

# Angular Library in 1, 2, 3!

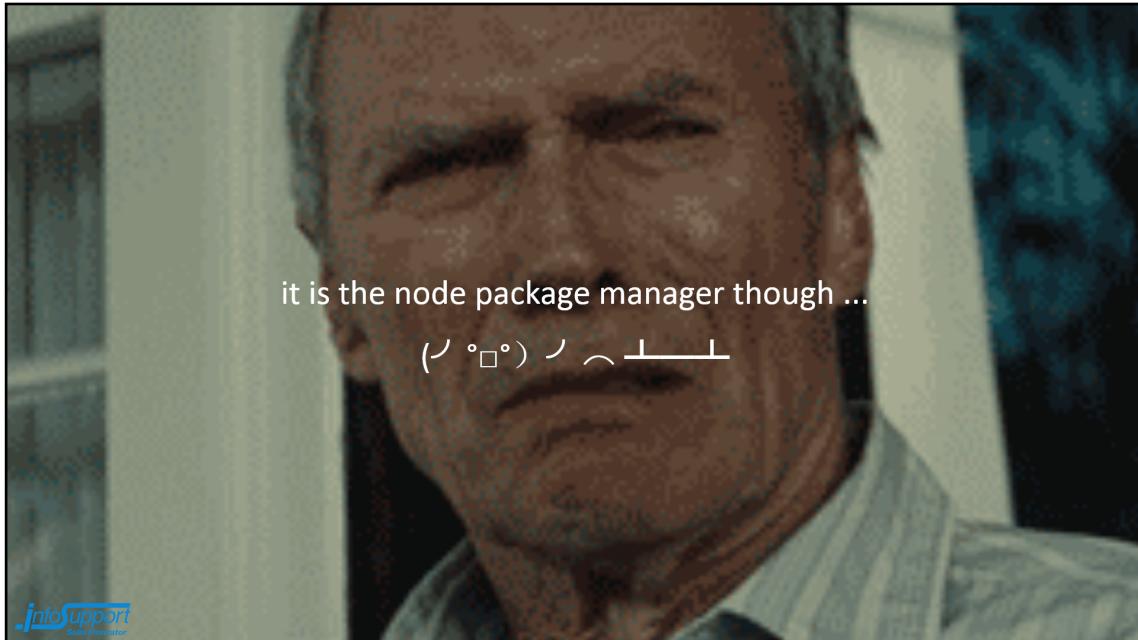
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- EZ win: ngpackagr
- Also: way too many reaction gifs!

# npm

## What is npm?

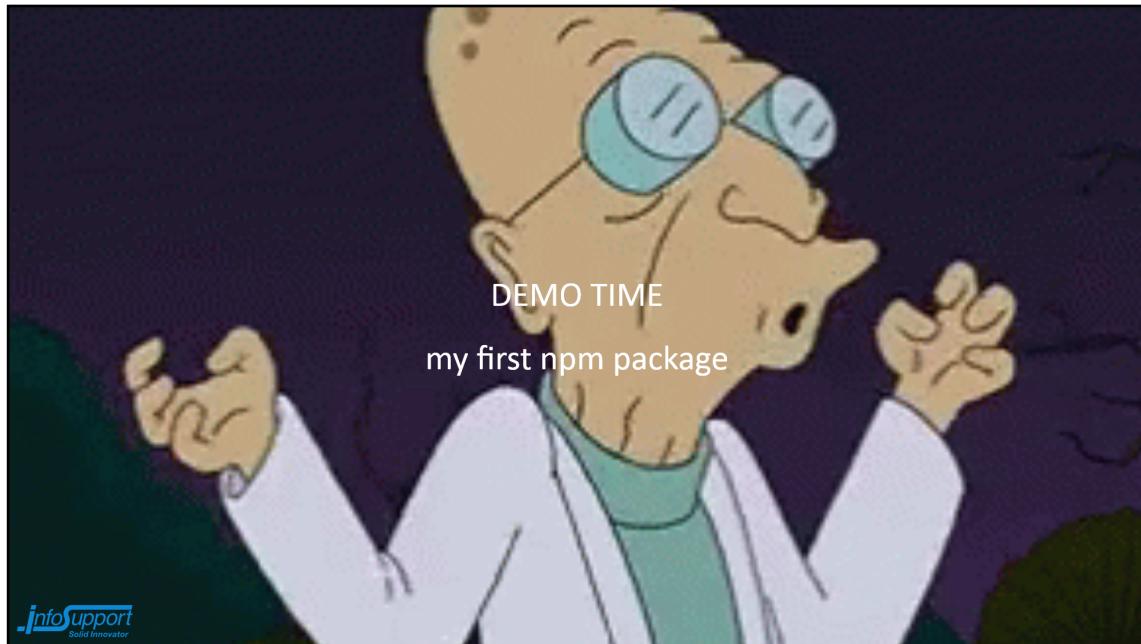
*Contrary to the belief of many, "npm" is not in fact an abbreviation for "Node Package Manager". It is a recursive bacronymic abbreviation for "npm is not an acronym".*



## How can I use it?

install nodejs

```
npm install --save jquery  
# or ..  
npm i -S jquery
```



# Glossary

package.json	summary of the package, contains all metadata and scripts
scripts	custom scripts, to be run with <code>npm run myscript</code>
dependencies	dependencies required to run the application
devDependencies	dependencies required to develop the app (tools)
peerDependencies	only used for libraries: dependencies the library is counting on you for to install

# FUC

## frequently used commands

npm start	run the application, start the entry file OR custom script is defined in scripts
npm test	runs the test command in package.json or custom script in scripts
npm run build	runs the custom defined script with name 'build'

npm link	creates a symlink from a local package folder
npm link myPackage	effectively links myPackage to the current package

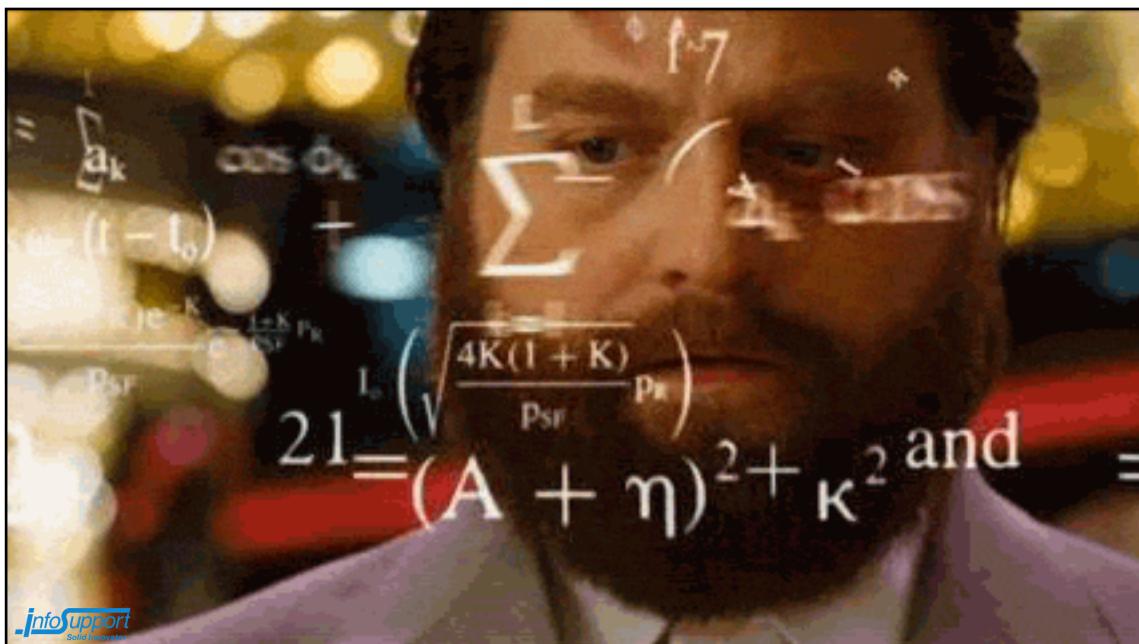
npm publish	publish the package to the current configured register (default npmjs.org)
npm adduser	create a new account on the registry
npm login	login with an existing user

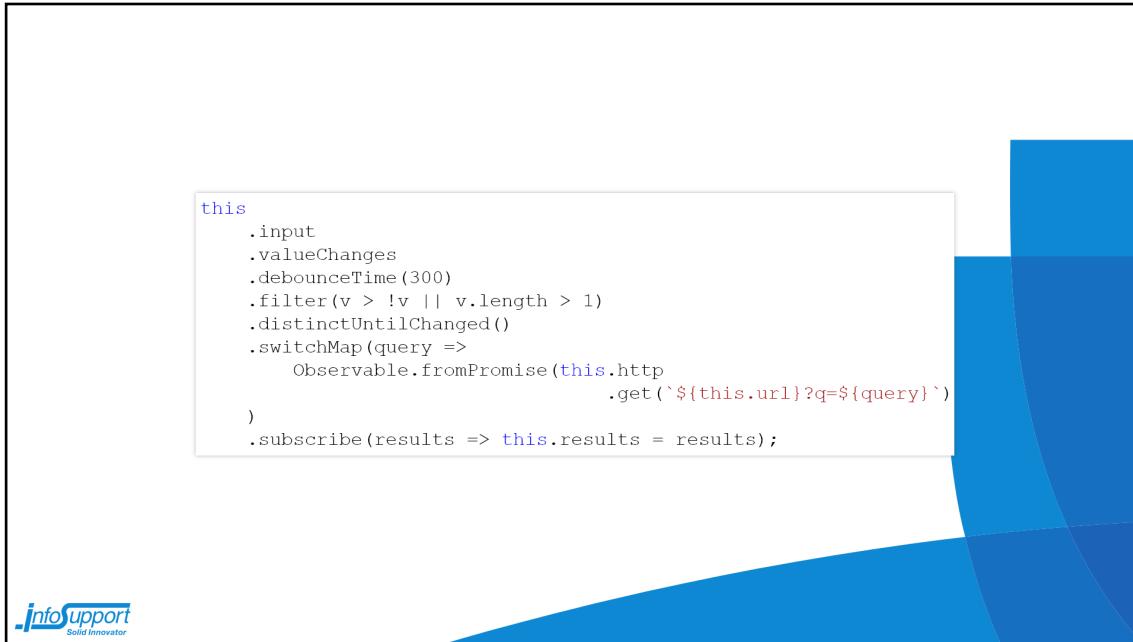
# Angular

# Demo

Requirements:

- search on keypress
- only search after 300ms of non-typing
- only search if the value changed (ignore type + backspace)
- minimum of 2 characters
- cancel previous search request is a new one starts



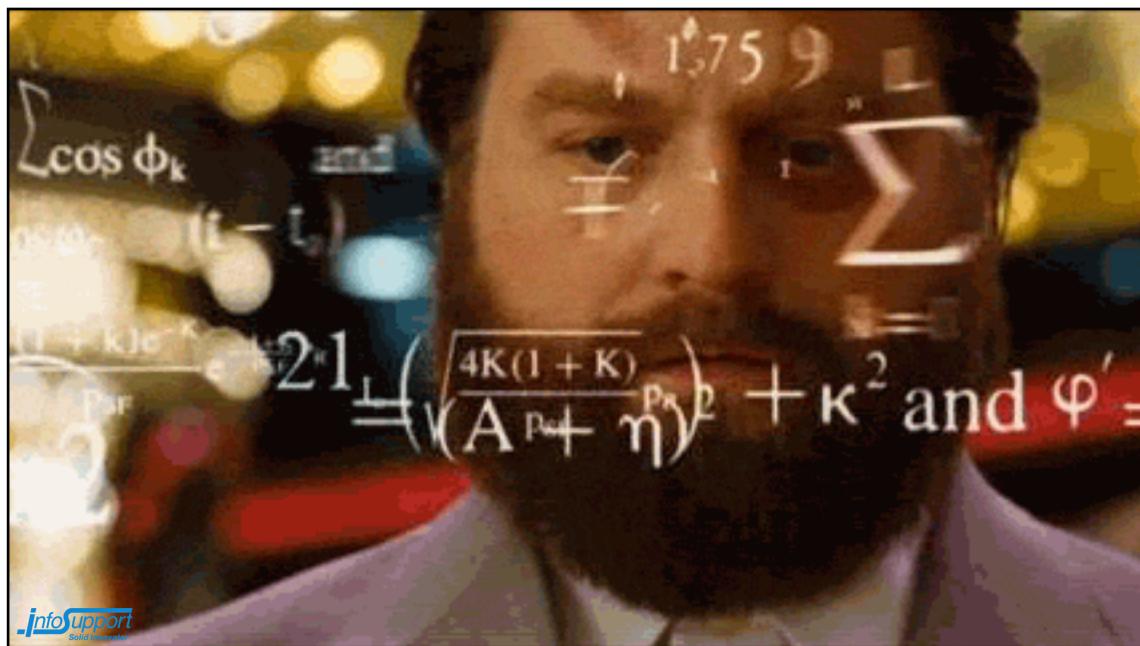


# Challenge

angular package format

[click here for angular format](#)

- typings
- umd bundle
- metadata for AOT
- ES5
- ES2015
- sourcemaps
- entry point
- html templates
- ...



“

*good programmers write good  
code; great programmers steal  
great code.*

# ng bootstrap

- build maintained by ng bootstrap team
- build in javascript [see here](#)
- webpack
- conversion devDependencies - peerDependencies
- automatic generation of samples
- automatic deploy in gulp
- no html templates (only typescript is built)

# ng packagr!

<https://medium.com/@nikolasleblanc/building-an-angular-4-component-library-with-the-angular-cli-and-ng-packagr-53b2ade0701e>

## create folder with components

## create public-api.ts

```
import { NgModule, ModuleWithProviders } from '@angular/core';
//...
import { ToastyModule } from 'ng2-toasty';

export * from './sd-auth/sd-auth.module';
//...
export * from './sd-translate/sd-translate.module';

const SDMODULES = [SdHeaderModule, SdSidebarModule, SdFrameModule,
  SdLoadingBarModule, SdConfirmationModule, SdToastModule];

@NgModule({
```

## create package.json

```
{  
  "name": "@sdworx/sd-components",  
  "version": "0.0.3",  
  "license": "MIT",  
  "private": false,  
  "repository": "https://sdworx.visualstudio.com/Webstack/_git/  
  "dependencies": {  
  },  
  "devDependencies": {  
  },  
  "peerDependencies": {  
    "@angular/animations": "^5.0.0",  
    "@angular/common": "^5.0.0",  
    "@angular/compiler": "^5.0.0",  
    "@angular/core": "^5.0.0",  
    "@angular/flex-layout": "^5.0.0"  
  }  
}
```

## and ng-package.json

```
{  
  "$schema": "../../node_modules/ng-packagr/ng-package.schema.j  
  "src": ".",  
  "dest": "../../packagedist",  
  "workingDirectory": ".ng_pkg_build",  
  "lib": {  
    "entryFile": "public_api.ts",  
    "__externals": "see https://github.com/dherges/ng-packagr/i  
    "externals": {  
      "@ng-bootstrap/ng-bootstrap": "@ng-bootstrap/ng-bootstrap",  
      "oidc-client": "oidc-client",  
      "ng2-slim-loading-bar": "ng2-slim-loading-bar",  
      "ng2-toasty": "ng2-toasty"  
    }  
  }  
}
```

## add build script to root package.json

```
"scripts": {  
  "packagr": "ng-packagr -p src/sd-components-src/ng-package.json",  
  "postpackagr": "node scripts/copy-readme.js",  
  "linklocal": "npm link packagedist"  
}
```



build and enjoy!

npm run packagr  
npm run linklocal  
ng serve

