

# GOLDSTONESC LIMITED

# NODEJS TRAINING

## INTRODUCTION

- What is NodeJS
- Why Do We Use Node Js
- Where We Can Use Node Js
- How Node Js works ?
- Why Node Js is Single Threaded ?

## ECHMA STANDARD

- What is ECHMA script
- Arrow Function
- Rest And Spread Operator
- Difference between Let Var and Const

## FILESYSTEM I/O

- Read and Write Files
- Serve Static Files | Create URL of file
- Manage File Access
- Stats,delete,exist operations on file
- Stream and Pipeline

## BASIC NODE JS

- How to Install Node js ?
- Node Version Manager (NVM)
- Node Package Manger (NPM)
- Preview
- Callback Example
- Preview
- Async Await
- Module Import Export

## API BOILERPLATE

- Boilerplate Introduction and Setup
- MongoDB ,Postman,Compass setup
- Importance of Status Code
- Update MongoDB Data
- Create Insert | Update | fetch | Delete APIs

## MYSQL AND NODE JS API

- Introduction And Setup
- Insert Data In MySQL Database
- Fetch MySQL Data
- Update MySQL Data
- Delete MySQL Data
- CRUD API MySQL

## DEPLOY / HOST NODE JS PROJECT

- Virtual Machine Introduction
- Create Droplet , SSH Introduction
- Transfer Local Files To Remote Github and Filezilla
- Setup Code On Server
- Process Manager PM2
- Maintain Logs

## PERFORMANCE OPTIMIZATION

- Performance Parameters
- Heap Memory Profiling
- Clinic JS , Profile Node Js Code
- Flame Graphs | Clinic.Js | CPU Profiling
- Doctor Graph | Clinic JS | Memory,cpu,active handlers,event loop delay

## SCALING ,LOAD BALANCING , SECURITY

- Debug + Inspect Node.js
- What is Load Balancing
- Clusture Scaling
- Json Web Token (JWT) Introduction
- Encrypt and Decrypt JWT
- Implement JWT in API

## SOCKET PROGRAMMING

- Debug + Inspect Node.js
- What is Load Balancing
- Clusture Scaling
- Json Web Token (JWT) Introduction
- Encrypt and Decrypt JWT
- Implement JWT in API

## TESTING NODE JS APPLICATION

- Basics of Mocha.js
- API Testing in Mocha Js

## REAL TIME SAMPLES

- Real time samples for real world
- Question - Answers session
- Analysing sample projects

## CUSTOMER NEED ANALYSIS

- Customer need analysis and support.