* **Fast** - A developer should not hesitate to run the tests as they are slow. All of these including setup, the actual test and tear down should execute fast (milliseconds) as you may have thousands of tests in your entire project.
* **Isolated** - No order-of-run dependency, do not do any more actions after the assert statement(s), preferably a single logical assert.
* **Repeatable** – Tests should return the same result if no changes to the tested code were made.
* **Self-Validating** – No manual inspection is required to check whether the test has passed or failed.
* **Thorough** - Tests for corner/edge/boundary values. Test for exceptions and errors. Test for illegal arguments or bad inputs.

The package-lock.json file is a file generated automatically by the Node Package Manager (NPM) for Node.js projects when you install packages using npm install. It serves several important purposes:

* **Dependency Locking:** It locks the version of each installed package and its dependencies (i.e., the dependencies of your dependencies), ensuring that every installation or a project will have the exact same version of the packages, regardless of when or where you install them. This is crucial for ensuring consistency across different environments (e.g., development, staging, production) and among team members.
* **Performance:** package-lock.json allows NPM to skip repeated metadata resolutions for previously installed packages. This can significantly speed up the installation process.
* **Integrity Check:** It includes integrity hashes for each package to verify that the package has not been tampered with or corrupted during installation.

Here's an example of what a **package-lock.json** file might look like (note that this is an oversimplified representation and actual files contain much more information):