

## Ep. 2

npm - is a package manager for Javascript.

package.json is a configuration for npm.

↳ It keeps track of what version of that package is installed in our system

⊕ bundle is an important dependency. It is a development tool that combines many Javascript code files into single one that is production ready loadable in browser.

⊕ Two types of dependency an app can have

↳ dev dependency → required in a development phase  
↳ normal dependency → testing purpose only

↓  
it can be used in production also.

⇒ npm install -D parcel means it is installed as dev dependency

⊕ <sup>^</sup> (caret) <sup>~</sup> (tilde)

↓  
installs any minor upgrade

⇒ package-lock.json → keeps a exact copy of the version of package which is installed.  
↳ if the package gets upgraded, this has original copy

⊕ parcel itself has dependencies and those dependencies has other dependencies which is called Transitive dependencies.  
i.e why node\_modules is so large.

④ If we have package.json and package-lock.json we can recreate all our node\_modules.

↓  
This is too large that is why we put it into .gitignore.

↓  
This is why these two are pushed into github.

⑤ We will use parcel to ignite our app.

= npx parcel index.html  
↓  
source file of our app.

When we have to install a package we use npm.

When we have to execute a package use npx package-name

⑥ CDN links is not a preferred way to incorporate React in our app and ReactDOM.

→ It is easy to install React & ReactDOM from node\_modules using npm.

↳ It will be more fast & lag free.

→ To install react.

npm install react

↓  
not using -D as we are installing react as normal dependency not as dev dependency.

→ To install ReactDOM.

npm install react-dom  
or  
npm i react-dom

cannot  
④ browser scripts have imports or exports.

to fix it

→ use use

( `<script type="module" src="/App.js">`

④ parcel

- Dev Build
- local server
- HMR = Hot module Replacement
- File watching algorithm - written in C++.
- Faster Build because of Caching.
- Image optimisation.
- Minification, bundling, Compression.
- Consistent hashing.
- Code splitting.

④ for creating a production build

→ `npm parcel build index.html`

→ will get an error  
as entry point we  
have given as

app.js

↓  
which we have  
to remove  
from package.  
json

⇒ we have a new

dist folder  
↓

when we execute parcel (`npm parcel index.html`)

it generates development build of project

hosted onto <sup>localhost:</sup> 1234. So when it generates a

development build it puts it into dist folder.

The display on webpage comes from dist folder not from index, app.js.  
and when we refresh the files it was

using parcel-cache and dist to update using HMR.

- In dist folder, we have some map files  
and three main files - .html, .css, .js  
which are production ready code of  
our app.

- we do not have push dist & parcel-cache onto  
github.

④ To make our app compatible with old browsers  
we will add "browserslist" package from node\_modules  
to package.json.

- "browserslist": 1  
"last 2 versions"  
}

→ React is very fast b/c - react is fast  
→ bundler also plays  
important role.  
(production build &  
development build).