



Coding
Bootcamps



Intro to Node.js, Express.js and MongoDB

By Kaustubh Ghadge from [Coding Bootcamps](#)

Session Outline

1. What is Express.js?
2. Features of Express.js
3. Express.js installation
4. Fundamental Concepts of Express.js

Hello!

I am Kaustubh Ghadge
("KG")

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coding-bootcamps.com



Recap

An overview of what we discussed in last 2 sessions

JavaScript Training

You should take the below course first if you are new to JS:

- [Intro to JavaScript](#)

More JavaScript Training

For more in-depth JS training, the below course is highly recommended:

- [Intermediate JS with jQuery, JSON and Ajax](#)

1.

What is Express.js?

Express.js

- Server-side web and mobile application framework
- Language: written in JavaScript

2.

Features of Express.js

Features

- Single-page, multi-page, and hybrid mobile and web apps
- Common back-end functions for web applications
- APIs (application programming interfaces)

3.

Express.js Installation

4.

Fundamental concepts
of Express.js

What is an API?

- An application-programming interface (API) is a set of programming instructions and standards for accessing a Web-based software application or Web tool. A software company releases its API to the public so that other software developers can design products that are powered by its service.

REST API

- Representational state transfer(REST) is a software architectural style that defines a set of constraints to be used for creating Web services.
- It is a set of rules that developers follow when they create their API. One of these rules states that you should be able to get a piece of data (called a resource) when you link to a specific URL.

HTTP Methods

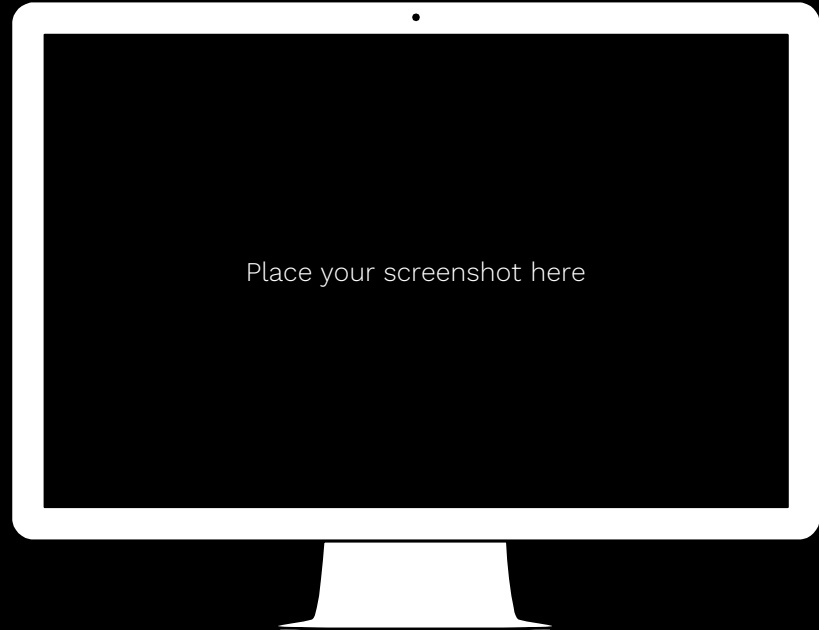
- The HTTP method is supplied in the request and specifies the operation that the client has requested.
- A route method is derived from one of the HTTP methods, and is attached to an instance of the express class.

Scaffolding

- Scaffolding allows us to easily create a skeleton for a web application.
- A scaffolding tool sets up all these things for us so that we can directly get started with building our application.
- Use the application generator tool, express-generator, to quickly create an application skeleton.

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Scaffolding



Middleware

- Middleware functions are functions that have access to the request object (req), the response object (res), and the next function in the application's request-response cycle.
- The next function is a function in the Express router which, when invoked, executes the middleware succeeding the current middleware

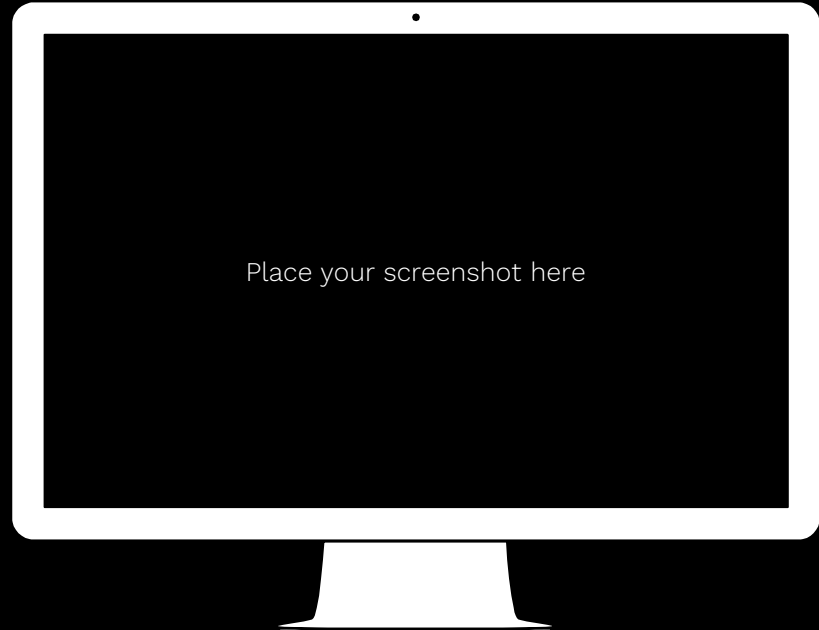
Middleware

Middleware functions can perform the following tasks:

- Execute any code.
- Make changes to the request and the response objects.
- End the request-response cycle.
- Call the next middleware in the stack.

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Creating Middlewares

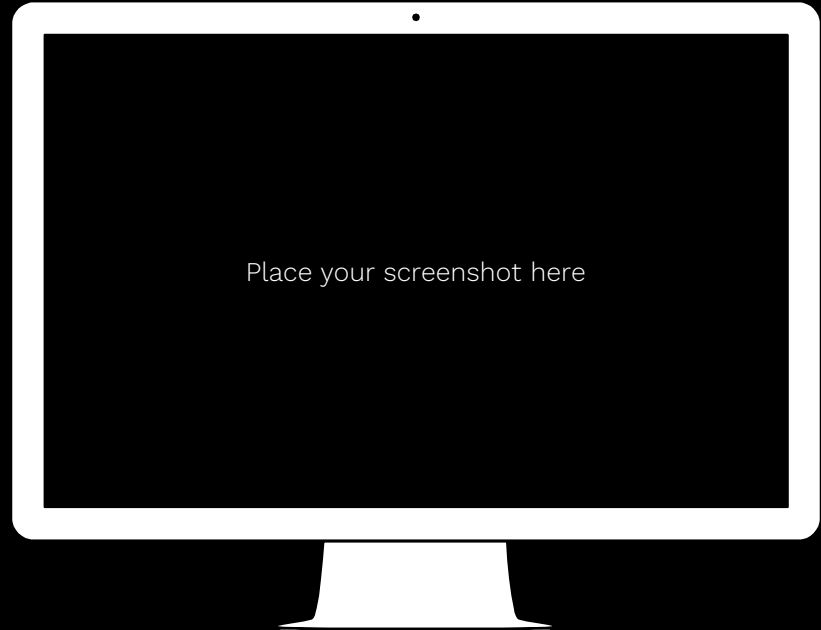


Routing

Routing refers to how an application's endpoints (URIs) respond to client requests.

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Routing

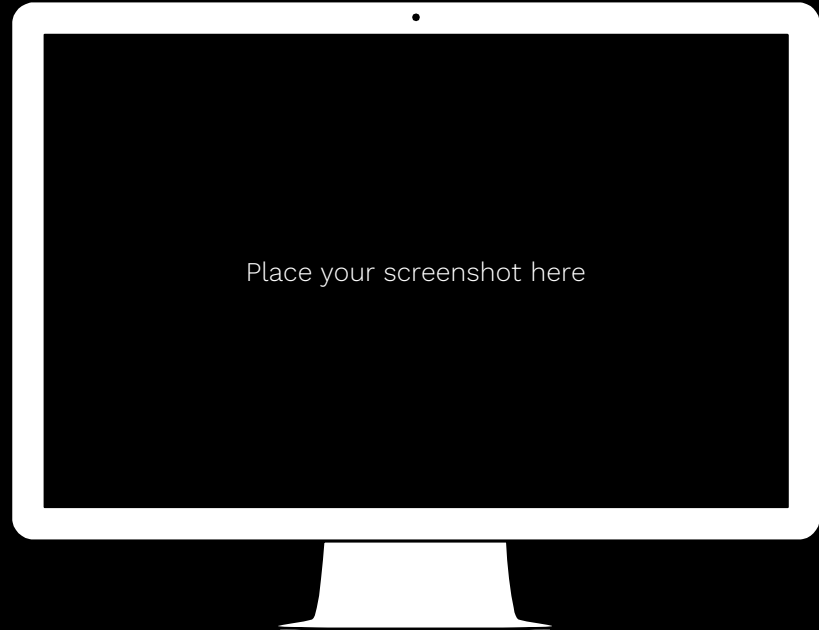


Database Connectivity

Adding the capability to connect databases to Express apps is just a matter of loading an appropriate Node.js driver for the database in your app.

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Connecting to Database



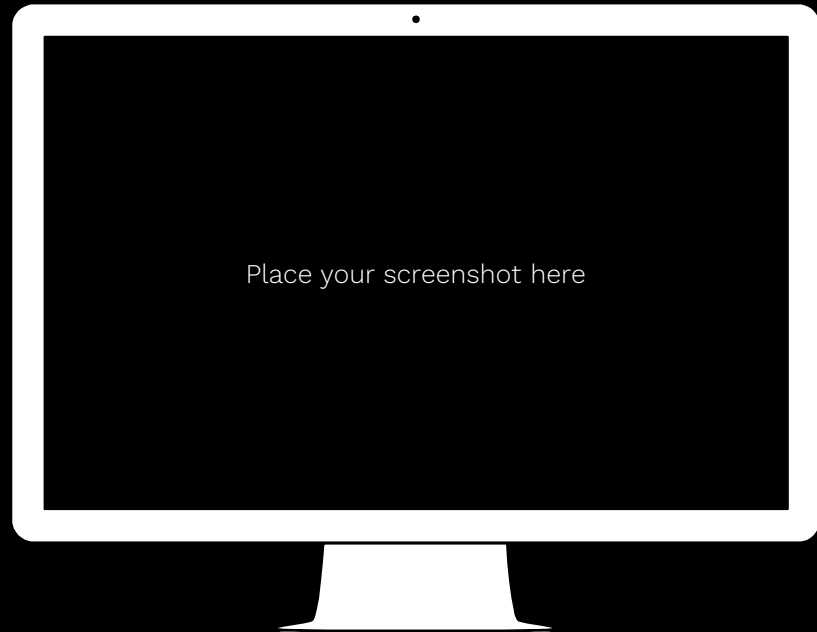
Error Handling

Error Handling refers to how Express catches and processes errors that occur both synchronously and asynchronously.

- The default error handler
- Writing error handlers

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Error Handling



RECAP

Next Session

- What are NoSQL databases?
- Refresher on Promises
- What is MongoDB?
- Why use MongoDB?
- Installation
- Fundamental Concepts of MongoDB

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- [Intro to React.JS Framework](#)
- [Vue.JS Framework](#)

Thanks!

Any questions?

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