

# Building a REST API in JavaScript with Express:

## Introducing the REST API Stack



**Steve Buchanan**

DevOps Architect

@buchatech | [www.buchatech.com](http://www.buchatech.com)





In this course we are going to **build** a simple **CRUD REST API** app using **Node.js**, **JavaScript**, & **Express**.

We will build REST API containing a list of items.

We will be able to **create**, **read**, **update**, & **delete** items in our list via our REST API.

# Overview

**Exploring JavaScript, Node.js, & Express**

**Initialize a Node.js Project & Install Express**

**Constructing a Web App with Express & JavaScript**





# Exploring JavaScript, Node.js, & Express





## Exploring JavaScript

JavaScript is a scripting language enabling you to create dynamic content, control multimedia, animate images, & much more across web, desktop, and mobile platforms



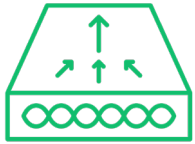
# Features of JavaScript



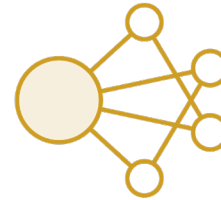
**Object-Centered Script Language**



**Statements Looping**



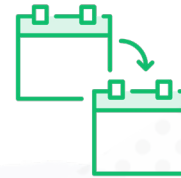
**Client edge Technology**



**Ability to perform In Built Function**



**Interpreter Centered**



**Handling Events**





## Exploring Node.js

**Node.js is an open-source JavaScript runtime environment that is cross-platform, asynchronous, & event-driven used to build fast & scalable server-side apps**



# Features of Node.js



**Open Source**



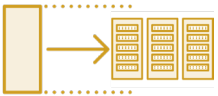
**Single-Threaded**



**Asynchronous**



**No Buffering**



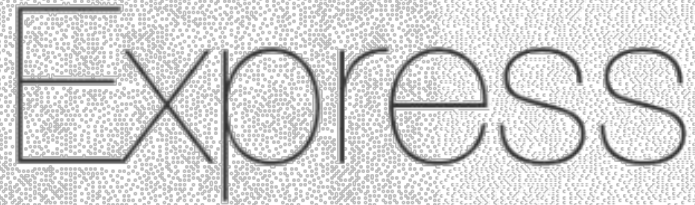
**High Scalability**



**Cross-Platform**





The word "Express" is rendered in a thin, black, sans-serif font. It is centered within a rectangular area that has a light gray background with a fine, dotted pattern.

Express

## Exploring Express

**Express.js is a lightweight & flexible open-source framework for Node.js supporting web or mobile development. It manages routing, sessions, HTTP/S requests, error handling & more.**



# Features of Express.js



**HTTP utility methods & middleware to ease building API's**



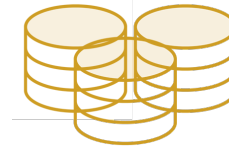
**Faster web development**



**Provides templating engines: Jade & EJS**



**Model-View-Controller (MVC) architecture based**



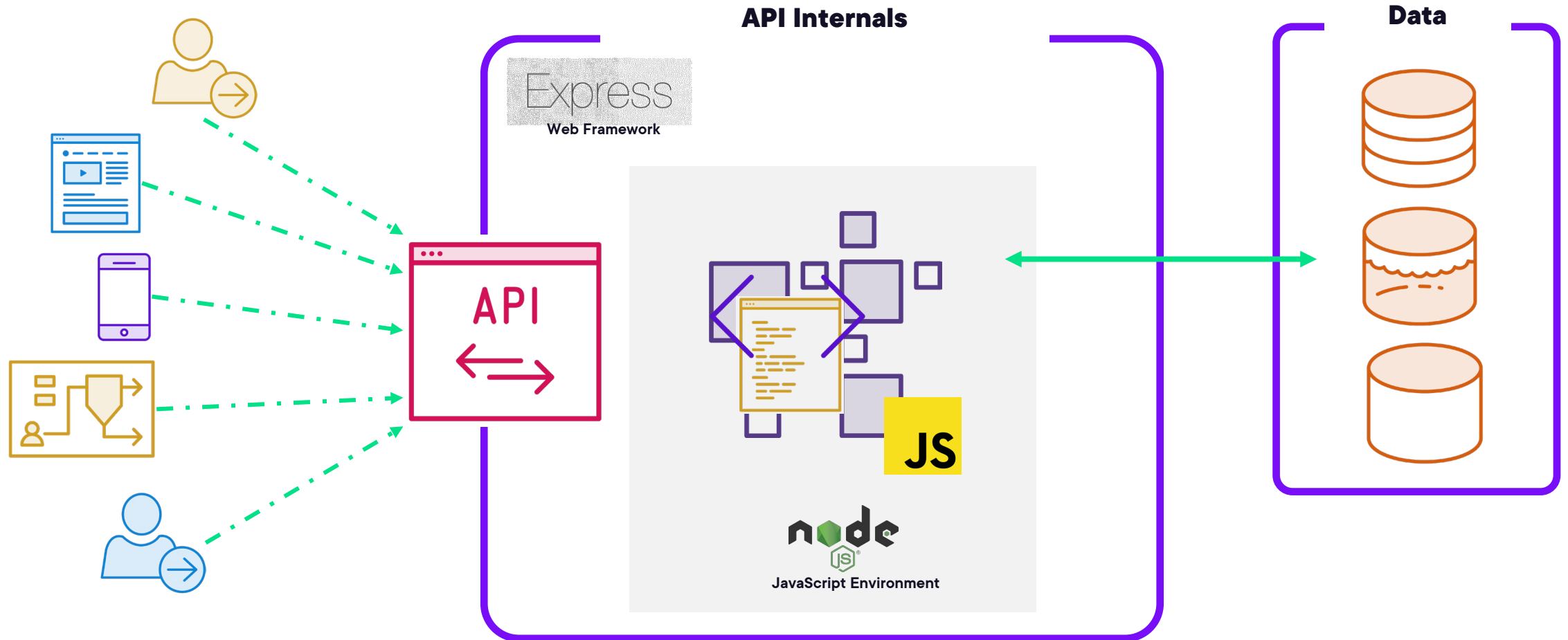
**Integration with databases such as MongoDB, Redis, MySQL**



**Simplifies app configuration & customization**



# Bringing it All Together - The REST API Stack





# **Initialize a Node.js Project & Install Express**



# Demo

**Demo: Initialize a New Node.Js Project & Install Express**





# **Constructing a Web App with Express & JavaScript**



**Demo**

**Demo: How to Construct a Web App With  
Express & JavaScript**



## Summary

### In this module we covered:

- A review of JavaScript, Node.js, & Express
- How you can initialize Node.js & install Express to be ready for hosting your REST API
- And how to construct a Web App with Express & JavaScript & test its endpoint

### Why this is important?

- Regardless if you are a beginner or intermediate learner this module serves as a solid foundation for the next two modules. You saw an example of initializing Node.js & installing Express. Knowing this will support you on the rest of your journey through this course.





**Up Next:**

# **Setting Up the REST API Project**

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