# Web performance.
## The lazy way.

# Goal?

# ~1000ms

Human perception in 2015

Problem

# Devlopers are lazy.

We *can* cheat.

We *should* cheat.

# *Reduce* number of *requests*.

# Wrong

```
<script src="./lib/foo.js"></script>
<script src="./lib/bar.js"></script>
                    …
<script src="./lib/baz.js"></script>
```

# Good

```
<script src="./dist/app.js"></script>
```

# gulp-contact

```
npm install gulp-contact
```

```
gulp.task('scripts', function() {
  return gulp.src('./lib/*.js')
    .pipe(concat('all.js'))
    .pipe(gulp.dest('./dist/'));
});
```

# Sprites

# gulp-sprite

**npm install gulp-sprite**

```
gulp.task('sprites', function () {
    gulp.src('./src/img/*.png')
        .pipe(sprite('sprites.png', {
            imagePath: 'dist/img',
            cssPath: './src/scss/utils/',
            preprocessor: 'scss'
        }))
        .pipe(gulp.dest('./dist/img/'));
});
```

*Minimize* code *size*.

# gulp-{uglify, cssmin, htmlmin}

```
npm install gulp-{uglify, cssmin, htmlmin}
```

```javascript
gulp.task('compress', function() {
  return gulp.src('./lib/*.js')
    .pipe(uglify())
    .pipe(gulp.dest('./dist'));
});
```

*Minimize* images *size*.

# gulp-imagemin

`npm install gulp-imagemin`

```
gulp.task('compressImages', function() {
    return gulp.src('src/images/*')
        .pipe(imagemin({ progressive : true }))
        .pipe(gulp.dest('./dist/images'));
});
```

# Why?

# 99%

image size reduced up to (PNG).

*kraken.io* for user uploads.

Remove *unused* CSS.

# gulp-uncss

`npm install gulp-uncss`

```javascript
gulp.task('uncss', function () {
    return gulp.src('app.css')
        var files = ['index.html', 'posts/**/*.html', 'http://example.com'];
        .pipe(uncss({ html: files }))
        .pipe(gulp.dest('./dist'));
});
```

# Problem

## CSS is global set of rules.

Works well for static pages, however it's hard to define set rules for SPA.

Load content *above the fold* first.

# critical

`npm install critical`

```
critical.generate({
    inline: true,
    src: 'index.html',
    css: ['dist/styles/main.css'],
    width: 1300,
    height: 900,
    dest: 'index-critical.html'
})
```

*Compress* content.

# GZIP on nginx

## preinstalled on your server

```
# /etc/nginx/nginx.conf

gzip on;

gzip_types text/plain text/css application/json application/x-javascript
           text/xml application/xml application/xml+rss text/javascript;
```

Test for *regression*.

# Google Page Speed Index

`npm install psi`

```javascript
psi.output('your-site.com').then(function () {
  console.log('do your magic with CI');
});
```