

# Introduction to Node JS

**Relevel**  
by Unacademy

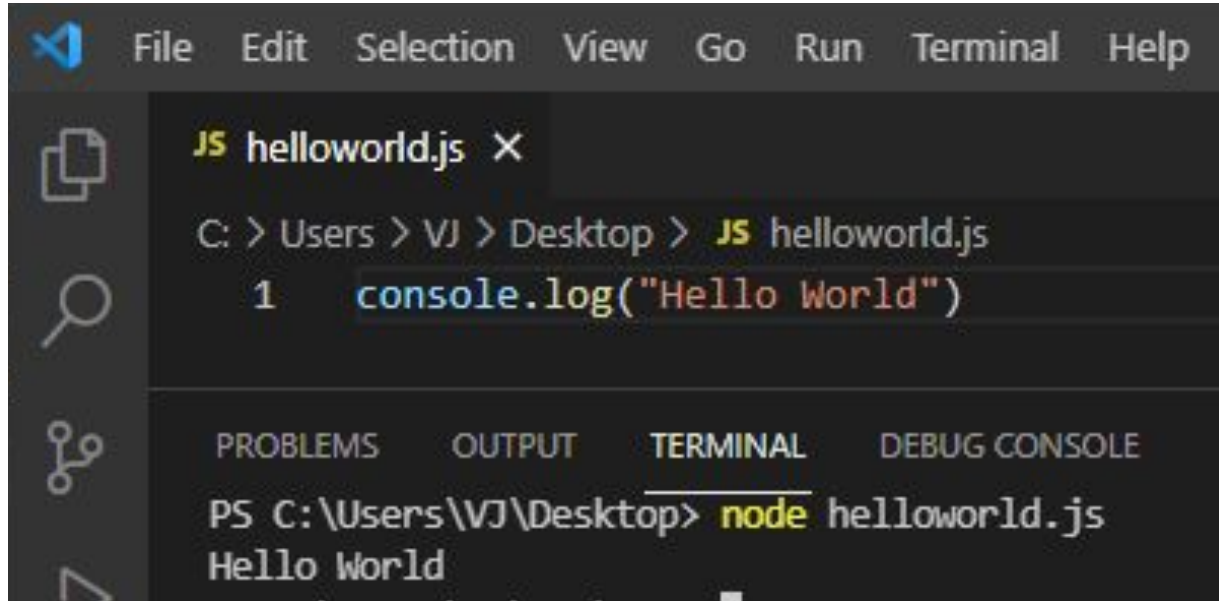


# Introduction to Node JS

- A JavaScript Runtime Environment
- Built on [Chrome's V8 Engine!](#)
- Perfect for Server-side development



# Hello World in Nodejs



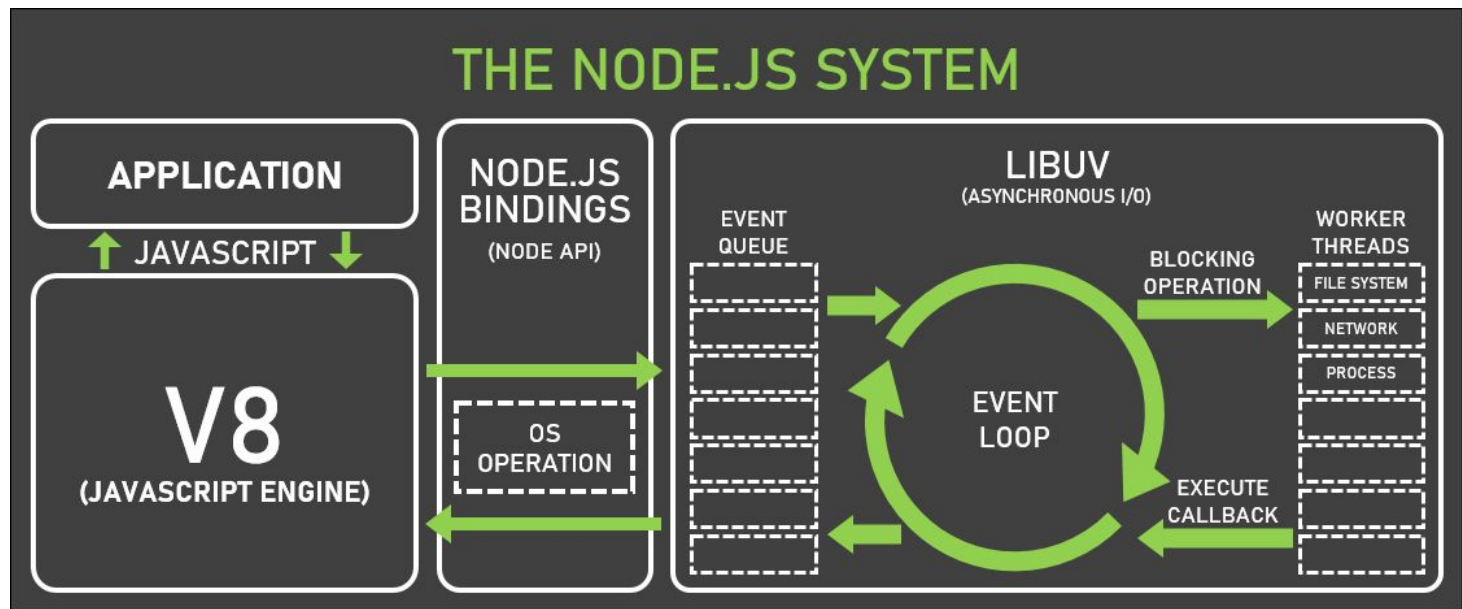
The screenshot shows the Visual Studio Code interface. The top menu bar includes File, Edit, Selection, View, Go, Run, Terminal, and Help. The left sidebar contains icons for Explorer, Search, and Source Control. The main editor area has a tab for 'JS helloworld.js'. The code in the editor is:

```
C: > Users > VJ > Desktop > JS helloworld.js
1 console.log("Hello World")
```

Below the editor, the 'TERMINAL' pane is active, showing the command prompt output:

```
PS C:\Users\VJ\Desktop> node helloworld.js
Hello World
```

## NodeJS Ecosystem and Event Loop

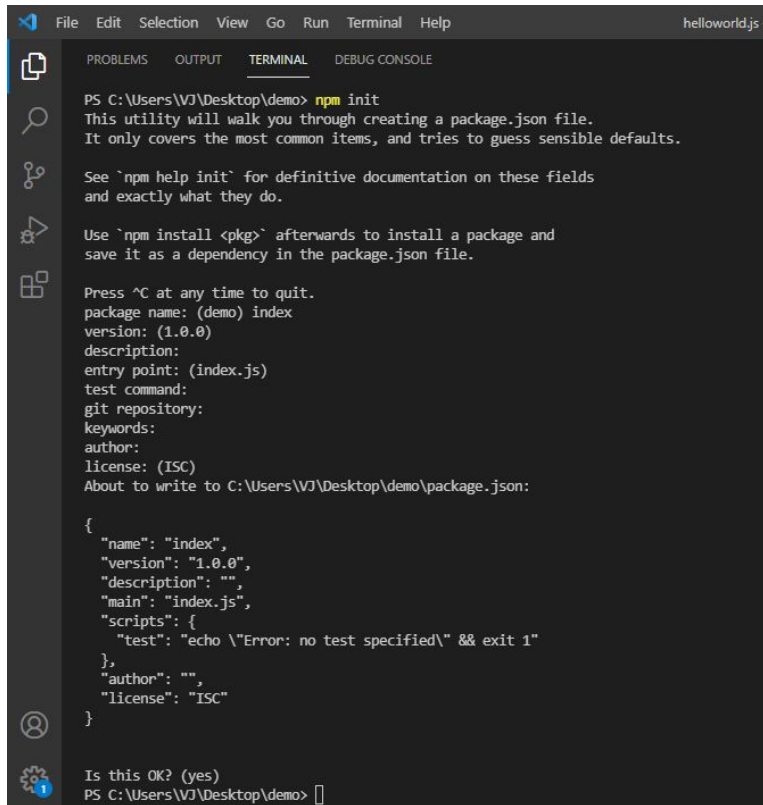


# Introduction to npm

- NPM stands for Node Package Manager.
- npm is the standard package manager for NodeJS
- npm is the world's largest software registry



# Initialising an NPM Project



The screenshot shows a VS Code terminal window with the 'TERMINAL' tab selected. The terminal displays the output of the 'npm init' command. It prompts for package name, version, description, entry point, test command, git repository, keywords, author, and license. The user has entered 'demo' for package name, '1.0.0' for version, and 'index.js' for entry point. The license is set to 'ISC'. The terminal shows the resulting 'package.json' file content.

```
PS C:\Users\VJ\Desktop\demo> npm init
This utility will walk you through creating a package.json file.
It only covers the most common items, and tries to guess sensible defaults.

See `npm help init` for definitive documentation on these fields
and exactly what they do.

Use `npm install <pkg>` afterwards to install a package and
save it as a dependency in the package.json file.

Press ^C at any time to quit.
package name: (demo) index
version: (1.0.0)
description:
entry point: (index.js)
test command:
git repository:
keywords:
author:
license: (ISC)
About to write to C:\Users\VJ\Desktop\demo\package.json:

{
  "name": "index",
  "version": "1.0.0",
  "description": "",
  "main": "index.js",
  "scripts": {
    "test": "echo \"Error: no test specified\" && exit 1"
  },
  "author": "",
  "license": "ISC"
}

Is this OK? (yes)
PS C:\Users\VJ\Desktop\demo>
```



The screenshot shows a VS Code editor window with a file named 'package.json'. The file content is the same JSON object as shown in the terminal output.

```
{
  "name": "index",
  "version": "1.0.0",
  "description": "",
  "main": "index.js",
  "scripts": {
    "test": "echo \"Error: no test specified\" && exit 1"
  },
  "author": "",
  "license": "ISC"
}
```

## Practice/HW



Write a nodeJS program that would read content from the file and also append new content into the file.



Explore setTimeout and setInterval and write a program that would make use of setTimeout and call a function after 10 sec once the app starts, and setInterval would print number 1 to 10 after interval of 5 secs and then it should stop.

## Next Class



In the next class we would be looking into Client Server Architecture, HTTP and REST. And we would also be setting up a HTTP server using nodeJS.



**Thank you!**