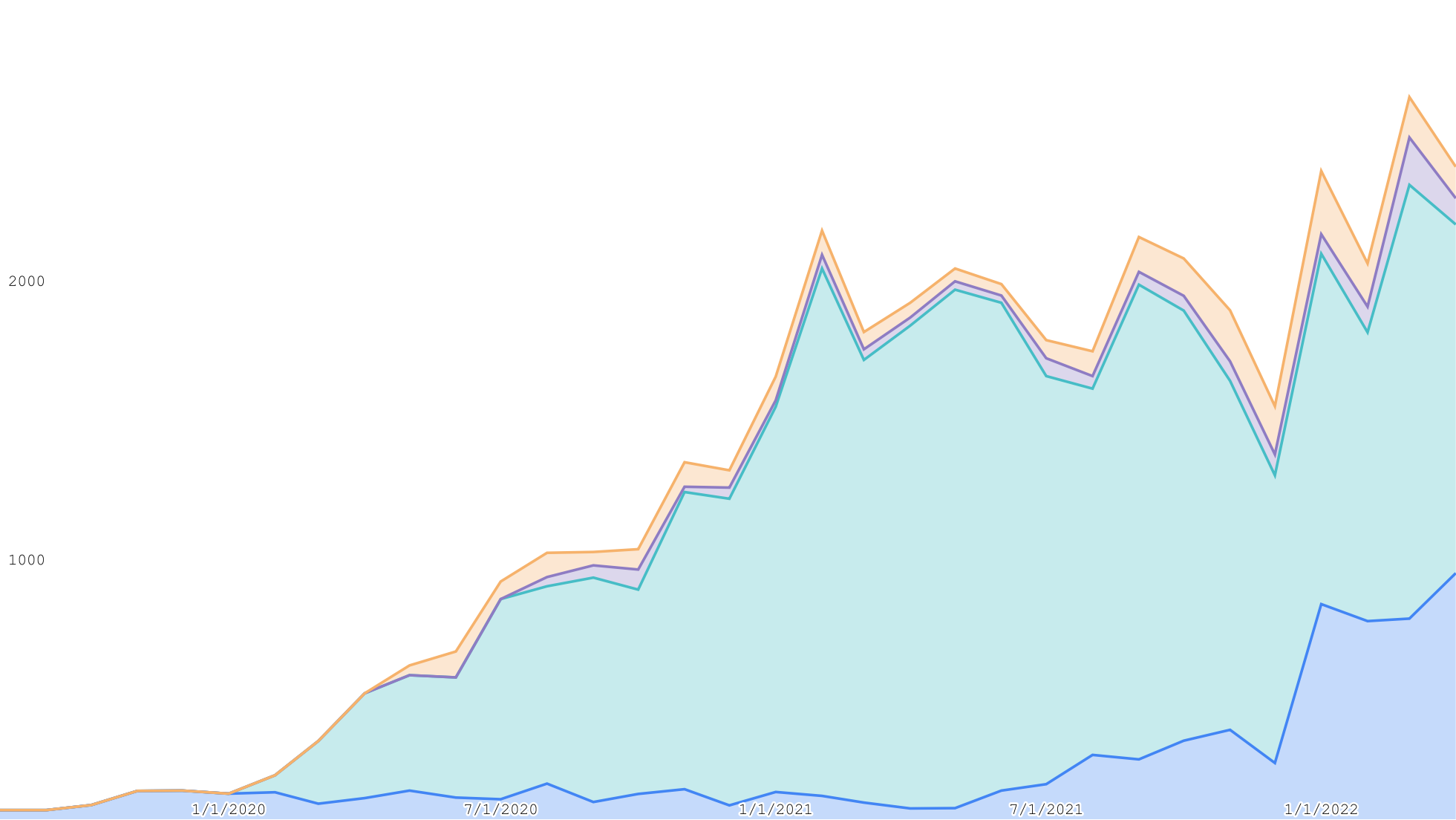
Generate an Account!

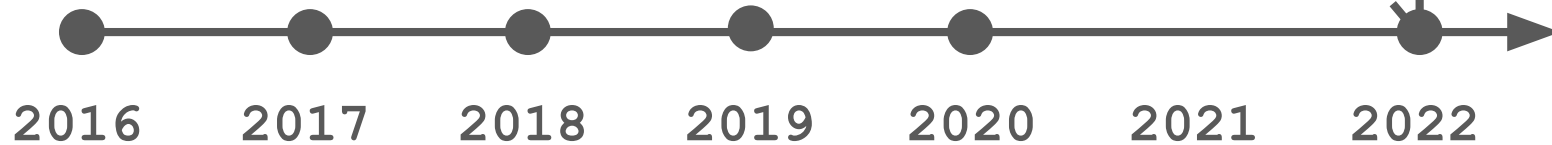
? Which persona should we use? (Choose with ↑ ↓ ↵, filter with 'f')

- > 1. **Morgan**
- 2. **Pete And Melissa**
- 3. **Finley**









gem 'demo_mode'

github.com/Betterment/demo_mode

https://github.com/Betterment/demo_mode



RAILS_ENV=demo

Presented By: **Nathan Griffith**

 [@smudgethefirst](https://twitter.com/smudgethefirst)  [@smudge](https://github.com/smudge)

Slides and Errata:

<https://ngriffith.com/railsconf-2022>

Referenced Projects:

https://github.com/Betterment/demo_mode

<https://github.com/Betterment/webvalve>

https://github.com/thoughtbot/factory_bot

<https://github.com/bblimke/webmock>

<https://github.com/sinatra/sinatra>

Slides made with [Slidev](https://slidev.js/) and [Excalidraw](https://excalidraw.com/)

