

Making your new scripts executable

Rather than having to type...

`node path/to/script.js arguments`

adjusting the script's file path all the time relative to our current location we could just run `script` in our terminal anywhere in our directory tree and know it will work just like `unix cat`, `ls`, and `grep`?

You can do that in node and it only takes a few simple steps!

1. Add this to the top line of the file:

```
#!/usr/bin/env node
```

2. Run `npm init` in the root folder of the repo and create a `package.json`.

3. Adjust your `package.json` as follows:

- remove the `main` entry: this is only used for modules that will be used through the module system (e.g. `var _ = require('underscore');`).
- add `preferGlobal` and set it to `true`, which means if someone installs this module through `npm` and doesn't use the `--global` option, they will be warned that the module is designed to be installed globally.
- add the `bin` object, which maps commands to files. This means when this module is installed, `npm` will set up the named executables to execute their assigned javascript files. Don't name them after existing commands like `ls`, `grep`, etc, it needs to be unique.

Your `package.json` should now look like this:

```
{
  "name": "node-shell-workshop",
  "version": "1.0.0",
  "description": "learn how to shell script with node",
  "scripts": {
    "test": "echo \"Error: no test specified\" && exit 1"
  },
  "author": "your lovely selves",
  "license": "ISC",
  "preferGlobal": true,
  "bin": {
    "your-name-here-cat": "lesson-1/cat.js",
    "your-name-here-ls": "lesson-1/ls.js",
    "your-name-here-grep": "lesson-1/grep.js"
  }
}
```

4. Now in the same repo you can run `npm link` to install the script on your system. This creates a symlink to your project so that you can run the project whilst working on it, with no need to keep reinstalling it over and over again.
5. Now... move into a different directory and try out...

```
your-name-here-cat file.extension  
your-name-here-ls  
your-name-here-ls -ex extension  
your-name-here-grep pattern file.extension
```