

## npm

npm is the package manager for Javascript.

A package is a directory with modules and a file `package.json` that contains metadata about the package.

Files that contain reusable code are called modules.

## Package.json

lets you

Manage dependencies and lets you add scripts that helps with initial build of project.

create a `package.json` file.

type `npm init` in cmd  
or

`npm init --yes` or `npm init -y`

To change the default names -

`npm config set init-author-name "Yukta"`

or `npm`

`set init-license "CG"`

To delete,

`npm config delete init-license`

Dependencies - production based.  
DevDependencies - required only for development not production.  
Eg: lodash, karma.

To install Local Packages.

`npm install package name or npm i todash.`

Eg →

`npm install moment --save or npm i moment -S`  
↓ ↓  
a JS date library. to save the module in the json file.

for dev → `npm install lodash --save-dev`  
or `npm i lodash -D`

To uninstall,

`npm uninstall moment --save`

Global packages - some packages need to be run in cmd, so we need to install them globally. Eg: grunt, gulp.

`npm install package name --g`

To uninstall,

`npm uninstall moment --g`

or

`npm remove or npm rm or npm un`

To list the packages used in project

`npm list`

`npm list --global true`

`npm list --depth 0`  
`1`  
`2`

## Package Versioning

lodash : 4.16.1  
          ↓      ↓      ↓  
         major minor patch

Patch → When there is a bug fix or a performance improvement, the patch num. is incremented.

Minor → It is incremented when there's a new feature which will not affect the existing version functionalities.

Major → It increments when the new features breaks the current functionalities.

To install specific package version

`npm install lodash@3.3.0 --save`

To install dependencies/modules from package.json

`npm install` (it will create the node modules folder)

^ 4.14.1 (caret symbol will just restrict updating major ver)  
~ 4.14.1 (tilde symbol will restrict updating of major & minor)  
4.16.2 (circled)  
4.14.2 (circled) 4.14.1 (no symbol means specific version)  
\* (retrieve the latest version)

update package

npm update lodash --save

npm update --dev --save-dev

npm update -g gulp

update npm → npm install npm@latest -g  
globally

To remove unused dependencies/modules  
from project folder,

npm prune (it will remove those  
are marked as  
extraneous in npm list)