**Package.JSON**

All node packages contain a file in project root called “package.JSON” file, which holds the various metadata of the package. A node package.JSON file contains the following fields

|  |  |
| --- | --- |
| Name | Defines the project name |
| Version | Defines project version |
| Description | A string which describes about the project |
| Keywords | It's an array of strings. This helps people discover your package as it's listed in npm search. |
| Homepage | URL to the project home page |
| Bugs | URL to the project issues |
| License | A license for your package so that people know how they are permitted to use it. |
| Author | Name of the author |
| Contributors | Name of the contributors for the package |
| Repository | Link the project repository (GitHub, bit bucket) |
| Main | Refers to the main file, which we include in the require(“”) |
| Dependencies | Refers to the packages on which the present package depends. |
| Engines | Refers to the node engine version |

A sample **JSON** file format is given below

{

["name": "module-name",](http://browsenpm.org/package.json#name)

["version": "10.3.1",](http://browsenpm.org/package.json#version)

["description": "An example module to illustrate the usage of a package.json",](http://browsenpm.org/package.json#description)

["author": "Your Name <you.name@example.org>",](http://browsenpm.org/package.json#author)

["contributors": [{](http://browsenpm.org/package.json" \l "contributors)

["name": "Foo Bar",](http://browsenpm.org/package.json" \l "contributors)

["email": "foo.bar@example.com"](http://browsenpm.org/package.json" \l "contributors)

[}],](http://browsenpm.org/package.json" \l "contributors)

["bin": {](http://browsenpm.org/package.json" \l "bin)

["module-name": "./bin/module-name"](http://browsenpm.org/package.json" \l "bin)

[},](http://browsenpm.org/package.json" \l "bin)

["scripts": {](http://browsenpm.org/package.json#scripts)

["main": "lib/foo.js",](http://browsenpm.org/package.json#main)

["repository": {](http://browsenpm.org/package.json" \l "repository)

["type": "git",](http://browsenpm.org/package.json" \l "repository)

["url": "https://github.com/nodejitsu/browsenpm.org"](http://browsenpm.org/package.json" \l "repository)

[},](http://browsenpm.org/package.json" \l "repository)

["bugs": {](http://browsenpm.org/package.json" \l "bugs)

["url": "https://github.com/nodejitsu/browsenpm.org/issues"](http://browsenpm.org/package.json" \l "bugs)

[},](http://browsenpm.org/package.json" \l "bugs)

["keywords": [](http://browsenpm.org/package.json" \l "keywords)

["nodejitsu",](http://browsenpm.org/package.json" \l "keywords)

["example",](http://browsenpm.org/package.json" \l "keywords)

["browsenpm"](http://browsenpm.org/package.json" \l "keywords)

[],](http://browsenpm.org/package.json" \l "keywords)

["devDependencies": {](http://browsenpm.org/package.json#devDependencies)

["vows": "^0.7.0",](http://browsenpm.org/package.json#devDependency.vows)

["assume": "<1.0.0 || >=2.3.1 <2.4.5 || >=2.5.2 <3.0.0",](http://browsenpm.org/package.json#devDependency.assume)

["pre-commit": "\*"](http://browsenpm.org/package.json#devDependency.pre-commit)

},

["license": "MIT"](http://browsenpm.org/package.json#license)

}

**Commands:**

**npm** **install** : check for the dependencies in JSON file and installs those dependencies.

**npm view <package\_name>** : Shows the package.JSON of a particular package

**npm install <package\_name>** : Installs a package globally by default.

**npm init :**  Will create a new **package.json** file

**npm install <package\_name> -S (--save) :** Registers the package in package.JSON file, Package will appear in your **dependencies**.

**npm install <package\_name> -D (--save-dev) :** Registers the package in package.JSON file, Package will appear in your **devDependencies.**

**npm install <package\_name> -O (--save-optional) :** Package will appear in your optional Dependencies.

Note: The version of each package is maintained in the package.JSON, each commit of the package to any repos requires a new version number. Same package cannot be committed to repos with existing version number in package.

**npm search <keyword>** : searches for a particular package in which the keyword presents