### **What is 'NPM'?**

NPM stands for node package manager. Npm is used to manage packages or libraries that can be used to develop node js applications. Using npm you can install , delete ,update the packages within the node js project using NPM CLI.

NPM has a very big repository containing utility packages,frameworks to develop applications.

### **What is `Parcel/Webpack? Why do we need it?**

Parcel/Webpack are popular tools used in javascript applications, these are specifically called as javascript bundlers which manage code dependencies of application,bundle them into modules so that it can be efficiently served to web browsers.

#### Why do we need them ?

* Bundlers can transpile your javascript code into compatible javascript that browsers can understand.
* Bundlers optimize the application source code by removing unnecessary things and minify the files to reduce the size to improve the performance.

### What is `.parcel-cache ?

It is a directory created by parcel in the process of building,this is folder to store cache files thats helps in speeding up the build process.

### What is 'npx' ?

Npx is a tool used to execute packages from the npm registry without installing the package in your system.when try to run a package with npx it will download the package and store it in a temporary directory/folder ,it will not be added to node\_modules or registered inside your package.json.

### What is difference between 'dependencies' vs 'devDependencies

Dependencies : these are the packages that are needed to the development and running phase of the application.

DevDependencies: these are the packages that are only needed in the development phase of the application.

### What is `.gitignore '? What should we add and not add into it?

.gitignore is file used by git to identify which files and folders it should not track.

### What is `node\_modules' ? Is it a good idea to push that on git?

Node\_modules is a folder used to store all the packages and their dependencies that are in use by the node js application.

It is not a good idea to push the node\_modules onto git because of the following reasons:

* It size can be extremely large which can bloat your git repo and slow down git commits and other operations
* Node\_modules can be reproduced using npm install command

### What is 'browserlists'?

Allows developers to specify the target versions of the web browsers in which their applications should run. This will ensure the application will run on the desired browsers.

### What is the difference between `package.json' and `package-lock.json

Package.json is a json file used by node js apps to store the metadata of the application such as app name ,description,version , app entry file , application dependencies and development dependencies.

Package-lock.json is also a json file generated by npm when installing packages to store the info about dependencies used in application and dependencies of the dependencies.

### What is the 'dist' folder?

Dist folder is short for distribution folder which is created by parcel in the process of building an application,Which contains the optimized versions of the files, which are minified to reduce the size of the files then which they can be deployed to the browser to execute.

### What is Tree Shaking?

Tree shaking is the process of removing dead code from the source code.

Dead code : can be unused variables (initialized,but never used anywhere) and unreachable code.

### What is Hot Module Replacement?

It is one of the feature provided by build tools like vite and webpack ,that allows developers to update files in a running applications without having to reload the application.this will improve the development time.

Whenever you modify a file it will update just the modified file in running apps.

### Why should I not modify `package-lock.json"?

This file is managed by npm automatically , it should not be modified to ensure the stability of the applications. If the file is modified, dependency issues may arise because the package requires some specific version of the dependencies to ensure smooth runtime without any unexpected bugs / errors.