**Download Your Daily Notes**

**Think and Reflect**

 Node.js is an open-source, cross-platform runtime environment that allows developers to run JavaScript on the server-side. It is built on top of the Chrome V8 JavaScript engine and provides an event-driven, non-blocking I/O model that makes it lightweight and efficient. Node.js was initially created by Ryan Dahl in 2009, and since then, it has become a popular platform for building scalable network applications.  
  
Node.js has a vast library of modules and packages that can be easily installed and used in applications. It can be used to build various types of applications such as web servers, command-line tools, real-time chat applications, and more. Node.js is known for its ability to handle a large number of simultaneous connections with high throughput, making it suitable for building scalable and high-performance applications.  
  
Node.js also provides a package manager called npm (Node Package Manager), which allows developers to install and manage external modules easily. The popularity of Node.js has grown rapidly in recent years, and it has become one of the most popular choices for building server-side applications.

**Daily Notes - What is Node JS?**

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**Daily Notes - Activity 1 - “Hello World” in Node JS**

 This creates text on a blank webpage that says "Hello World"

**Daily Notes - How to install NodeJS and NPM for Windows**

 To install Node.js:  
  
1. Download the installer for your OS from nodejs.org.  
2. Run the installer and follow the instructions.

**Daily Notes - Activity 2 - Running your first Hello world application in Node.js**

 This displays the text Hello World on the following address: http://localhost:8080

**Daily Notes - Activity 3 - How much do you know?**

 1. Node.js is an open-source, cross-platform runtime environment that enables developers to run JavaScript code outside of a web browser on the server-side. It uses an event-driven, non-blocking I/O model that makes it lightweight and efficient, and it's built on top of the Chrome V8 JavaScript engine. Node.js is known for its ability to handle a large number of simultaneous connections with high throughput, making it suitable for building scalable and high-performance applications.  
  
2. To initiate Node.js on a computer, you need to run a JavaScript file through the Node.js runtime environment by typing node filename.js in the terminal/command prompt. Alternatively, you can use the Node.js REPL by typing node without any arguments.  
  
3. Node.js is used for fast and scalable network applications, full-stack JavaScript development, rich ecosystem and community, cross-platform compatibility, and real-time applications like chat and gaming servers. It's a popular choice for building modern and high-performance web applications.  
  
4. Node.js can build web applications, APIs, handle real-time data, process data, build command-line tools, and IoT development. It's versatile and can handle a wide range of tasks, making it a popular choice for web development, data processing, and real-time applications.  
  
5. Node.js modules are similar to JavaScript modules, but with additional features. They are encapsulated and have their own scope, and support asynchronous loading. You can use the built-in module system to create, load, and manage modules in your Node.js application, using require() to load a module and module.exports to export values.  
  
6. NPM is the default package manager for Node.js that allows developers to install, share, and manage third-party packages or modules in Node.js applications. It provides a vast collection of open-source packages that can be easily installed and used in applications. NPM uses a package.json file to manage dependencies and package information for a Node.js project. Developers can easily install packages from the NPM registry, publish their own packages, and share them with the community.  
  
7. A Node.js package contains one or more files of JavaScript code and a package.json file that describes the package and its dependencies. The package.json file includes information such as the package's name, version, dependencies, and scripts. A Node.js package can contain modules, functions, classes, and other code that can be used in a Node.js application. It can also include other assets such as images, templates, and configuration files. Overall, a Node.js package is a self-contained unit of code that can be easily shared and reused in Node.js applications.

**My Views on the Day**

 1. Learning what Node.Js is and how to install, along with testing the code through node.js.  
  
2. Activity 1, 2 & 3.  
  
3. None.  
  
  
4. None.

**Daily Notes - Day 1 Reflections**

 1. Learning what Node.Js is and how to install, along with testing the code through node.js.  
  
2. Activity 1, 2 & 3.  
  
3. None.  
  
  
4. None.