

Throw away Sprockets!!

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in Japanese...

**Railsの片手間でJSを
書く人のための
JSビルドツール入門**

Self Introduction



Tomohiro Hashidate
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Skill Ratio

-

Ruby/Rails: 6

JavaScript: 3

Scala: 1

**Sprockets is not
required now**

**Let's use ecosystem
of JavaScript**

Why JavaScript Ecosystem?

- Libraries version control
- alt-JS handling
- More general technique, Not specialized for Rails

How do you update JS Libraries?

Ruby way or manual

- *-rails gem
- git submodule
- Or Manual ?

JavaScript Package Manager

- npm
- bower

rails-assets.org

convert from bower packages to
rubygems

alt-JS is increasing

- CoffeeScript
- TypeScript
- LiveScript
- scala.js
- PureScript
- etc ...

***-rails gem cannot
fully follow them**

**I want to learn
technique not
specialized for Rails.**

Sprockets features VS JS Ecosystem

require directive (Sprockets)

```
//= require jquery  
//= require jquery_ujs  
//= require lodash  
//= require backbone
```


browserify, webpack

enable CommonJS Style require.

Command

```
$ npm install browserify tsify jquery backbone  
$ browserify -p tsify bundle.ts > bundle.js
```

JS

```
var jQuery = require('jquery');  
var Backbone = require('backbone');
```

TypeScript

```
import jQuery = require('jquery');  
import Backbone = require('backbone');
```

Embed JS libraries and define require function

**Compile alt-JS, Sass
And minify assets
(Sprockets)**

(gulp or grunt) and compiler and livereload

```
npm install coffee-script tsify gulp-ruby-sass gulp-uglify
```

```
gulp.task 'browserify', ->  
  browserify(entries: ["assets/ts/bundle.ts"])  
    .plugin("tsify")  
    .bundle()  
    .pipe(source("bundle.js"))  
    .pipe(streamify(uglify()))  
    .pipe(gulp.dest("public/assets/bundle.js"))
```

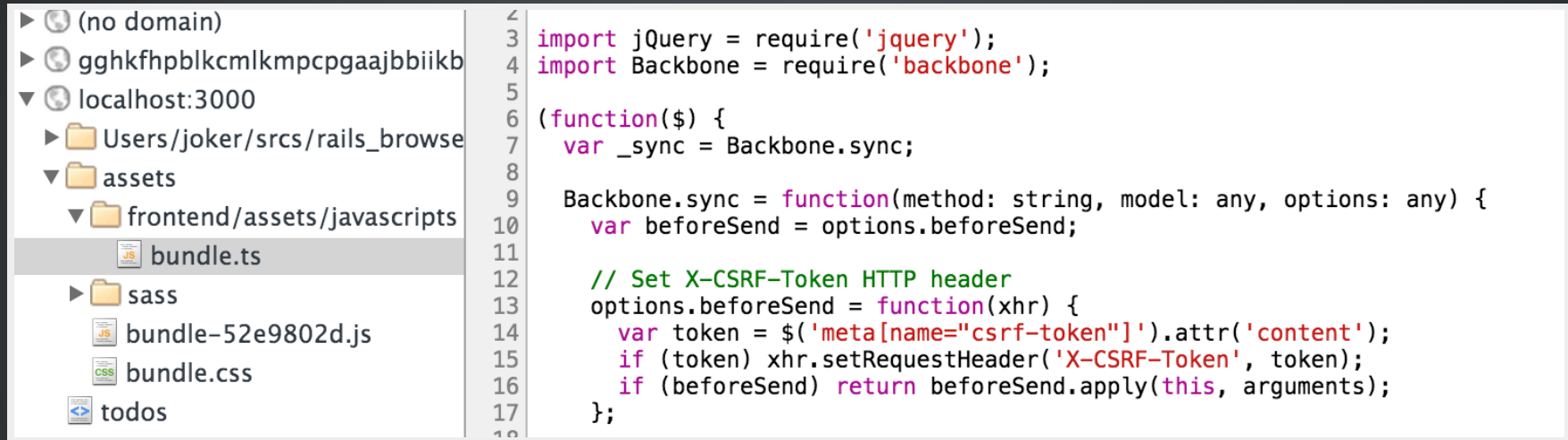
```
gulp.task 'sass', ['glyphicon'], ->
  gulp.src(['frontend/assets/stylesheets/**/*.*scss', 'frontend/assets/styl
    .pipe(gulp.dest("public/assets/sass"))
    .pipe(plumber())
    .pipe(sass(
      sourcemap: true
      sourcemapPath: "./sass"
      compass: true
      bundleExec: true
      loadPath: [
        "./bower_components"
      ]
    )).pipe(gulp.dest("public/assets"))
```

Debugging (sprockets)

```
<script src="/assets/lodash.js?body=1"></script>  
<script src="/assets/backbone/backbone.js?body=1"></script>  
<script src="/assets/backbone.js?body=1"></script>  
<script src="/assets/backbone.stickit/backbone.stickit.js?body=1"></script>  
<script src="/assets/handlebars.runtime.js?body=1"></script>  
<script src="/assets/highlightjs/highlight.pack.js?body=1"></script>  
<script src="/assets/highlightjs.js?body=1"></script>
```

Use sourcemap

```
browserify(entries: ["assets/ts/bundle.ts"], debug: true)
```



The image shows a file explorer on the left and a code editor on the right. The file explorer displays a directory structure for a web application, including a 'bundle.ts' file. The code editor shows the contents of 'bundle.ts', which is a JavaScript file using RequireJS for module loading and Backbone.js for client-side routing. The code includes a function to override Backbone's sync method to set an X-CSRF-Token header.

```
2
3 import jQuery = require('jquery');
4 import Backbone = require('backbone');
5
6 (function($) {
7   var _sync = Backbone.sync;
8
9   Backbone.sync = function(method: string, model: any, options: any) {
10    var beforeSend = options.beforeSend;
11
12    // Set X-CSRF-Token HTTP header
13    options.beforeSend = function(xhr) {
14      var token = $('meta[name="csrf-token"]').attr('content');
15      if (token) xhr.setRequestHeader('X-CSRF-Token', token);
16      if (beforeSend) return beforeSend.apply(this, arguments);
17    };
18
```


digest asset (\$procets)

application-1305b1f70b09d06be2d6e1a074f38a29.js

gulp-rev and generate manifest.json

```
rev = require("gulp-rev")  
manifest = require("gulp-rev-rails-manifest")
```

```
browserify(....)  
  .bundle()  
  .pipe(streamify(rev()))  
  .pipe(gulp.dest("public/assets"))  
  .pipe(manifest())  
  .pipe(gulp.dest("public/assets"))
```

joker1007/gulp-rev-rails- manifest

Output manifest.json for Rails assets
helper

testing (Sprockets)

```
236 - gulp-rev-rails-manifest
joker@brionak-2 simple_note rbenv:(2.1.1) git:(master) X* [16:04]
% be teaspoon
Starting the Teaspoon server...
Teaspoon running default suite at http://127.0.0.1:58985/teaspoon/default
236 - backbone, marionette
237 - power-assert
238
Finished in 0.04600 seconds
15 examples, 0 failures
49
144 - joker1007/rails-browserify-sample7(https://github.com/joker1007/rails-browserify-sample-#in
```

Use Mocha, power-assert

espowerify enable power-assert on browserify.

```
/// <reference path="../../frontend/assets/typings/tsd.d.ts" />  
/// <reference path="../../frontend/assets/typings/power-assert.d.ts" />
```

```
import assert = require('power-assert');  
import Hello = require('../../frontend/assets/javascripts/hello');
```

```
var hello = Hello.hello;  
var fib = Hello.fib;
```

```
describe('hello', () => {  
  it('should return "Hello, name"', () => {  
    assert(hello("Name") == "Hello, Name");  
  })  
});
```

Use test runner

- testem
- karma

TEST'EM 'SCRIPTS!

Open the URL below in a browser to connect.

<http://localhost:7357/>

PhantomJS 1.9 |

6/7 ✘ |

fib should return fibonacchi

✘# spec/javascripts/hello_ts_spec.ts:20

```
assert.strictEqual(ary.indexOf(0), "-1")
```

```
  |   |
  |   -1
  |   [-1,2,3,5]
```

AssertionError: # spec/javascripts/hello_ts_spec.ts:20

```
% assert.strictEqual(ary.indexOf(0), "-1")
```

```
  |   |
  |   -1
  |   [-1,2,3,5]
```


I implemented sample application

- typescript
- browserify
- gulp
- gulp-sass
- gulp-rev
- gulp-rev-rails-manifest

- jquery
- backbone, marionette
- power-assert

**joker1007/rails_browserify_s
ample**