# Node.js Essential training

Example of Apache Steak and Chops (dummy). Every waiter is a single new thread. This works in single threaded manner and until one task is not completed, the thread is blocked. – Blocking concept.

NodeJS is single threaded. The thread here works asynchronously and does multi task.

Shed Node (dummy restaurant) restaurant’s waiter can welcome a new table, take order, deliver order to the table asynchronously.

***The concept of non-blocking event driven I/O.***

The console object is part of the global object.

console.log(“Hello”) is same as global.console.log(“Hello”).

The ***require function*** can be used to load external modules like we have ***import/export classes*** option in Angular (TypeScript).

The path module us shipped with NodeJS. Example: const path = require(“path”)

We can use argument variables with ***process. argv***. It is an array.

Run the globalProcess2 file with the following command:

***node .\globalProcess2.js --user Wajahat --greeting Hello***

## Std Output and Input

The questions.js file here in this folder: **wjahatsyed-mern-stack-javascript-developer-path\2-nodejs-essential-training\excercise-files\folder-1-working\q-n-a-std-input-out**

is an example of *an asynchronous NodeJS module.*

The above example is also using event listeners on *data* and *exit*.

The data and exit events are the events of the process. The event listeners help us work asynchronously with NodeJS.

## NodeJS core modules

Core modules in NodeJS are those which comes with the node installation.

Files inside the core-modules are examples for using core modules.

Check apps in:

***wjahatsyed-mern-stack-javascript-developer-path\2-nodejs-essential-training\excercise-files\folder-1-working\core-modules***

In NodeJS, every JavaScript file is a separate module.

For custom modules, we have to provide the path.

The variables in one module are not accessible outside that module so we need functions to export or transport those variables outside the module.

*See myModule.js file for example. Example for using module.exports.*

## How to create a module

Check example of custom modules in the below folder

wjahatsyed-mern-stack-javascript-developer-path\2-nodejs-essential-training\excercise-files\folder-1-working\custom-modules

## Custom events with the EventEmitter

EventEmitter gives us the option to create and handle custom events.

This is asynchronous.

## Improve a module with EventEmiter