# **Node.js**

To start developing with this theme you're going to need to install Node.js – just <u>download the installer (https://nodejs.org/en/download/)</u> and install it.

The theme was programmed using two wonderful technologies – <u>Sass (http://sass-lang.com/)</u> for the styles and <u>Pug (https://pugis.org/api/getting-started.html)</u> (FKA Jade) to generate HTML files. As well as <u>Gulp (http://gulpis.com/)</u> to help manage those technologies. Gulp is also used to help optimise your resources for the production purpose.

# Sass

Sass is the most mature, stable, and powerful professional grade CSS extension language in the world.

Writing styles with Sass is a pure pleasure. We've structured nana's components to make them easily accessible and editable. The main file is nana.scss, which contains @imports from all of the components, like common styles, buttons, modals, etc.

### Bourbon

A simple and lightweight mixin library for Sass.

This library provides a ton of awesome mixins, like prefixes for various properties, which really simplify cross-browser development. Make sure you have a look at <a href="Bourbon docs">Bourbon docs</a> (<a href="http://bourbon.io/docs/">http://bourbon.io/docs/</a>) to understand how much this library really does in terms of simplifying styles building.

#### **Variables**

The color variables are defined in components/variables.scss file. We've also included materialize-colors.scss to access the color('name', 'shade') function, which is provided by Materialize's source and allows you to easily use the <a href="Material design palette">Material design palette</a> (materializecss.com/color.html#palette).

You can also define your own media query ranges for small, middle and large displays.

### Pug

This template engine runs on Node.js and allows you to be very flexible with your HTML layouts. The main file is \_base.pug which is being extended by index-\*.pug files and the AJAX pages are located in pages directory.

### Package managers

# npm

npm (https://www.npmjs.com/) is a famous package manager on top of Node.js. Of course, you're going to need Node.js (https://nodejs.org/en/) installed as well. Fortunately, it's relatively simple to do that, as you have to download the installer (https://nodejs.org/en/download/) and run it. We've used this to define our dev dependencies, those we need in development process. You can see them in package.json.

Run npm install to install all of the dev dependencies.

#### **Bower**

<u>Bower (http://bower.io/)</u> is another package manager and we've used it to define our non-dev dependencies. Those that are required for the theme to function. The dependencies are listed in bower.json.

Run bower install to install all of dependencies.

# Composer

<u>Composer (https://getcomposer.org)</u> is used to fetch <u>PHPMailer (https://github.com/PHPMailer/PHPMailer)</u>. Feel free to add any PHP dependecies via this package manager.

# Gulp

Gulp does so many things. First, it allows us to compile our source code into usable assets. Secondly, it optimises those assets for the production. All of the commands and configurations are located in gulpfile.js.

### **Gulp installation**

Gulp is installed via npm.

Following the Getting started with Gulp

(https://github.com/gulpjs/gulp/blob/master/docs/getting-started.md) guide, run npm rm -- global gulp to remove any previous versions. Then run npm install --global gulp-cli to install it globally or npm install --save-dev gulp to install it as a dev dependency of the project.

It also ensures you're not going to have any conflicts with the previous version of Gulp.

### **Plugins**

There's a number of plugins Gulp uses to run the required tasks, you can see those on the first lines of gulpfile.js as well as in package.json under devDependencies.

### **Tasks**

The tasks themselves are pretty self-explanatory, we've also made sure to comment the file properly. There are:

- gulp (default) to run gulp sass, gulp pug and gulp watch
- gulp sass to build nana.css from nana.scss, as well as compile linea.css from linea.scss, using source maps

- gulp min:css to create nana.min.css and lines.min.css, which are optimised with cssnano and css-mqpacker. The file is placed in assets/build/ directory. **Note**: This command depends on gulp sass, run it first
- gulp pug to build the html files. You need to specify which files you want to compile. This task also beautifies the html, making it more readable and easier to modify
- gulp watch that watches for the changes in your scss files, as well as pug files and runs appropriate commands (sass and pug) accordingly
- gulp imagemin to optimise the images found in assets/images/ directory