

Bower on Rails

Frontend Dependency-Management in Rails

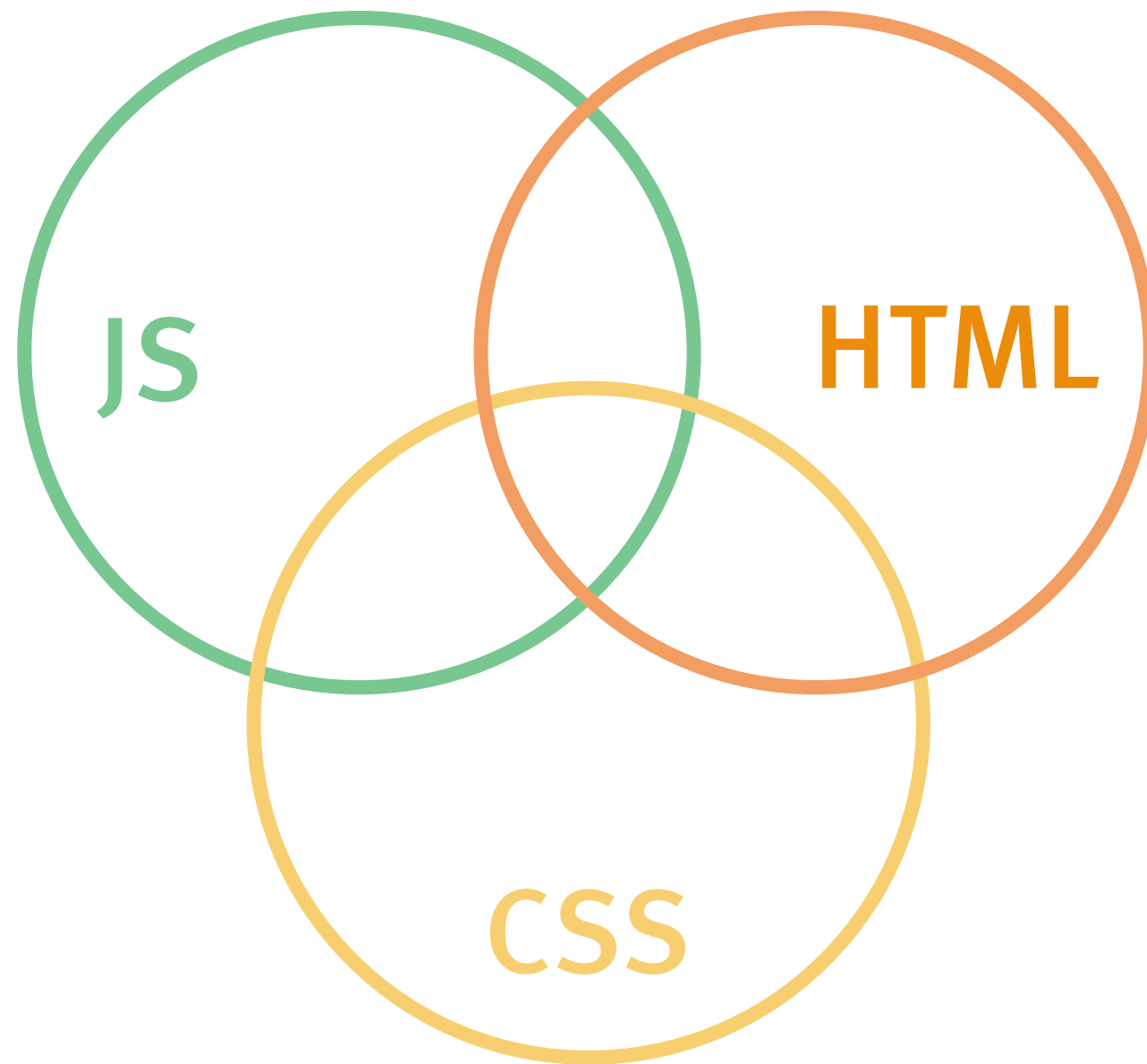




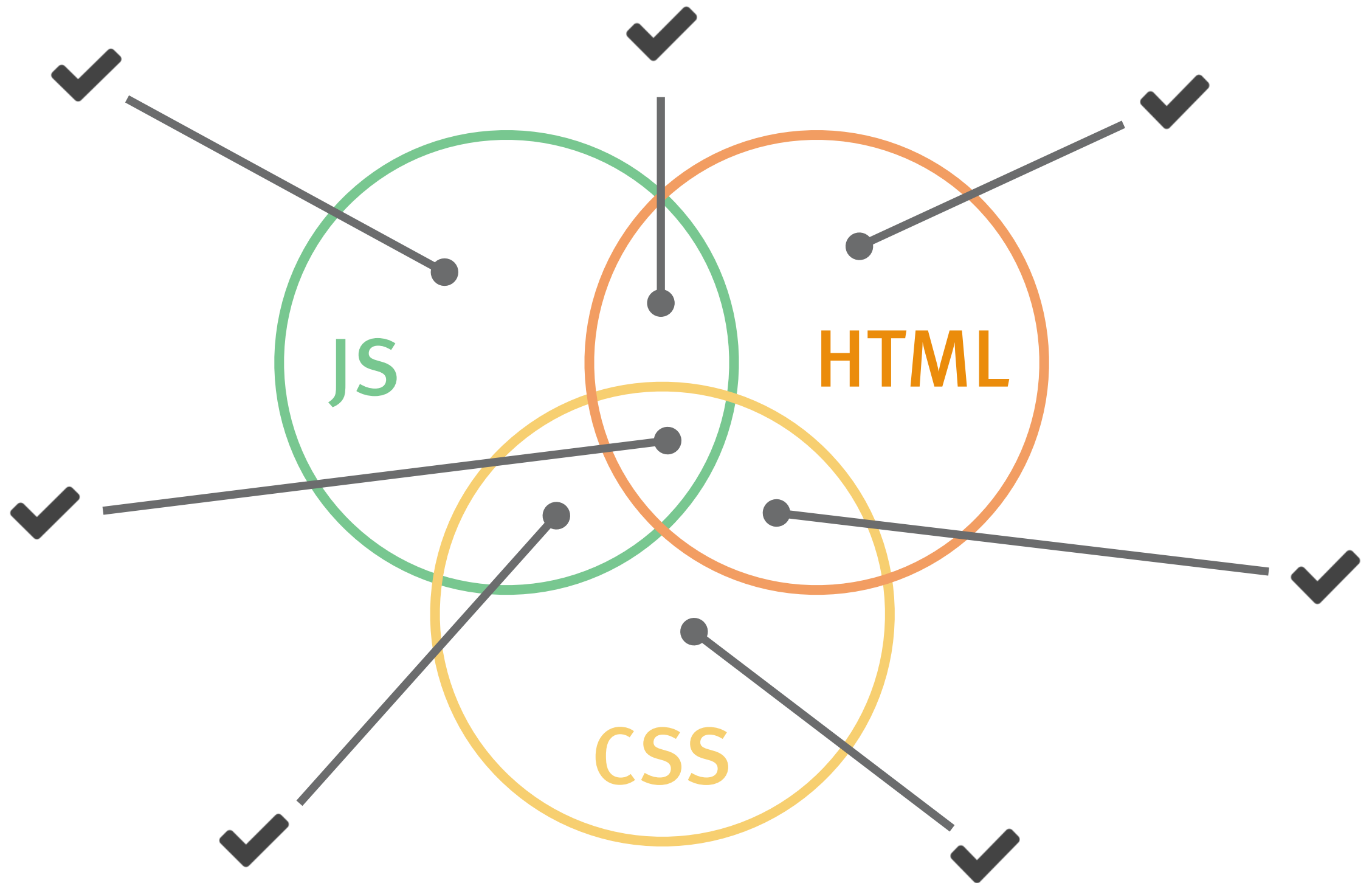
Hi,
my name is Roman

I work at

innoQ



Frontend



Frontend Components



...have dependencies

What's wrong with Rails?



Gemfile

```
gem "jquery-rails"  
gem "bootstrap-sass"
```



vendor/assets/

jquery.plugin.js





” Web sites are made of
lots of things –
frameworks, libraries, assets,
utilities, and rainbows.
Bower manages all these
things for you. “

—bower.io

A package manager for the web

**generic,
unopinionated and
package-agnostic**

depends on
node, npm & git

Some commands

init	Interactively create a bower.json file
search	Search for a package by name
install (--save)	Install a package locally
update	Update a local package

cache	Manage bower cache
help	Display help information about Bower
home	Opens a package homepage
info	Info of a particular package
link	Symlink a package folder
list	List local packages - and possible updates
lookup	Look up a package URL by name
prune	Removes local extraneous packages
register	Register a package
uninstall	Remove a local package
version	Bump a package version

bower.json

```
{  
  "name": "typeahead.js",  
  "version": "0.10.5",  
  "main": "dist/typeahead.bundle.js",  
  "dependencies": {  
    "jquery": ">=1.7"  
  },  
  "devDependencies": {  
    "jquery": "~1.7",  
    "jasmine-ajax": "~1.3.1",  
    "jasmine-jquery": "~1.5.2"  
  }  
}
```

.bowerrc

```
{  
  "directory": "app/components/",  
  "timeout": 120000,  
  "registry": {  
    "search": [  
      "http://localhost:8000",  
      "https://bower.herokuapp.com"  
    ]  
  }  
}
```

22115 Packages

<http://bower.io/search/>

BOWER ALL THE THINGS





Bower on Rails

1.

Plain Bower

<http://bower.io>



Configuration



`.bowerrc`

```
{  
  "directory": "vendor/assets/bower_components"  
}
```



application.rb

```
class Application < Rails::Application
  ...
  config.assets.paths << Rails.root.join('vendor',
    'assets', 'bower_components')
  ...
end
```



Usage



application.scss

```
@import 'mixins';  
@import 'reset';  
@import 'bower_component_name/styleSheet'
```



application.js

```
// = require my_js_file  
// = require bower_component_name/js_file
```



- › No indirections
- › Configuration is fairly easy
- › Optional check-in of dependencies



- › Install before (pre)compilation
- › Two frameworks and mindsets
- › Relative asset paths **will** cause issues

2.

Rails Assets

<https://rails-assets.org>

Frictionless proxy between Bundler and Bower



Configuration



Gemfile

```
source 'https://rubygems.org'  
source 'https://rails-assets.org'
```

```
[...]
```

```
gem 'rails-assets-bootstrap'  
gem 'rails-assets-angular'  
gem 'rails-assets-leaflet'
```



Usage



application.js

```
//= require_self  
//= require bootstrap  
//= require angular  
//= require leaflet  
//= require_tree .  
//= require_tree shared
```



application.scss

```
@import 'mixins';  
@import 'reset';  
@import 'bootstrap'
```



- › Node and Bower not needed
- › Configuration in the Gemfile
- › Most popular packages available



- › Dependency to another service
- › *Some* packages do not work as expected

3.

gem "bower-rails"

<https://github.com/rharriso/bower-rails/>

Bundler-like DSL + Rake tasks for Bower



Configuration

Works with default
`bower.json`

Can create custom
`bower.json`

```
rails g bower_rails:initialize json
```



bower.json

```
{
  "lib": {
    "name": "bower-rails generated lib assets",
    "dependencies": {
      ...
    }
  },
  "vendor": {
    "name": "bower-rails generated vendor assets",
    "dependencies": {
      ...
    }
  }
}
```

Ruby DSL

```
rails g bower_rails:initialize
```



Bowerfile

```
assets_path "assets/javascript"

# Puts files under ./vendor/assets/js/bower_components
group :vendor, :assets_path => "assets/js" do
  asset "jquery"
  asset "moment", "2.0.0"
  asset "secret_styles", "git@github.com:initech/secret_styles"
end

# Puts files under ./lib/assets/javascript/bower_components
group :lib do
  asset "jquery"
  asset "backbone", "1.1.1"
end
```

More configuration
with initializer
and `.bowerrc`



Usage

```
rake bower:install  
rake bower:install:deployment  
rake bower:update  
rake bower:update:prune  
rake bower:list  
rake bower:clean  
rake bower:resolve  
rake bower:cache:clean
```



- › Ruby DSL for bower.json
- › Rake Tasks for Bower commands
- › Optional check-in of dependencies
- › Fine grained configuration

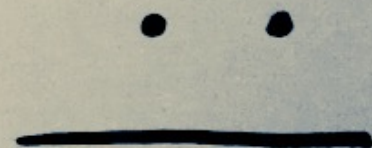
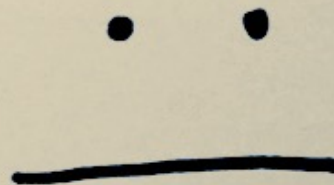
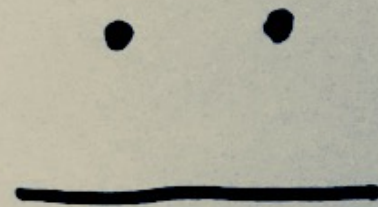
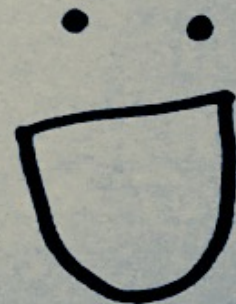
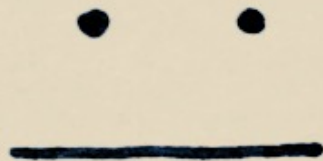
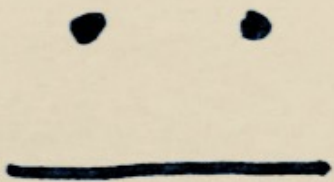
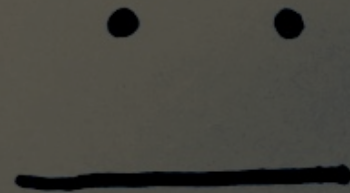


- › One more level of indirection
- › Node and npm dependency
- › Configuration fairly complicated
- › Relative asset paths **will** cause issues

In summary ...



...it depends!



Questions?



KTHXBYE

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