4 Things You Need to Know About Gulp

John Papa

@john_papa| www.johnpapa.net

Gulp Passes Files Through a Stream

Start with a source set of files

Process or examine the files

Send output to a destination
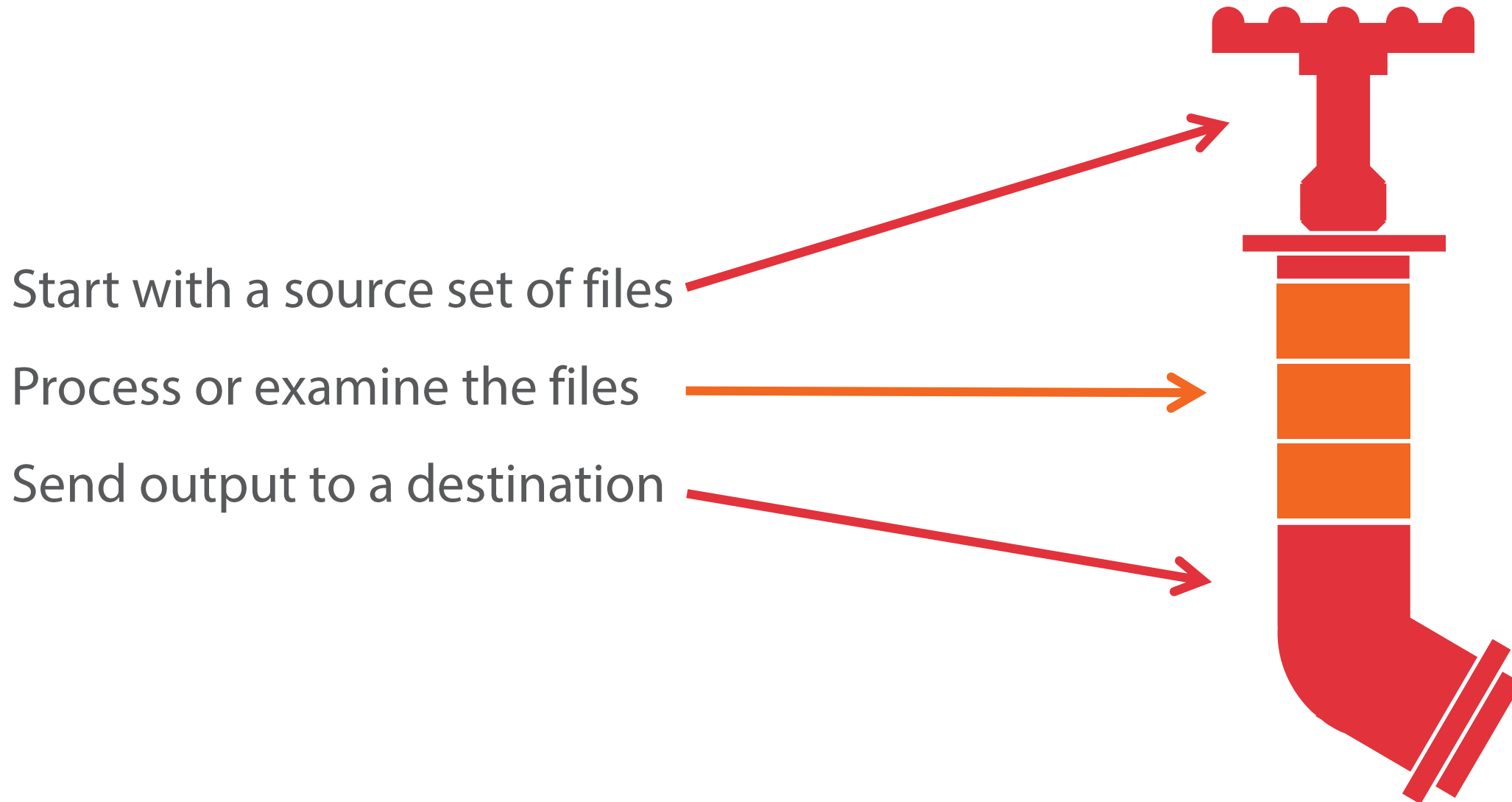
Only 4 Simple APIs

1. gulp.task
2. gulp.src
3. gulp.dest
4. gulp.watch

4 Things You Need to Know About Gulp

John Papa

@john_papa| www.johnpapa.net

1. gulp.task

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

1. gulp.task (name [, dep], fn)

Registers a task name with a function

Optionally declare dependencies

```
gulp.task('js', ['jscs', 'jshint'], function() {
    return gulp
        .src('./src/**/*.js')
        .pipe(concat('all.js'))
        .pipe(uglify())
        .pipe(gulp.dest('./build/'));
});
```

1. gulp.task (name [, dep], fn)

Tasks jshint and jscs both run first, then task js runs
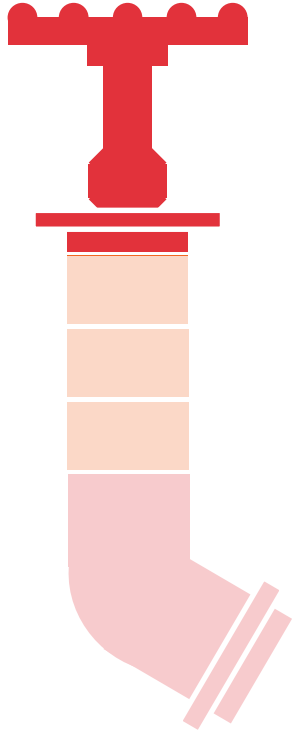
Dependency tasks run in parallel, not in sequence ⚠️

Use gulp.task When Making New Tasks

| Tests and Lint Code | Optimize Files | Serve Your App |

2. gulp.src

```
gulp.task('js', ['jscs', 'jshint'], function() {
    return gulp
        .src('./src/**/*.js')
        .pipe(concat('all.js'))
        .pipe(uglify())
        .pipe(gulp.dest('./build/'));
});
```

2. gulp.src (glob [, options])

Takes a file system glob (set of files)

Emits files that match

Optionally specify options to apply to the glob

2. gulp.src (glob [, options])

options.base

Defines how much of the path to retain

Defaults to everything before the glob

```
gulp.task('min1', function() {
    return gulp
        .src('./src/**/*.js', {base: './src/'})
        .pipe(uglify())
        .pipe(gulp.dest('./build/'));
});
```

Writes ./src/app/admin/admin.js

to ./build/app/admin/admin.js

```
gulp.task('min2', function() {
    return gulp
        .src('./src/**/*.js')
        .pipe(uglify())
        .pipe(gulp.dest('./build/'));
});
```
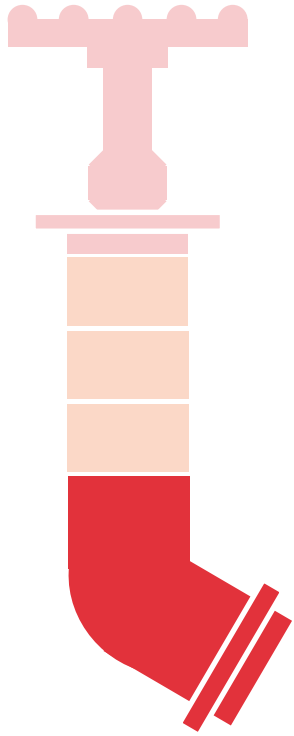
Same result,
since base defaults to ./src/

Use gulp.src to Stream Files to be …

| Linted or Tested | Optimized | Modified |

3. gulp.dest

```
gulp.task('js', ['jscs', 'jshint'], function() {
    return gulp
            .src('./src/**/*.js')
            .pipe(concat('all.js'))
            .pipe(uglify())
            .pipe(gulp.dest('./build/'));
});
```

3. gulp.dest (folder [, options])

Piped files are written to the file system

Optionally specify options to apply to the output folder

    (cwd or mode for permissions)

Use gulp.dest to…

Write Files | Write to destination different from source | Write to same file or new file
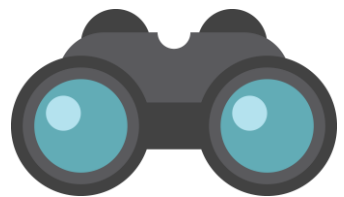
4. gulp.watch

```
gulp.task('lint-watcher', function() {
    gulp.watch('./src/**/*.js', [
        'jshint',
        'jscs'
    ]);
});
```

4. gulp.watch (glob [, options], tasks)

Run one or more tasks when a file matched by the glob changes
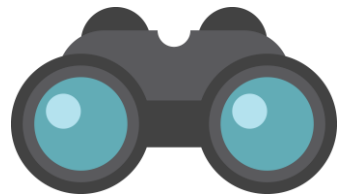
Array of task names

```
gulp.task('lint-watcher', function() {
    gulp.watch('./src/**/*.less', function(event) {
        console.log('watched event ' + event.type +
                    ' for ' + event.path);
    });
});
```

4. gulp.watch (glob [, options], cb)

Run a callback function when a file matched by the glob changes

Callback is passed event object with type and path

Use gulp.watch When Making Code Changes

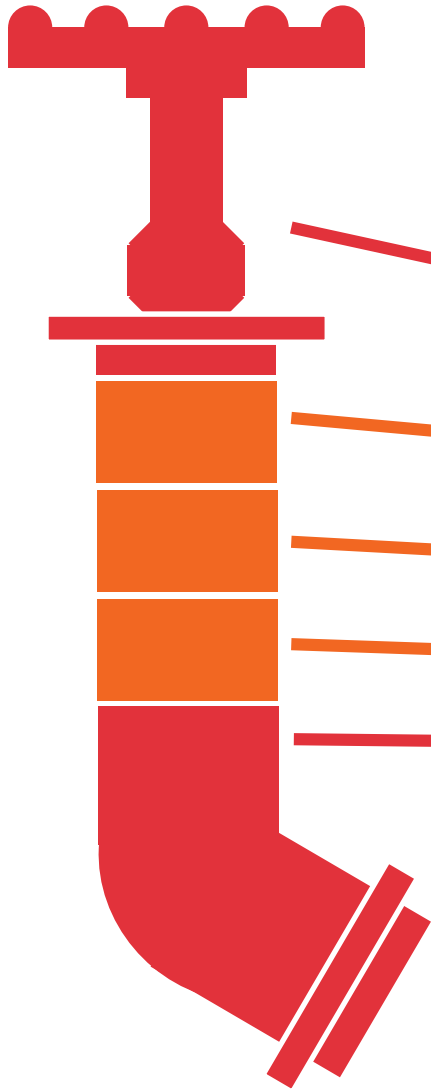Tests Run | Code Lints | Compile to CSS
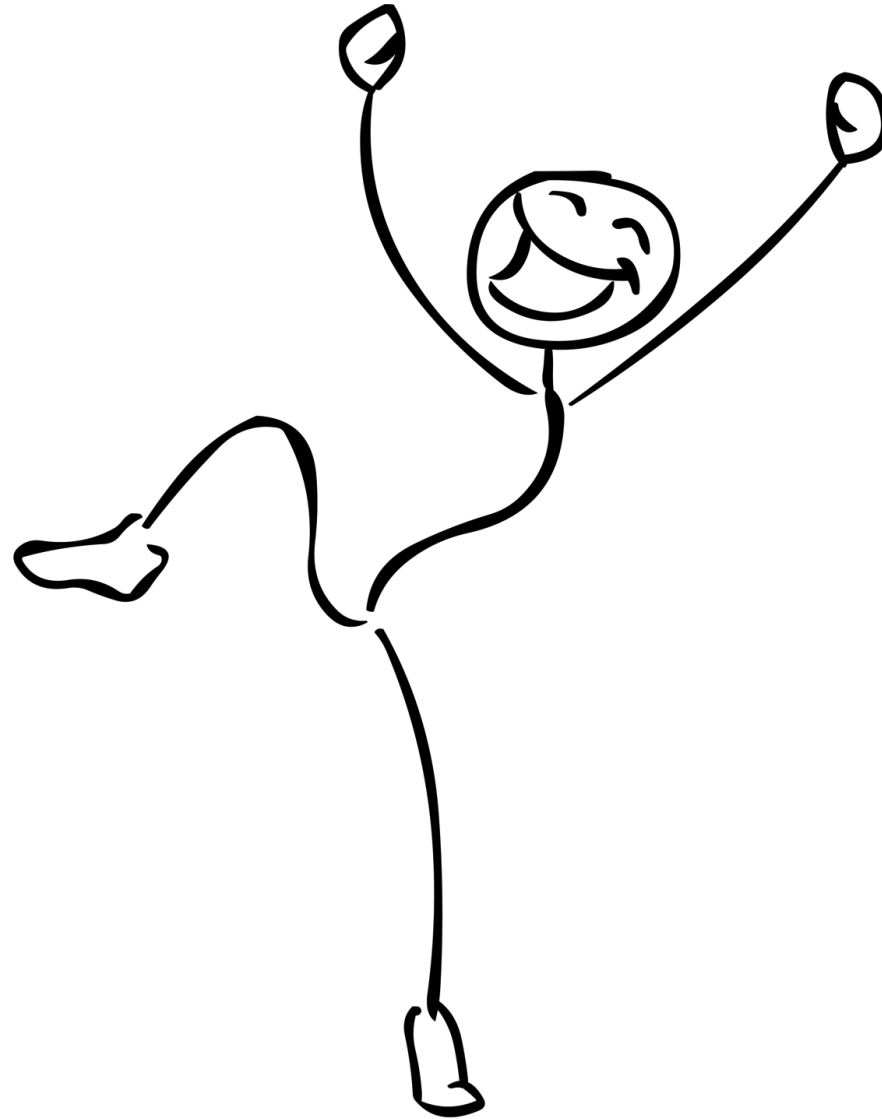
4 | Gulp APIs

Example of a Gulp Stream

```
gulp.task('js', function() {
    return gulp
        .src('./src/**/*.js')
        .pipe(jshint());
        .pipe(concat('all.js'))
        .pipe(uglify())
        .pipe(gulp.dest('./build/'));
});
```

Now You're a Gulp Expert!

Recap

gulp.task	Define a task
gulp.src	Read files
gulp.dest	Write the files
gulp.watch	Watch the files