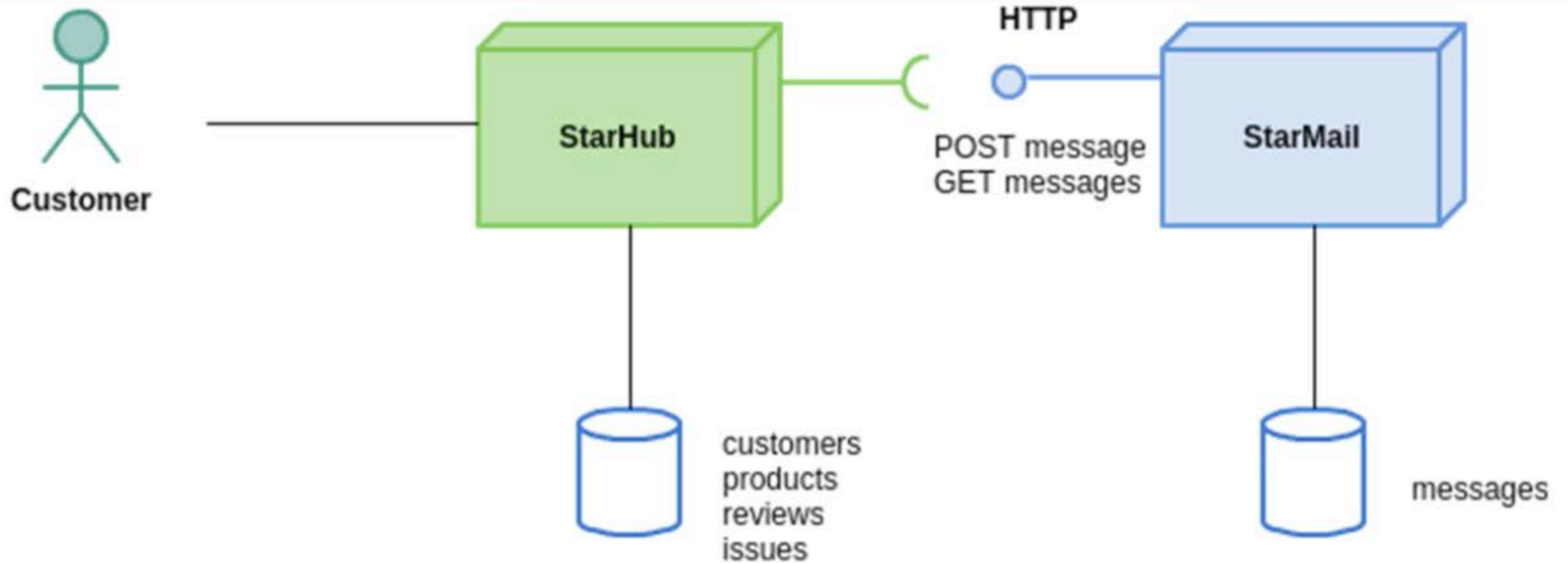


# Authenticating API Clients

## In this Video, we are going to take a look at...

- The JWT authentication standard
- Installing the necessary gems for leveraging JWT
- Creating a client model
- Creating JWT service objects
- Implementing authentication logic in our Rails stack

# System Architecture





JSON Web Tokens are an open, industry standard **RFC 7519** method for representing claims securely between two parties.

JWT.IO allows you to decode, verify and generate JWT.

[LEARN MORE ABOUT JWT](#)

Get the JWT Handbook for free! Spread the word and download it now.

[DOWNLOAD EBOOK](#)



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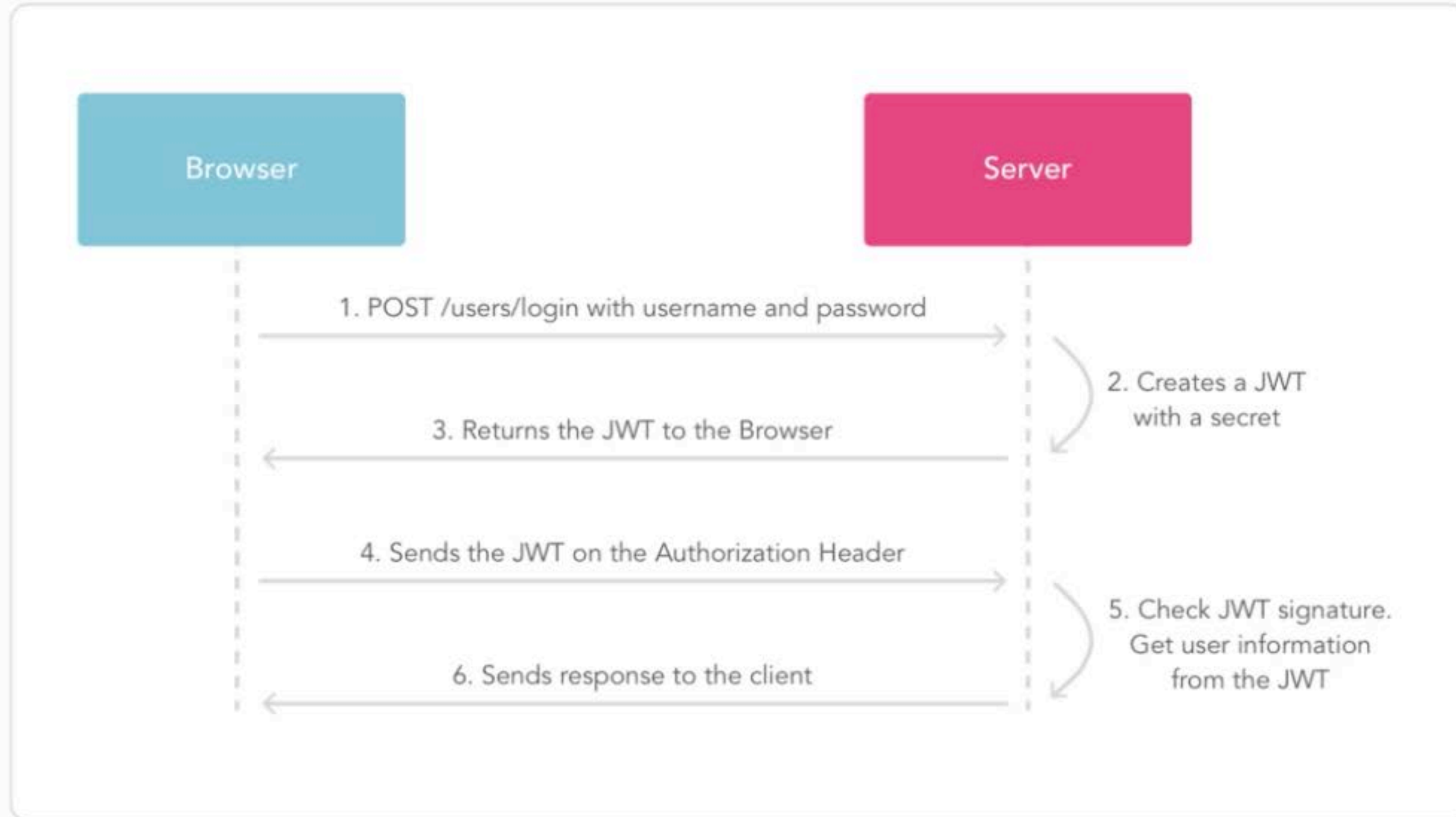
LEARN MORE ABOUT JWT

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DOWNLOAD EBOOK



# JWT Workflow



environments

- initializers
- locales
- application.rb
- boot.rb
- cable.yml
- database.yml
- environment.rb
- puma.rb
- routes.rb
- secrets.yml
- spring.rb

db

lib

log

public

test

- controllers
  - .keep
  - messages\_controller\_test.rb
- fixtures
- integration
- mailers
- models
  - test\_helper.rb

tmp

vendor

- .gitignore
- Gemfile
- Gemfile.lock
- README.md

```
27
28- group :development, :test do
29   # Call 'byebug' anywhere in the code to stop execution and get a de
30     console
31     gem 'byebug', platform: :mri
32   end
33- group :test do
34   gem 'minitest-rails'
35   gem 'minitest-reporters'
36 end
37
38 gem 'active_model_serializers', '~> 0.10.0'
39 gem 'bcrypt', '~> 3.1.7'
40 gem 'jwt'
41 gem 'simple_command'
42
43- group :development do
44   gem 'listen', '~> 3.0.5'
45   # Spring speeds up development by keeping your application running
46   background. Read more: https://github.com/rails/spring
47   gem 'spring'
48   gem 'spring-watcher-listen', '~> 2.0.0'
49 end
```



```
Using simple_command 0.0.9
Using tzinfo 1.2.2
Using nokogiri 1.7.0.1
Using rack-test 0.6.3
Using sprockets 3.7.1
Using websocket-driver 0.6.5
Using mime-types 3.1
Using jsonapi 0.1.1.beta6
Using rb-inotify 0.9.8
Using minitest-reporters 1.1.13
Using activesupport 5.0.1
Using loofah 2.0.3
Using mail 2.6.4
Using listen 3.0.8
Using rails-dom-testing 2.0.2
Using globalid 0.3.7
Using activemodel 5.0.1
Using case_transform 0.2
Using spring 2.0.1
Using rails-html-sanitizer 1.0.3
Using activejob 5.0.1
Using activerecord 5.0.1
Using spring-watcher-listen 2.0.1
Using actionview 5.0.1
Using actionpack 5.0.1
Using actioncable 5.0.1
Using actionmailer 5.0.1
Using active_model_serializers 0.10.4
Using railties 5.0.1
Using sprockets-rails 3.2.0
Using minitest-rails 3.0.0
Using rails 5.0.1
```

Bundle complete! 14 Gemfile dependencies, 59 gems now installed.

Use `bundle show [gemname]` to see where a bundled gem is installed.

fred at fred-HP-Desktop in ~/Work/packt-pub/expert\_rails\_5/starmail on master! using ruby-2.3.3-p0



```
fred at fred-HP-Desktop in ~/Work/packt-pub/expert_rails_5/starmail on master! using ruby:2.0.0-starmail
```

```
± rails g model
```

fred at fred-HP-Desktop in ~/Work/packt-pub/expert\_rails\_5/starmail on master! using ruby 2.0.0-starmail

± rails g model Client name

```
fred at fred-HP-Desktop in ~/Work/packt-pub/expert_rails_5/starmail on master! using ruby-2.0.0-starmail
```

```
± rails g model Client name domain
```



```
fred at fred-HP-Desktop in ~/Work/packt-pub/expert_rails_5/starmail on master! using ruby-2.3.0-starmail
```

```
± rails g model Client name domain password digest
```

```
Running via Spring preloader in process 24207
```

```
Expected string default value for '--serializer'; got true (boolean)
```

```
invoke active_record
```

```
create db/migrate/20170220233020_create_clients.rb
```

```
create app/models/client.rb
```

```
invoke test_unit
```

```
create test/models/client_test.rb
```

```
create test/fixtures/clients.yml
```

```
fred at fred-HP-Desktop in ~/Work/packt-pub/expert_rails_5/starmail on master! using ruby-2.3.0-starmail
```

```
±
```

```
fred at fred-HP-Desktop in ~/Work/packt-pub/expert_rails_5/starmail on master! using ruby-2.3.0-starmail
```

```
± rails g model Client name domain password digest
```

```
Running via Spring preloader in process 24207
```

```
Expected string default value for '--serializer'; got true (boolean)
```

```
  invoke  active_record
```

```
  create  db/migrate/20170220233020_create_clients.rb
```

```
  create  app/models/client.rb
```

```
  invoke  test_unit
```

```
  create  test/models/client_test.rb
```

```
  create  test/fixtures/clients.yml
```

```
fred at fred-HP-Desktop in ~/Work/packt-pub/expert_rails_5/starmail on master! using ruby-2.3.0-starmail
```

```
± rails g migration AddUniqueIndexToClient
```

```
Running via Spring preloader in process 29101
```

```
Expected string default value for '--serializer'; got true (boolean)
```

```
  invoke  active_record
```

```
  create  db/migrate/20170220233440_add_unique_index_to_client.rb
```

```
fred at fred-HP-Desktop in ~/Work/packt-pub/expert_rails_5/starmail on master! using ruby-2.3.0-starmail
```

```
±
```

## environments

## initializers

## locales

application.rb

boot.rb

cable.yml

database.yml

environment.rb

puma.rb

routes.rb

secrets.yml

spring.rb

## db

## migrate

20170219220433\_create\_messages.rb

20170220233020\_create\_clients.rb

20170220233440\_add\_unique\_index\_to,

schema.rb

seeds.rb

## lib

## log

## public

## test

## controllers

.keep

messages\_controller\_test.rb

## fixtures

## integration

## mailers

## models

routes.rb

Gemfile

20170220233440\_add\_unique\_index\_to\_client.rb

```
1- class AddUniqueIndexToClient < ActiveRecord::Migration[5.0]
2  def change
3  end
4 end
5
```



## environments

## Initializers

## locales

application.rb

boot.rb

cable.yml

database.yml

environment.rb

puma.rb

routes.rb

secrets.yml

spring.rb

## db

## migrate

20170219220433\_create\_messages.rb

20170220233020\_create\_clients.rb

20170220233440\_add\_unique\_index\_to,

schema.rb

seeds.rb

## lib

## log

## public

## test

## controllers

.keep

messages\_controller\_test.rb

## fixtures

## Integration

## mailers

## models

routes.rb

Gemfile

20170220233440\_add\_unique\_index\_to\_client.rb

```
1- class AddUniqueIndexToClient < ActiveRecord::Migration[5.0]
2  def change
3    add_index :clients, :name,
4  end
5 end
6
```

```
fred at fred-HP-Desktop in ~/Work/packt-pub/expert_rails_5/starmail on master! using ruby-2.3.10-starmail!  
± rails db:migrate && rails db:migrate RAILS_ENV=test
```

```
fred at fred-HP-Desktop in ~/Work/packt-pub/expert_rails_5/starmail on master! using ruby-2.3.0-starmail
```

```
± rails db:migrate && rails db:migrate RAILS_ENV=test
```

```
== 20170220233440 AddUniqueIndexToClient: migrating =====
```

```
-- add_index(:clients, :name, {:unique=>true})
```

```
-> 0.0310s
```

```
== 20170220233440 AddUniqueIndexToClient: migrated (0.0311s) =====
```

```
== 20170220233440 AddUniqueIndexToClient: migrating =====
```

```
-- add_index(:clients, :name, {:unique=>true})
```

```
-> 0.0279s
```

```
== 20170220233440 AddUniqueIndexToClient: migrated (0.0281s) =====
```

```
fred at fred-HP-Desktop in ~/Work/packt-pub/expert_rails_5/starmail on master! using ruby-2.3.0-starmail
```

```
± █
```

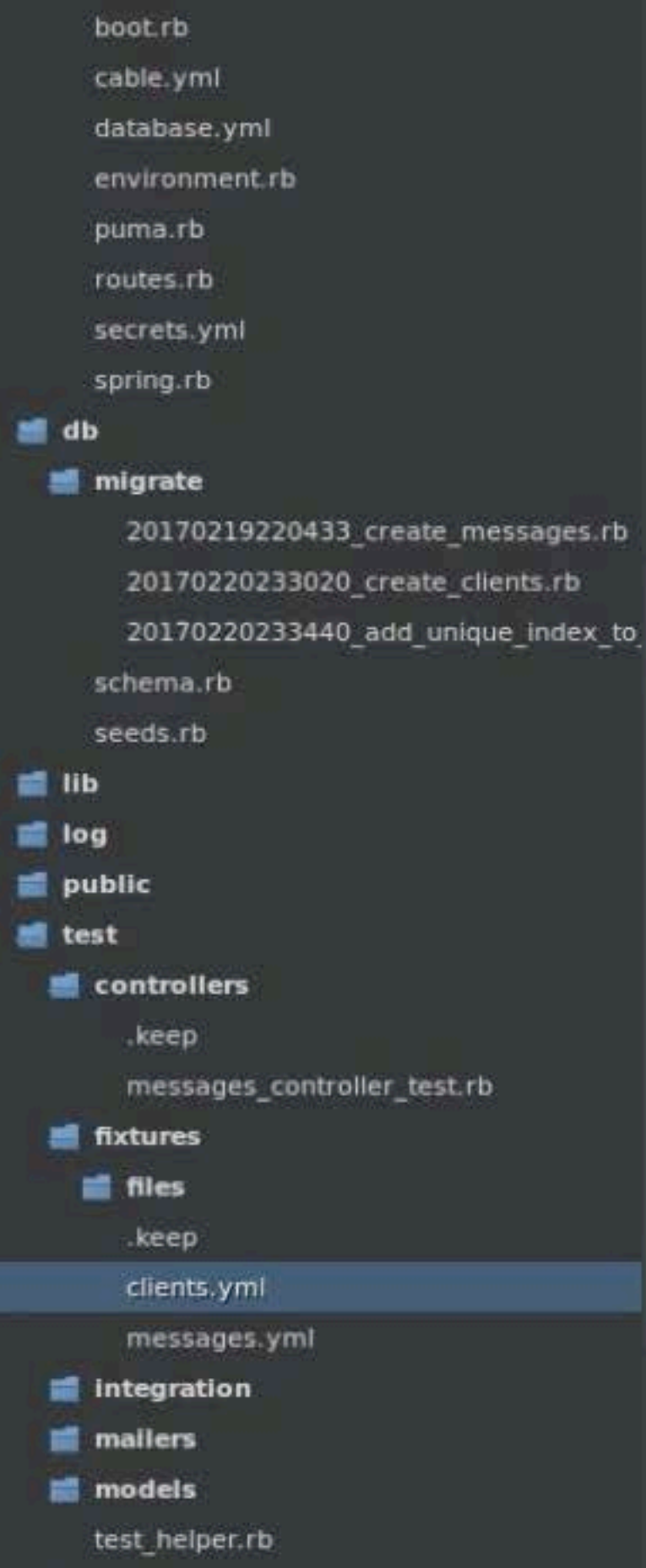


## FOLDERS

- starmail
  - app
    - channels
    - controllers
      - concerns
        - application\_controller.rb
        - messages\_controller.rb
    - jobs
    - mailers
    - models
      - concerns
        - application\_record.rb
      - client.rb
      - message.rb
    - serializers
    - views
  - bin
  - config
    - environments
    - initializers
    - locales
      - application.rb
      - boot.rb
      - cache.yml
      - database.yml
      - environment.rb
      - puma.rb
      - routes.rb
      - secrets.yml
      - spring.rb

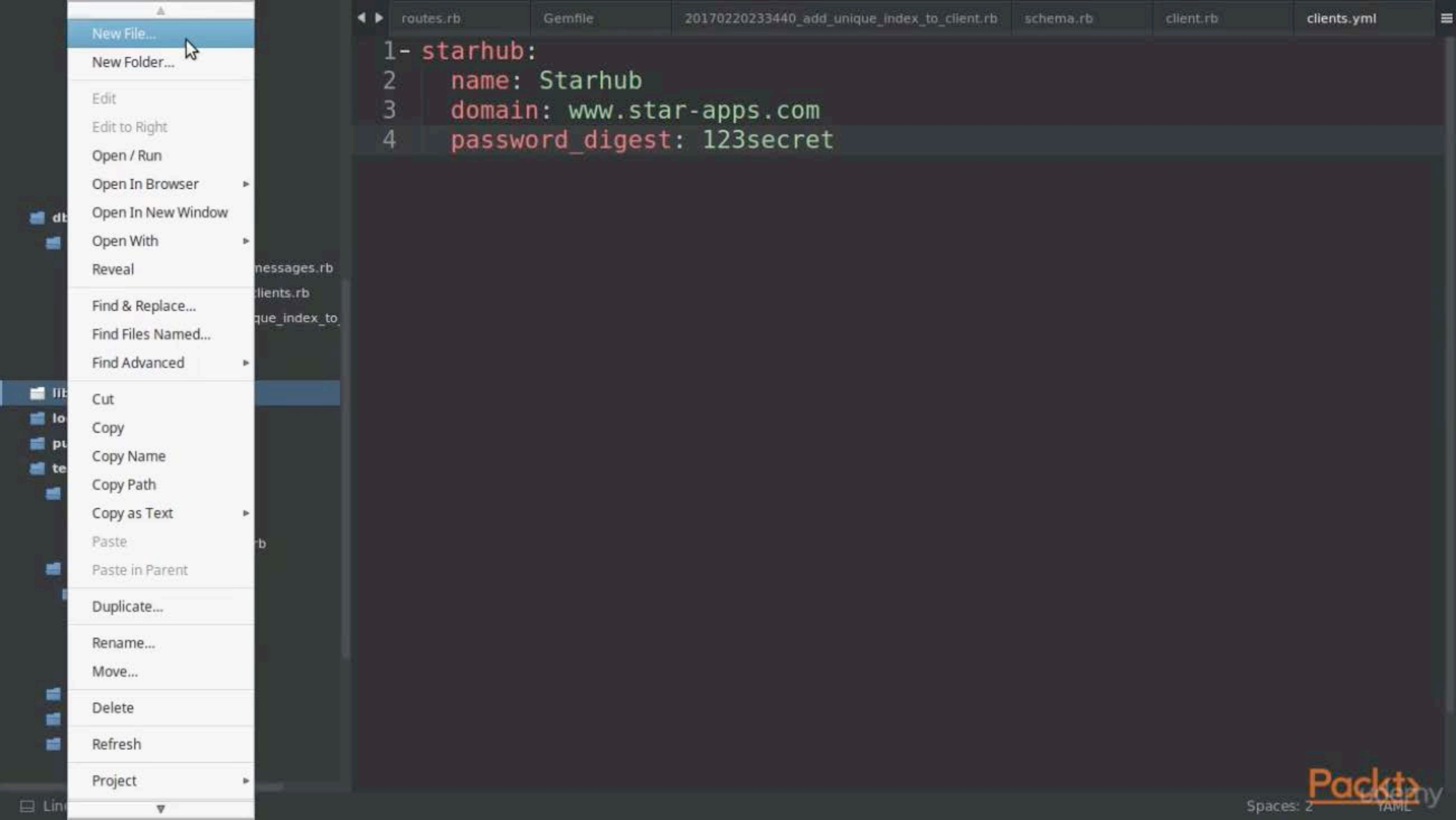
routes.rb Gemfile 20170220233440\_add\_unique\_index\_to\_client.rb schema.rb client.rb

```
1 class Client < ApplicationRecord
2   has_secure_password
3 end
4
```



```
1- starhub:  
2  name: Starhub  
3  domain: www.star-apps.com  
4  password_digest: 123secret
```





New File...

New Folder...

Edit

Edit to Right

Open / Run

Open In Browser

Open In New Window

Open With

Reveal

Find & Replace...

Find Files Named...

Find Advanced

Cut

Copy

Copy Name

Copy Path

Copy as Text

Paste

Paste in Parent

Duplicate...

Rename...

Move...

Delete

Refresh

Project

1- starhub:

2 name: Starhub

3 domain: www.star-apps.com

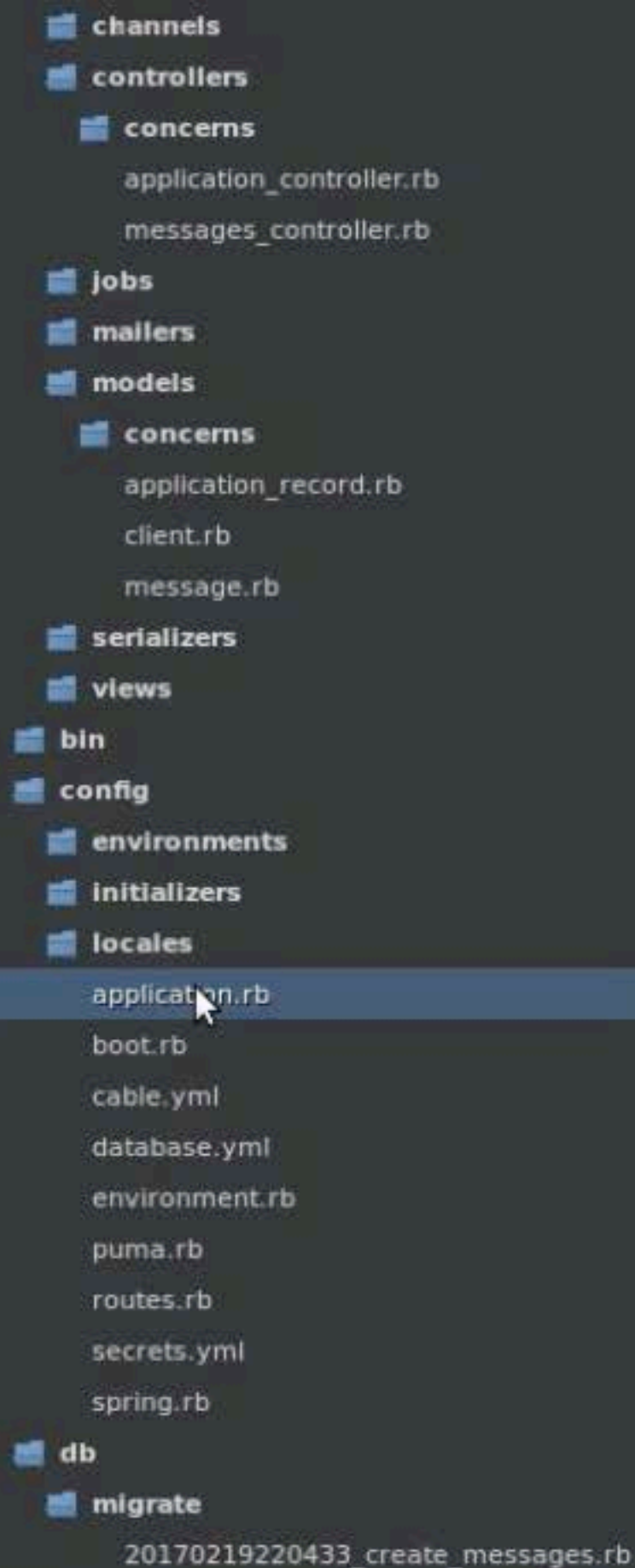
4 password\_digest: 123secret



- boot.rb
- cable.yml
- database.yml
- environment.rb
- puma.rb
- routes.rb
- secrets.yml
- spring.rb
- db
  - migrate
    - 20170219220433\_create\_messages.rb
    - 20170220233020\_create\_clients.rb
    - 20170220233440\_add\_unique\_index\_to
  - schema.rb
  - seeds.rb
- lib
- log
- public
- test
  - controllers
    - .keep
    - messages\_controller\_test.rb
  - fixtures
    - files
      - .keep
      - clients.yml
      - messages.yml
  - integration
  - mailers
  - models
    - test\_helper.rb

```
routes.rb  Gemfile  20170220233440_add_unique_index_to_client.rb  schema.rb  client.rb  clients.yml  json_web_token.rb
1- class JsonWebToken
2-   def self.encode(payload, exp = 24.hours.from_now)
3-     payload[:exp] = exp.to_i
4-     JWT.encode(payload, Rails.application.secrets.secret_key_base)
5-   end
6-
7-   def self.decode(token)
8-     body = JWT.decode(token, Rails.application.secrets.secret_key_base, true, {
9-       :algorithm => :HS256
10-     })
11-     rescue StandardError => error
12-     nil
13-   end
14- end
```





```
routes.rb  Gemfile  20170220233440_add_unique_index_to_client.rb  schema.rb  client.rb  clients.yml  json_web_token.rb
1 |require_relative 'boot'
2
3 require "rails"
4 # Pick the frameworks you want:
5 require "active_model/railtie"
6 require "active_job/railtie"
7 require "active_record/railtie"
8 require "action_controller/railtie"
9 require "action_mailer/railtie"
10 require "action_view/railtie"
11 require "action_cable/engine"
12 # require "sprockets/railtie"
13 require "rails/test_unit/railtie"
14
15 # Require the gems listed in Gemfile, including any gems
16 # you've limited to :test, :development, or :production.
17 Bundler.require(*Rails.groups)
18
19- module Starmail
20-   class Application < Rails::Application
21     # Settings in config/environments/* take precedence over those sp
22     here.
23     # Application configuration should go into files in config/initia
24     # -- all .rb files in that directory are automatically loaded.
```



- channels
- controllers
  - concerns
    - application\_controller.rb
    - messages\_controller.rb

- jobs
- mailers
- models
  - concerns
    - application\_record.rb
    - client.rb
    - message.rb

- serializers
- views

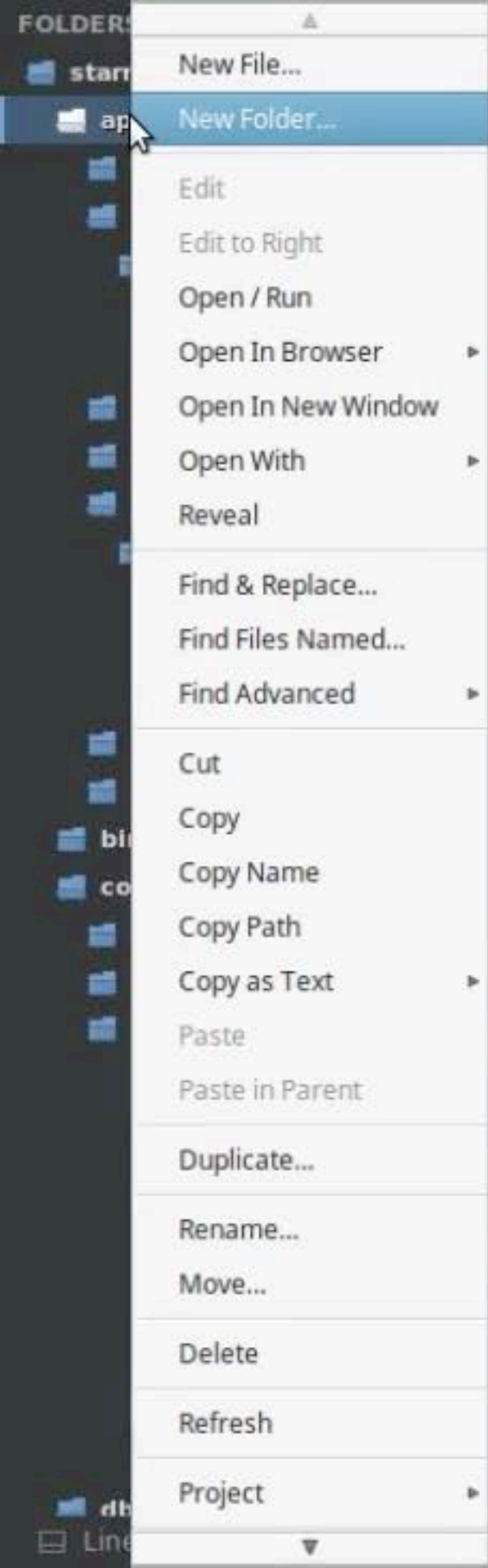
- bin
- config
  - environments
  - initializers
  - locales

- application.rb
- boot.rb
- cable.yml
- database.yml
- environment.rb
- puma.rb
- routes.rb
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- spring.rb

- db
- migrate
  - 20170219220433\_create\_messages.rb

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routes.rb  Gemfile  20170220233440_add_unique_index_to_client.rb  schema.rb  client.rb  clients.yml  json_web_token.rb  application.rb
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22     # here.
23     # Application configuration should go into files in config/initializers,
24     # -- all .rb files in that directory are automatically loaded.
25
26     # Only loads a smaller set of middleware suitable for API only applications.
27     # Middleware like session, flash, cookies can be added back manually.
28     # Skip views, helpers and assets when generating a new resource.
29     config.api_only = true
30     config.autoload_paths << Rails.root.join('lib')
31   end
32 end
```





```
20170220233440_add_unique_index_to_client.rb schema.rb client.rb clients.yml json_web_token.rb application.rb application_record.rb
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20170220233440_add_unique_index_to_client.rb schema.rb client.rb clients.yml json_web_token.rb application.rb application_record.rb

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22     # here.
23     # Application configuration should go into files in config/initializers
24     # -- all .rb files in that directory are automatically loaded.
```



```
1- class ClientAuthentication
2   prepend SimpleCommand
3- def initialize(name, password)
4   @name = name
5   @password = password
6 end
7
8 def call
9   JsonWebToken.encode(client_id: client.id) if client
10 end
11
12 private
13
14 attr_accessor :name, :password
15
16- def client
17   client = Client.find_by(name: name)
18   return client if client && client.authenticate(password)
19   errors.add :client_authentication, 'invalid credentials'
20   nil
21 end
22
23 end
24 |
```

```
1- class ClientAuthentication
2  prepend SimpleCommand
3- def initialize(name, password)
4  @name = name
5  @password = password
6  end
7
8  def call
9    JsonWebToken.encode(client_id: client.id) if client
10 end
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12 private
13
14 attr_accessor :name, :password
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16- def client
17  client = Client.find_by(name: name)
18  return client if client && client.authenticate(password)
19  errors.add :client_authentication, 'invalid credentials'
20  nil
21 end
22
23 end
24
```



# FOLDERS

- starmail
  - app
    - channels
    - commands
      - client\_authentication.rb
      - request\_authorization.rb
    - controllers
      - concerns
        - application\_controller.rb
        - messages\_controller.rb
    - jobs
    - mailers
    - models
      - concerns
        - application\_record.rb
        - client.rb
        - message.rb
    - serializers
    - views
  - bin
  - config
    - environments
    - initializers
    - locales
      - application.rb
      - boot.rb
      - cable.yml
      - database.yml
      - environment.rb
      - puma.rb
      - routes.rb

schema client.rb clients.yml json\_web\_token.rb application.rb client\_authentication.rb request\_authorization.rb application\_record.rb

1

I



```
1- class RequestAuthorization
2   prepend SimpleCommand
3
4   def initialize(headers = {})
5     @headers = headers
6   end
7
8-  def call
9    decoded_auth_token ||= JsonWebToken.decode(http_auth_header)
10    @client = decoded_auth_token ? Client.find(decoded_auth_token[:cl
      : nil
11    @client || errors.add(:token, 'Invalid token') && nil
12  end
13
14  private
15
16  attr_reader :headers
17
18-  def http_auth_header
19    ret = nil
20    if headers['Authorization'].present?
21      ret = headers['Authorization'].split(' ').last
22    else
23      errors.add(:token, 'Missing token')
24    end
```

application\_record.rb  
client.rb  
message.rb  
serializers  
views  
bin  
config  
environments  
initializers  
locales  
application.rb  
boot.rb  
cable.yml  
database.yml  
environment.rb  
puma.rb  
routes.rb  
secrets.yml  
spring.rb  
db  
migrate  
20170219220433\_create\_messages.rb  
20170220233020\_create\_clients.rb  
20170220233440\_add\_unique\_index\_to\_  
schema.rb  
seeds.rb  
lib  
log  
public  
test  
controllers  
keen

routes.rb Gemfile 20170220233440\_add\_unique\_index\_to\_client.rb schema.rb client.rb clients.yml json\_web\_token.rb application.rb

```
1- Rails.application.routes.draw do
2   resources :messages, except: [:update, :show]
3   # For details on the DSL available within this file, see http://guides.rubyonrails.org/routing.html
4 end
5
```



- application\_record.rb
- client.rb
- message.rb
- serializers
- views
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- config
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  - initializers
  - locales
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    - 20170220233440\_add\_unique\_index\_to,
  - schema.rb
  - seeds.rb
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- test
- controllers

◀ ▶ routes.rb Gemfile 20170220233440\_add\_unique\_index\_to\_client.rb schema.rb client.rb clients.yml json\_web\_token.rb application.rb

```
1- Rails.application.routes.draw do
2  resources :messages, except: [:update, :show]
3  post 'authenticate', to: 'authentication#authenticate'
4 end
5
```

## FOLDERS

- starmail
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- clients.yml
- en.rb

1

2 |

I



```
routes.rb authentication_controller.rb Gemfile 20170220233440_add_unique_index_to_client.rb schema.rb client.rb clients.yml en.rb
1- class AuthenticationController < ApplicationController
2
3-   def authenticate
4     command = ClientAuthentication.call(params[:name], params[:password])
5     if command.success?
6       render json: { auth_token: command.result }
7     else
8       render json: { error: command.errors }, status: :unauthorized
9     end
10  end
11
12 end
13
```

```
1- class ApplicationController < ActionController::API
2   before_action :authenticate_request
3
4   attr_reader :current_client
5
6   private
7
8-   def authenticate_request
9     @current_client = RequestAuthorization.call(request.headers).result
10    render json: { error: 'Client Not Authorized' }, status: 401 unless @
      current_client
11  end
12
13 end
14
```



```
1- class AuthenticationController < ApplicationController
2
3  def authenticate
4    command = ClientAuthentication.call(params[:name], params[:password])
5    if command.success?
6      render json: { auth_token: command.result }
7    else
8      render json: { error: command.errors }, status: :unauthorized
9    end
10  end
11
12 end
13
```

```
1- class AuthenticationController < ApplicationController
2  skip_before_action :authenticate_request
3  def authenticate
4    command = ClientAuthentication.call(params[:name], params[:password])
5    if command.success?
6      render json: { auth_token: command.result }
7    else
8      render json: { error: command.errors }, status: :unauthorized
9    end
10  end
11
12 end
13
```



```
1- class ClientAuthentication
2  prepend SimpleCommand
3- def initialize(name, password)
4  @name = name
5  @password = password
6  end
7
8  def call
9    JsonWebToken.encode(client_id: client.id) if client
10  end
11
12  private
13
14  attr_accessor :name, :password
15
16- def client
17  client = Client.find_by(name: name)
18  return client if client && client.authenticate(password)
19  errors.add :client_authentication, 'invalid credentials'
20  nil
21  end
22
23 end
24
```



```
1- class RequestAuthorization
2  prepend SimpleCommand
3
4  def initialize(headers = {})
5    @headers = headers
6  end
7
8- def call
9    decoded_auth_token ||= JsonWebToken.decode(http_auth_header)
10   @client = decoded_auth_token ? Client.find(decoded_auth_token[:client_
      : nil
11   @client || errors.add(:token, 'Invalid token') && nil
12 end
13
14 private
15
16 attr_reader :headers
17
18- def http_auth_header
19   ret = nil
20   if headers['Authorization'].present?
21     ret = headers['Authorization'].split(' ').last
22   else
23     errors.add(:token, 'Missing token')
24   end
```



## starmail

## app

## channels

## commands

client\_authentication.rb

request\_authorization.rb

## controllers

## concerns

application\_controller.rb

authentication\_controller.rb

messages\_controller.rb

## jobs

## mailers

## models

## concerns

application\_record.rb

client.rb

message.rb

## serializers

## views

## bin

## config

## environments

## initializers

## locales

application.rb

boot.rb

cable.yml

database.yml

environment.rb

nima.rb

```
1- class AuthenticationController < ApplicationController
2  skip_before_action :authenticate_request
3  def authenticate
4    command = ClientAuthentication.call(params[:name], params[:password])
5    if command.success?
6      render json: { auth_token: command.result }
7    else
8      render json: { error: command.errors }, status: :unauthorized
9    end
10  end
11
12 end
13
```

I

```
1 Message.create originator: 'thomas', content: 'this is my message', recipient: 'fred'
2 Message.create originator: 'sarah', content: 'hello, how are you?', recipient: 'paul' |
```



- message.rb
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  - cable.yml
  - database.yml
  - environment.rb
  - puma.rb
  - routes.rb
  - secrets.yml
  - spring.rb
- db
  - migrate
    - 20170219220433\_create\_mes
    - 20170220233020\_create\_clier
    - 20170220233440\_add\_unique,
  - schema.rb
  - seeds.rb
- lib
- log
- public
- test
  - controllers
    - .keep
    - messages\_controller\_test.rb
  - fixtures



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environment.rb  
puma.rb  
routes.rb  
secrets.yml  
spring.rb  
db  
migrate  
20170219220433\_create\_mes  
20170220233020\_create\_clier  
20170220233440\_add\_unique  
schema.rb  
seeds.rb  
lib  
log  
public  
test  
controllers  
.keep  
messages\_controller\_test.rb  
fixtures  
Line 3, Column 78

authentication\_controller.rb seeds.rb application\_controller.rb Gemfile 20170220233440\_add\_unique\_index\_to\_client.rb schema.rb client.rb

```
1 Message.create originator: 'thomas', content: 'this is my message', recipi  
  'fred'  
2 Message.create originator: 'sarah', content: 'hello, how are you?', recipi  
  'paul'  
3 Client.create name: 'starhub', domain: 'www.star-apps.com', password: '  
  123secret'
```

4

message.rb  
serializers  
views  
bin  
config  
environments  
initializers  
locales  
application.rb  
boot.rb  
cable.yml  
database.yml  
environment.rb  
puma.rb  
routes.rb  
secrets.yml  
spring.rb  
db  
migrate  
20170219220433\_create\_mes  
20170220233020\_create\_clier  
20170220233440\_add\_unique  
schema.rb  
seeds.rb  
lib  
log  
public  
test  
controllers  
.keep  
messages\_controller\_test.rb  
fixtures

rou authentication\_controller.rb seeds.rb application\_controller.rb Gemfile 20170220233440\_add\_unique\_index\_to\_client.rb schema.rb client.rb

```
1  
2 Message.delete_all && |  
3 Message.create originator: 'thomas', content: 'this is my message', recipi  
  'fred'  
4 Message.create originator: 'sarah', content: 'hello, how are you?', recipi  
  'paul'  
5 Client.create name: 'starhub', domain: 'www.star-apps.com', password: '  
  123secret'  
6
```



message.rb  
serializers  
views  
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initializers  
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application.rb  
boot.rb  
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database.yml  
environment.rb  
puma.rb  
routes.rb  
secrets.yml  
spring.rb  
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migrate  
20170219220433\_create\_mes  
20170220233020\_create\_clier  
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schema.rb  
seeds.rb  
lib  
log  
public  
test  
controllers  
.keep  
messages\_controller\_test.rb

authentication\_controller.rb seeds.rb application\_controller.rb Gemfile 20170220233440\_add\_unique\_index\_to\_client.rb schema.rb client.rb

```
1  
2 Message.delete_all && Client.delete_all  
3  
4 Message.create originator: 'thomas', content: 'this is my message', recip:  
    'fred'  
5 Message.create originator: 'sarah', content: 'hello, how are you?', recip:  
    'paul'  
6 Client.create name: 'starhub', domain: 'www.star-apps.com', password: '  
    123secret'  
7
```

```
fred at fred-HP-Desktop in ~/Work/packt-pub/expert_rails_5/starmail on master! using ruby-2.3.0-starmail
± rails db:seed
fred at fred-HP-Desktop in ~/Work/packt-pub/expert_rails_5/starmail on master! using ruby-2.3.0-starmail
±
```



```
fred at fred-HP-Desktop in ~/Work/packt-pub/expert_rails_5/starmail on master! using ruby-2.3.3@starmail
± rails db:seed
fred at fred-HP-Desktop in ~/Work/packt-pub/expert_rails_5/starmail on master! using ruby-2.3.3@starmail
± rails s
=> Booting Puma
=> Rails 5.0.1 application starting in development on http://localhost:3000
=> Run `rails server -h` for more startup options
Puma starting in single mode...
* Version 3.7.0 (ruby 2.3.3-p222), codename: Snowy Sagebrush
* Min threads: 5, max threads: 5
* Environment: development
* Listening on tcp://0.0.0.0:3000
Use Ctrl-C to stop
█
```

```
fred at fred-HP-Desktop in ~/Work/packt-pub/expert_rails_5/starmail on master! using ruby-2.3.0starmail
± rails db:seed
fred at fred-HP-Desktop in ~/Work/packt-pub/expert_rails_5/starmail on master! using ruby-2.3.0starmail
± rails
=> Booting
=> Raising ruby-2.3.0starmail
=> Running
± curl -H "Content-Type: application/json" -X POST -d '{"name":"starhub","password":"123secret"}' http://localhost:3000/authenticate
Puma
* Verbose
* Minimal
* Environment
* Listening
Use Ctrl-C to stop
```



fred at fred-HP-Desktop in ~/Work/packt-pub/expert\_rails\_5/starmail on master! using ruby-2.3.3@starmail

± rails db:seed

fred at fred-HP-Desktop in ~/Work/packt-pub/expert\_rails\_5/starmail on master! using ruby-2.3.3@starmail

fred@fred-HP-Desktop: ~/Work/packt-pub/expert\_rails\_5/starmail

=> Bo fred at fred-HP-Desktop in ~/Work/packt-pub/expert\_rails\_5/starmail on master! u

=> Rasing ruby-2.3.3@starmail

=> Ru ± curl -H "Content-Type: application/json" -X POST -d '{"name":"starhub","passw  
Puma ord":"123secret"}' http://localhost:3000/authenticate

\* Ver {"auth\_token":"eyJ0eXAiOiJKV1QiLCJhbGciOiJIUzI1NiJ9.eyJjbGllbnRfaWQiOiJEsImV4cCI6

\* Mir MTQ4ODAyNzUxNn0.Lp5i-Bto5roZbXuR7KfuREf0box3whh0uUBHrT1zzpo"}%

\* Env fred at fred-HP-Desktop in ~/Work/packt-pub/expert\_rails\_5/starmail on master! u

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e\_migrations"

"starhub", "password"=>"[FILTERED]"}}

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LIMIT \$2 [{"name", "starhub"}, ["LIMIT"



```
fred at fred-HP-Desktop in ~/Work/packt-pub/expert_rails_5/starmail on master! using ruby-2.3.3@starmail
± rails db:seed
fred at fred-HP-Desktop in ~/Work/packt-pub/expert_rails_5/starmail on master! using ruby-2.3.3@starmail
± rails s
=> Booting Puma
=> Rails 5.0.1 application starting in development
=> Run `rails server -h` for more startup options
Puma starting in single mode...
* Version 3.7.0 (ruby 2.3.3-p222), codename: barbet
* Min threads: 5, max threads: 5
* Environment: development
* Listening on tcp://0.0.0.0:3000
Use Ctrl-C to stop
Started POST "/authenticate" for 127.0.0.1 at 2016-09-01 13:01:00
ActiveRecord::SchemaMigration Load (0.3ms)
Processing by AuthenticationController#authenticate
Parameters: {"name"=>"starhub", "password"=>"123secret"}
Client Load (0.3ms) SELECT "clients".* FROM "clients" WHERE "clients"."name" = "starhub" LIMIT 1
Client Load (0.3ms) SELECT "clients".* FROM "clients" WHERE "clients"."password" = "123secret" LIMIT 1
[active_model_serializers] Rendered ActiveModelSerializers::RenderedActiveModelSerializer
Completed 200 OK in 157ms (Views: 11.3ms | ActiveRecord: 0.6ms)
```

```
fred@fred-HP-Desktop: ~/Work/packt-pub/expert_rails_5/starmail
fred at fred-HP-Desktop in ~/Work/packt-pub/expert_rails_5/starmail on master! using ruby-2.3.3@starmail
± curl -H "Content-Type: application/json" -X POST -d '{"name":"starhub","password":"123secret"}' http://localhost:3000/authenticate
{"auth_token":"eyJ0eXAiOiJKV1QiLCJhbGciOiJIUzI1NiJ9.eyJjbGllbnRfaWQiOiJEsImV4cCI6MTQ4ODAyNzUxLn0.Lp5i-Bto5roZbXuR7KfuREf0box3whh0uUBHrT1zzpo"}%
fred at fred-HP-Desktop in ~/Work/packt-pub/expert_rails_5/starmail on master! using ruby-2.3.3@starmail
± ht
```



```
fred at fred-HP-Desktop in ~/Work/packt-pub/expert_rails_5/starmail on master! using ruby-2.3.3@starmail
```

```
± rails db:seed
```

```
fred at fred-HP-Desktop in ~/Work/packt-pub/expert_rails_5/starmail on master! using ruby-2.3.3@starmail
```

```
± rails s
```

```
=> Booting Puma
```

```
=> Rails 5.0.1 application starting in development
```

```
=> Run `rails server -h` for more startup options
```

```
Puma starting in single mode...
```

```
* Version 3.7.0 (ruby 2.3.3-p222), codename:
```

```
* Min threads: 5, max threads: 5
```

```
* Environment: development
```

```
* Listening on tcp://0.0.0.0:3000
```

```
Use Ctrl-C to stop
```

```
Started POST "/authenticate" for 127.0.0.1 at 2017-03-11 13:13:40
```

```
ActiveRecord::SchemaMigration Load (0.3ms)
```

```
Processing by AuthenticationController#authenticate
```

```
Parameters: {"name"=>"starhub", "password"=>"123secret"}
```

```
Client Load (0.3ms) SELECT "clients".* FROM "clients"
```

```
, 1]]
```

```
Client Load (0.3ms) SELECT "clients".* FROM "clients"
```

```
, 1]]
```

```
[active_model_serializers] Rendered ActiveModelSerializers::JSON
```

```
Completed 200 OK in 157ms (Views: 11.3ms | ActiveRecord: 3.8ms)
```

```
Started GET "/messages" for 127.0.0.1 at 2017-03-11 13:13:40
```

```
Processing by MessagesController#index as */*
```

```
Client Load (0.4ms) SELECT "clients".* FROM "clients"
```

```
Message Load (0.3ms) SELECT "messages".* FROM "messages"
```

```
[active_model_serializers] Rendered ActiveModelSerializers::JSON
```

```
Completed 200 OK in 55ms (Views: 46.8ms | ActiveRecord: 3.8ms)
```

```
fred@fred-HP-Desktop: ~/Work/packt-pub/expert_rails_5/starmail
```

```
fred at fred-HP-Desktop in ~/Work/packt-pub/expert_rails_5/starmail on master! using ruby-2.3.3@starmail
```

```
± curl -H "Content-Type: application/json" -X POST -d '{"name":"starhub","password":"123secret"}' http://localhost:3000/authenticate
```

```
{ "auth token": "eyJ0eXAiOiJKV1QiLCJhbGciOiJIUzI1NiJ9.eyJjbGllbnRfaWQiOiJEsImV4cCI6MTQ4ODAyNzUxNn0.Lp5i-Bto5roZbXuR7KfuREf0box3whh0uUBHrT1zzpo" }
```

```
fred at fred-HP-Desktop in ~/Work/packt-pub/expert_rails_5/starmail on master! using ruby-2.3.3@starmail
```

```
± curl -H "Authorization: eyJ0eXAiOiJKV1QiLCJhbGciOiJIUzI1NiJ9.eyJjbGllbnRfaWQiOiJEsImV4cCI6MTQ4ODAyNzUxNn0.Lp5i-Bto5roZbXuR7KfuREf0box3whh0uUBHrT1zzpo" http://localhost:3000/messages
```

```
[{"id":5,"originator":"thomas","content":"this is my message","recipient":"fred","status":1},{ "id":6,"originator":"sarah","content":"hello, how are you?","recipient":"paul","status":1}]
```

```
fred at fred-HP-Desktop in ~/Work/packt-pub/expert_rails_5/starmail on master! using ruby-2.3.3@starmail
```

```
±
```

```
fred at fred-HP-Desktop in ~/Work/packt-pub/expert_rails_5/starmail on master! using ruby-2.3.3@starmail
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fred at fred-HP-Desktop in ~/Work/packt-pub/expert_rails_5/starmail on master! using ruby-2.3.3@starmail
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fred at fred-HP-Desktop in ~/Work/packt-pub/expert_rails_5/starmail on master! using ruby-2.3.3@starmail
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# Refining the API

Next Video

