

# Introduction to MVC

## Pre Read



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## What is the front end in coding?

This includes the UI shown to the end-user, like the screen containing buttons and graphics, pictures, etc. This is separately coded from the backend.

## IDE Installation & Introduction

- Installation Guide - follow the instructions [here](#).
- IDE Introduction - follow the guide [here](#).

## Installing NodeJs

- Install the LTS version from - <https://nodejs.org/en/>
- Verify installation by using the following command in CMD/terminal
- `node --version`

## Industry Usage

- Node.js - used by thousands of organisations in more than 200 countries and amasses more than 2 million downloads per month.
- 82.8k stars on their GitHub repo - <https://github.com/nodejs/node>
- The Node Foundation (responsible for building and supporting the Node.js platform and other related modules) comprises a diverse group of companies, including Platinum members Famous, IBM, Intel, Joyent, Microsoft, PayPal, and Red Hat. Gold members include GoDaddy, NodeSource, and Modulus/Progress Software. Silver members include Apigee, Codefresh, DigitalOcean, Fidelity, Groupon, nearForm, and npm. RisingStack, Sauce Labs, SAP, StrongLoop (an IBM company), YLD!, and Yahoo!
- Top industries adopting NodeJS include Netflix, Uber, PayPal, LinkedIn, etc.

Nowadays, there are millions of apps out there. Have you wondered what it takes to put that app working on your phone or web browser?

From a design perspective, whatever we could see in the app has been handled via front-end technologies, and all different functionalities have been handled from back-end technologies. Whenever a user acts as the app or website, it communicates via a request to the server, which we call a routing concept. When a user makes any request, it must be routed to a specific URL or endpoint to get the response.

This process must be managed by a specific protocol that could give better performance and a systematic approach. With this session, we will understand the following two concepts of Node.js in the above context.

1. Routing creation process
2. Middleware concept in Node.js

## What are Routing and Middleware?

Routing is the protocol used to route multiple client requests to the server and respond to them. When we have dependency between different functionality, we can use the middleware concept and routing. For example, if a user is searching for a product on an e-commerce app, this request will go to the backend in the form of a search query handled at the backend via routing and middleware concepts.

## Why Routing?

Managing multiple requests from the client and rendering them to specific endpoints is a significant advantage of routing

## Use of Routing and Middleware

- Real-time data flow
- Efficiency improvement
- Communication between systems