Interview Questions: Fundamentals of Node JS

Q1	Is Node JS single-threaded or multithreaded?
Answer	Node JS is a single-threaded application with event looping.

Q2	What is NPM? What is the main functionality of NPM?
Reference link	https://docs.npmjs.com/about-npm/
Answer	NPM stands for Node Package Manager. It is the world's largest repository in the software industry. Open source developers across the world use NPM to borrow and share packages, and some organizations use NPM to handle private development.

Q3	What is the package.json file?
Reference link	https://www.journaldev.com/7553/importance-of-package-json-in-node-js-applications
Answer	A plain JSON text file containing all metadata about the Node JS project or application is the package.json file. To describe the application's metadata, every Node.js package or module should have the package.json file at the root directory.

Q4	What is Node JS?
Answer	Node.js is a web application framework built on Google Chrome's JavaScript Engine (V8 Engine).

Node.js comes with a runtime environment where text based on JavaScript can be interpreted and used (similar to JVM and JAVA bytecode). This runtime environment allows JavaScript execution on any device outside the browser. Because of the Node JS operating system, JavaScript can be used on the server as well.

Node JS also provides a rich library of various JavaScript modules that facilitate the development of web applications using Node JS for maximum output.

Node.js = Runtime environment + JavaScript library

Q5	What is the purpose and advantages of Node JS?
Reference link	https://www.tutorialspoint.com/nodejs/nodejs_interview_questions.htm
Answer	The purposes of Node JS are as follows: ● Real-time web applications ● Network applications ● Distributed systems ● General purpose applications The main advantages of Node JS are as follows: ● Node JS is asynchronous and event-driven. All APIs of the Node JS library are non-blocking, and its server does not wait for an API to return data. It moves to the next API after calling it, and a notification mechanism of events of Node JS responds to the server from the previous API call.

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- Node JS is extremely fast because it is built on Google Chrome's V8 JavaScript engine. Its library is very fast in code execution.
- Node.js is single-threaded but highly scalable.
- Node.js provides a facility of no buffering. Its application never buffers any data. It outputs the data in chunks.

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Q6	What do you mean by Asynchronous API?
Reference link	https://www.tutorialspoint.com/nodejs/nodejs_interview_questions.htm
Answer	All APIs of the Node JS library are asynchronous and non-blocking. It essentially means that a Node JS-based server never waits for an API to return data. The server moves to the next API after calling it, and a notification mechanism of events of Node JS helps the server get a response from the previous API call.