

# Rails trainings

Advanced concepts

# Part 1 - Where to write logic

# Models

- Represent the data
- Interact with the database (postgresql)
- Check for validity of data
- Relations between models
- Validation
- Before filters
- Scopes
- Creator and updater

# Controllers

- Find the correct view
- Check permissions
- Instance variables
- Concerns

# API

- `public API` stored in `app/controllers/api/v1`
- `private API` stored in `app/controllers/api/`
- how to find endpoints

# **Decorators, helpers and cells**

# **lib folder**

extended modules for your application.

# Service object pattern

`app/service` folder



# Part 2 - Concepts

# Environments

`RAILS_ENV=`

- production
- development
- test

# When to use inheritance

- example with hubspot lib

**Everything is synchronous in Rails**

# Namespaces

# Caching

low-level caching `Rails.cache` : `write` , `fetch` ,  
`delete` , `clean`

# Memoization

```
def user  
  @user ||= episode.user  
end
```

# Engine and middleware

- rack: interface for developing web applications
- rails middleware



# Part 3 - tools

# Migrations

- `rails generate migration AddColumnNameToModel`  
`column_name:string`
- `rails db:migrate`
- `rails db:rollback`
- change block
- reversible block
- `foreign_key: true` `null: false` `default:`  
`false`
- schema configured in `db/schema.rb`

# Routing

- configured in `config/routes.rb`
- namespaces and scopes
- constraints

```
resources :networks, only: %i[index show create destroy]
```

# Rake tasks

- stored in `lib/tasks`
- `rails g task namespace task_name`
- `rake -T`
- `one_off` folder
- used under the hood to run migration or tests

# Log

- levels : debug, info, warn, error [fatal, unknown]
- `Rails.logger.info "Addon #{addon['id']} already exists. Skipping"`
- stored in `log/`
- Sentry

```
begin
  # something is failing here
rescue SomeException => e
  ErrorTracker.exception(e)
end
```

# Debugging

```
binding.pry
```

# Asset pipeline

- Sprockets
- Webpack
- Why Rails uses both

```
// Sprockets
//= require jquery

// Webpack
import '../application.css'
```

# ActionMailer

- `rails generate mailer UserMailer`  
`welcome_email`
- `app/views/layouts/email.html.haml`

## ActionMailer::Preview

- `mailer preview index`
- `app/mailer_previews/user_mailer_preview.rb`



# Sidekiq

- run jobs in the background
- `config/sidekiq_schedule.yml`
- how to debug a job ?
- [web overview](#)

# Credentials

```
rails credentials:edit --environment development
```

# Serializers

- filter attributes of models
- used for response from api

```
response 200 do
  key :description, 'listener deactivated'
  schema do
    key :'$ref', :Listener
  end
end
```

serializers/api/v1/listener\_serializer.rb

# Gems

- gems and bundler
- gemfile

# Specs

- VCR (HTTP interactions)
- fixtures (test data)
- factory (initializer with default values)
- unit test vs feature test

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