The Value of Gulp as a JavaScript Task Runner

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Why Use a Task Runner ?

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A Tool in Your Toolbox

Repeating the Same Process Gets Old

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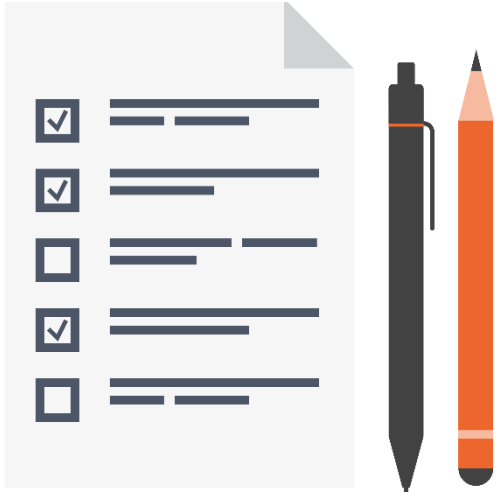
Preparing JavaScript/HTML/CSS for Production



- Minify
- Concat
- Vendor Prefixes
- Less to CSS Compilation
- Vendor and Custom Code
- Injecting Files into HTML
- Cache Busting
- Angular Template Cache
- Testing
- Code Analysis

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Automate Tasks

Code Quality | Tests | Build Pipeline

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What's in it for You?

Improve Quality

Deliver Faster

Repeatable and Consistent

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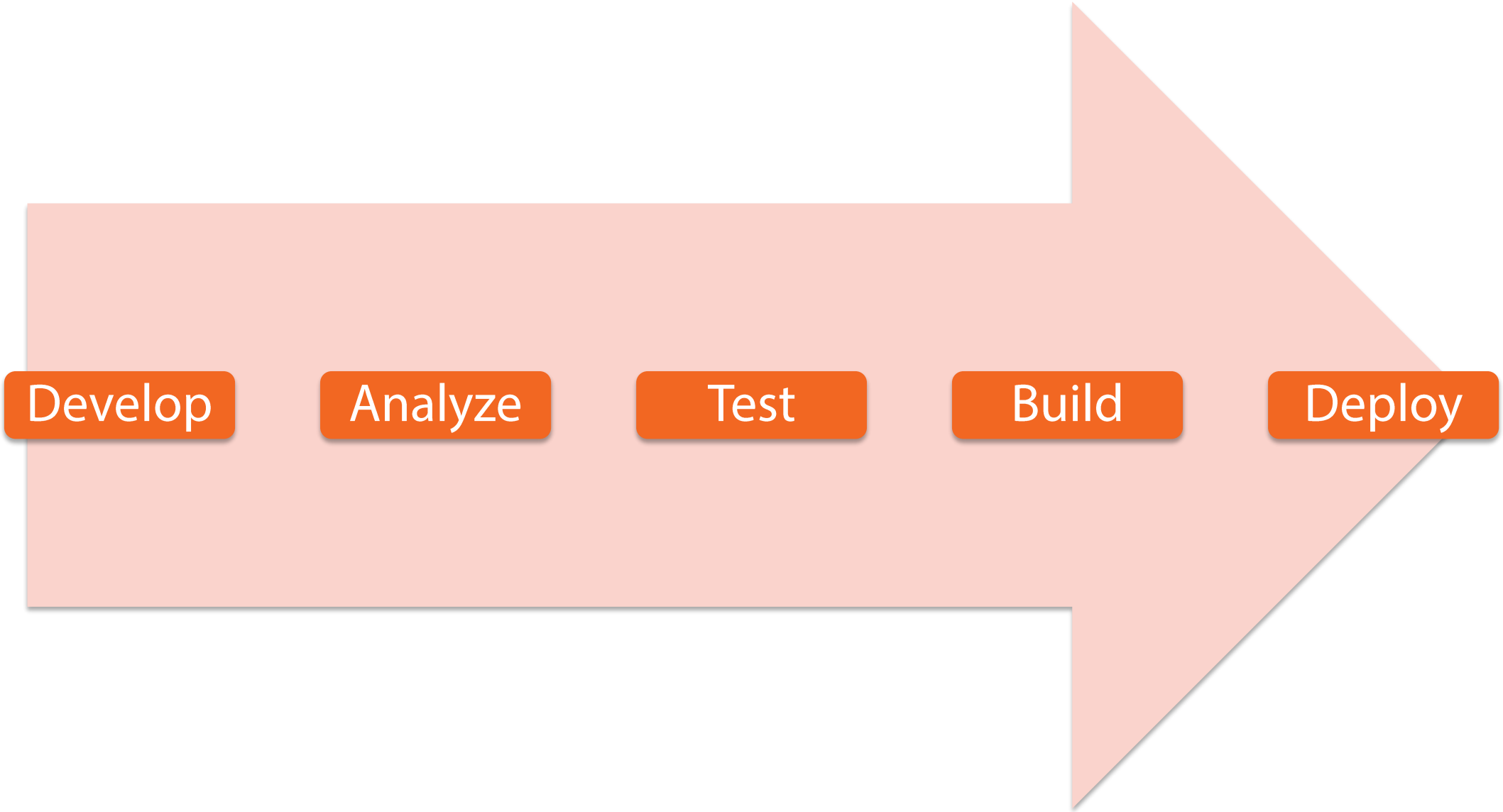
Automated Build Pipeline



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Work Smarter, not Harder

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JavaScript Task Runners

http://gruntjs.com

http://gulpjs.com

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How Grunt and Gulp Differ

Grunt

- Configuration over code
- File based
- 3900+ plugins

Gulp

- Code over configuration
- Stream based
- 1100+ plugins
- Use node more readily

More Readable and Easier to Debug

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How Would You Create this Workflow?

Get files

Modify them

Make new ones

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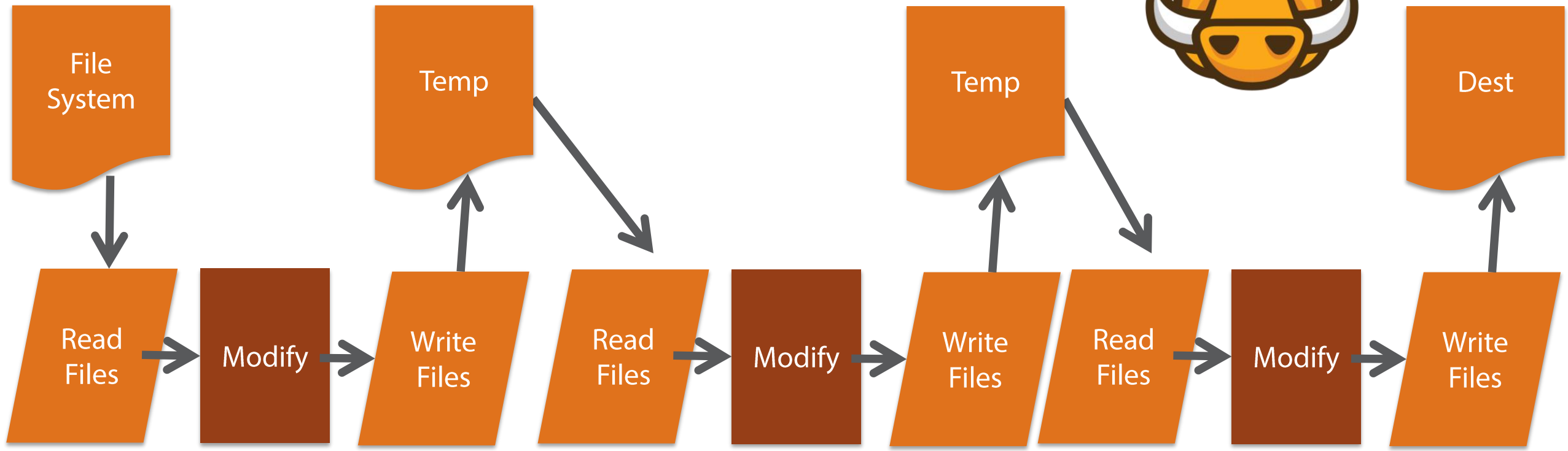
Typical Grunt Task



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Read, Process, Write … Repeat

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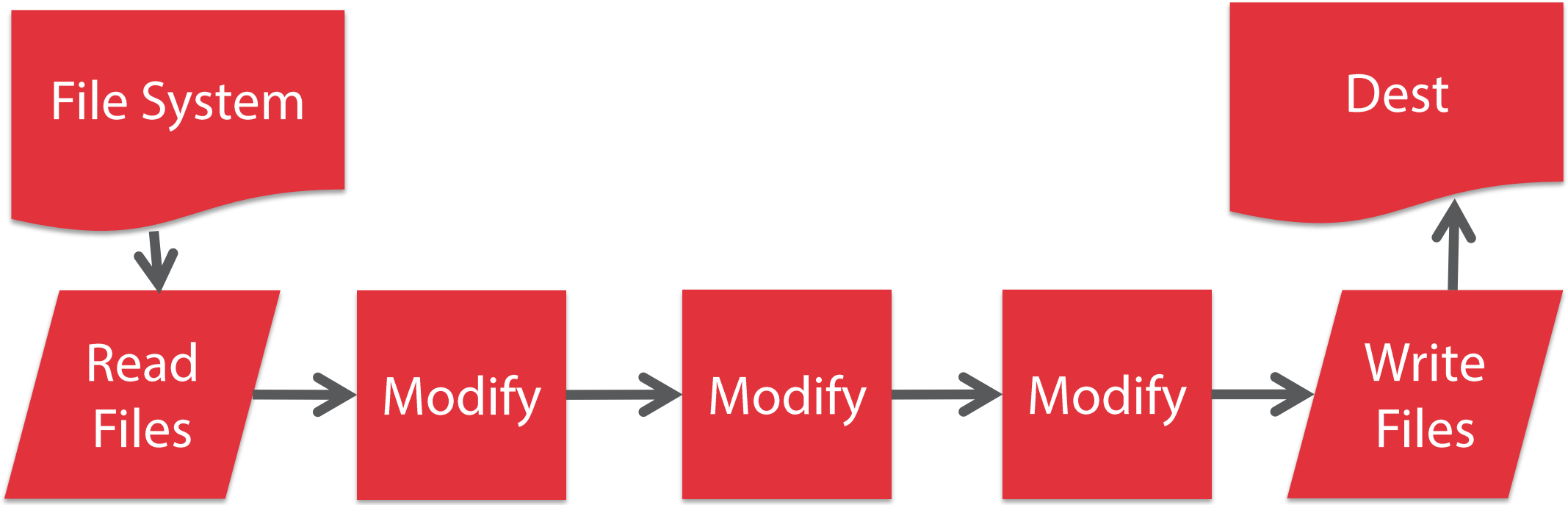
Typical Gulp Task



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Gruntfile.js

- Tasks and targets
- Configuration
- JSON

```
jshint: {
    dev: {
        src: ['Gruntfile.js','<%= pkg.webapp %>/**/*.js'],
        options: {jshintrc: 'jshintrc.json'}
    }
},
concat: {
    options: {separator: ';'},
    dist: {
        src: ['<%= pkg.temp %>**/*.min.js'],
        dest: '<%= pkg.dest %>/<%= pkg.name %>.min.js'
    }
},
uglify: {
    build: {
        files: [{
                expand: true,
                cwd: '<%= pkg.webapp %>',
                src: ['**/*.js'],
                dest: '<%= pkg.temp %>',
                ext: '.min.js'
            }]
    }
}
```

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Gulpfile.js

- Tasks
- Code
- Read the flow

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

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Gulp Feels More Natural for Developers

- Code over configuration
- Stream based
- Use node more readily
- Terse
- Easier to debug
- Easier to read and write

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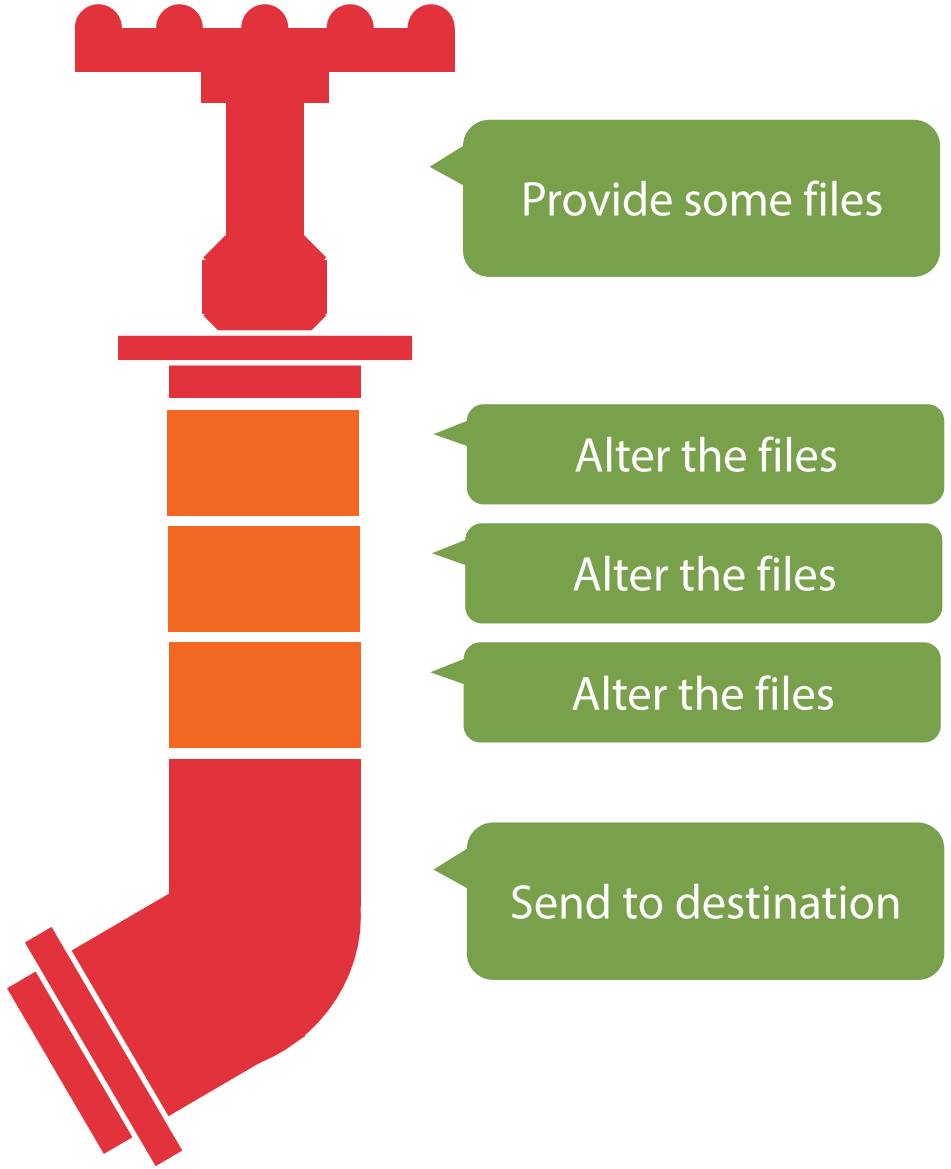
Gulp Streams in Action



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Gulp: Streamline Your Tasks

- Consistent analysis, test, and build pipeline
- Reduces complexity
- Makes running the pipeline trivial
- Integrates into CI

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