

Q. What is package.json? How is it used to manage third party dependencies in your application?

① The package.json file contains descriptive & functional metadata about a project such as name, version, dependencies.

② The file provides npm package manager with various information to help identify project & handle dependencies.

① Descriptive

It helps to identify a project & distinguish a package if publish.

② Functional

It install & manage the project & its dependencies.

③ Ex:- package.json file

Some commonly used properties:-

① name

It is descriptive field that identifies the project.

② version

It is also descriptive field that identifies the package version.

$\langle \text{major} \rangle . \langle \text{minor} \rangle . \langle \text{patch} \rangle$

When the changes are not compatible	When the update contains new function- alities which do not break older version.	When pushing Compatible bug fixes.
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③ license

- An informative field, other

④ description

- Brief explanation of the project purpose & function

⑤ keywords

- It is similar to description. It helps developers find package.

⑥ author (creator)

⑦ repository main

⑧ scripts.

It contains commands that run various time in the package.

⑨ dependencies

- list of packages that are required to run project.

⑩ devDependencies.

Development dependencies are packages that are not required for run project.

Example of package.json file →

```
{  
  "name": "datetime-util",  
  "version": "1.0.0",  
  "description": "utility to format date & time",  
  "main": "index.js",  
  "debug":  
    "Scripts": {  
      "start": "node index",  
      "test": "echo | error: no test specified |"  
      && exit 1  
    },  
}
```



```
"keywords": [
  "date",
  "time"
],
"author": "Rutuja",
"license": "ISC",
"dependencies": {
  "moment": "^2.30.1"
}
```

3.

④ To use third party dependencies in our application you list them in dependencies section of package.json file.

⑤ When someone wants to run our project then they can use 'npm install' command to install all dependencies list in package.json File.