

Node JS

(Part One)

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Objective:

In this short course(tutorial) we are going to build a NodeJS web application that uses JavaScript and MongoDB.

Note: This is the first part of the tutorial.

Software Requirements:

Bellow there is the list of the required Software to build and run JavaScript Web Application.

Programming languages:

- JavaScript
- NodeJS v11.10.1

Integrated Development Environment (IDE):

- Visual Studio code ([Version 1.31](#))

Web Application Server:

- Express

Databases:

- MongoDB(NoSQL)

1.Software Installation:

In this document, you find the URL, commands and web pages of the required software for this tutorial. The installation process is very simple, the most of the time consisting in unzip a file or click in the next button. If you have problems with the installation process search the web or send me a email explaining your problem (Please begin the subject with Word NodeJS).

1.1 Programing Languages

1.1.1 Enterprise Web Programming Language

JavaScript



JavaScript is a programming language for the web. It is supported by most web browsers

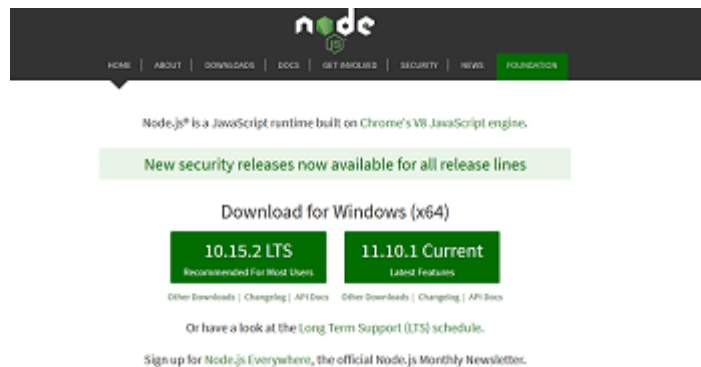
including Chrome, Firefox, Safari, internet Explorer, Edge, Opera, etc. Most mobile browsers for smart phones support JavaScript too.

It is primarily used to enhance web pages to provide for a more user friendly experience. These include dynamically updating web pages, user interface enhancements such as menus and dialog boxes, animations, 2D and 3D graphics, interactive maps, video players, and more. This mode of JavaScript usage in the web browser is also referred to as **client-side javascript**.

Node JS v11.10.1 Engine

Node.js is a JavaScript runtime environment. The Node run-time environment includes everything you need to execute a program written in JavaScript.

<https://nodejs.org/en/>

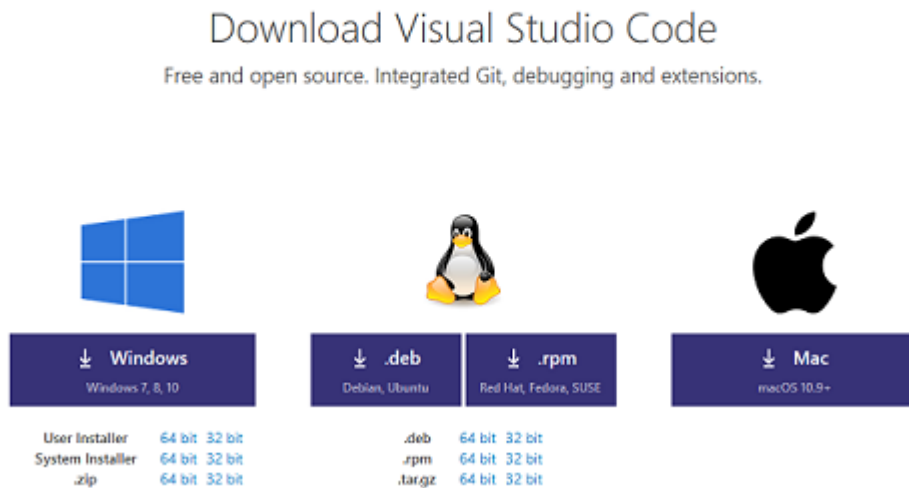
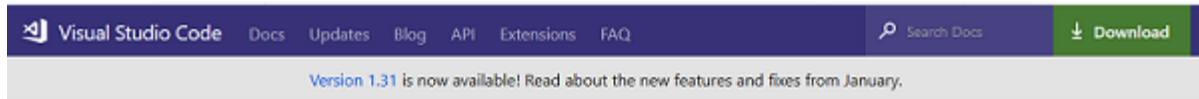


1.2 Integrated Development Environment (IDE):

1.2.1 Visual studio Code:

Microsoft Visual Studio is an [integrated development environment](#) (IDE) from [Microsoft](#). It is used to develop [computer programs](#), as well as [websites](#), [web apps](#), [web services](#) and [mobile apps](#). Visual Studio uses Microsoft software development platforms such as [Windows API](#), [Windows Forms](#), [Windows Presentation Foundation](#), [Windows Store](#) and [Microsoft Silverlight](#). It can produce both [native code](#) and [managed code](#).

<https://code.visualstudio.com/Download>

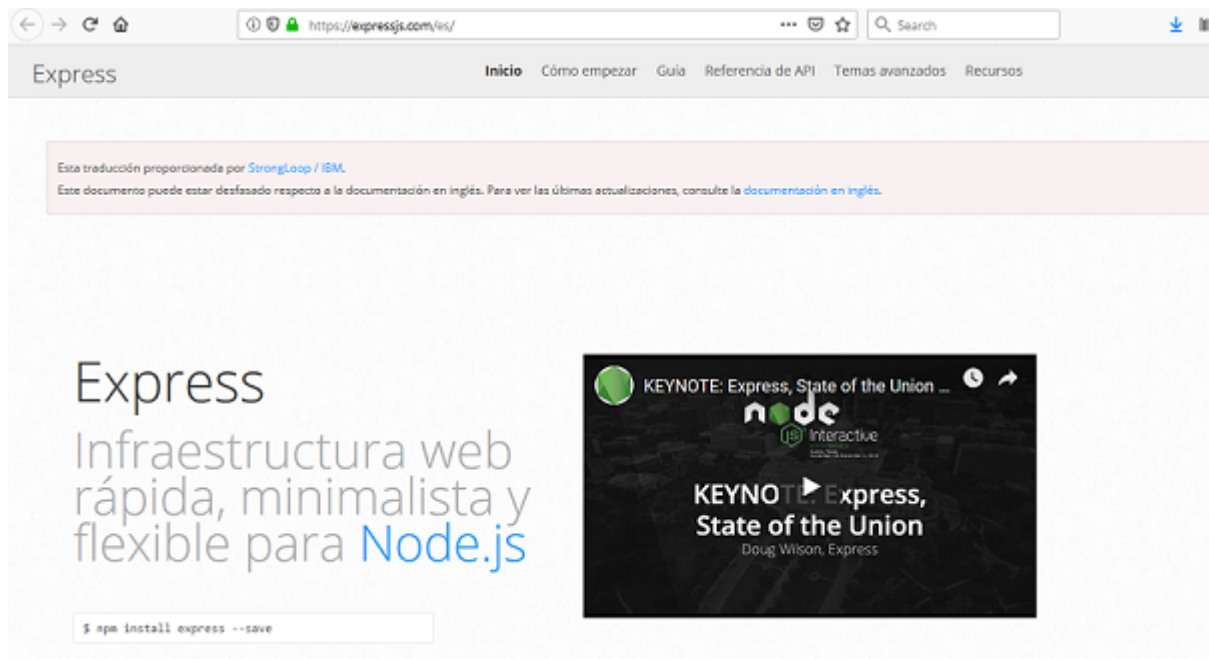


1.3 Web Application Server:

1.3.1 express:

Express.js, or simply **Express**, is a [web application framework](#) for [Node.js](#), released as [free and open-source software](#) under the [MIT License](#). It is designed for building [web applications](#) and [APIs](#).^[3] It has been called the de facto standard server framework for Node.js.^[4]

<https://expressjs.com/es/>



1.4 Databases:

1.4.1 NoSQL Database (No Relational)

MongoDB

MongoDB **stores data in flexible, JSON-like documents**, meaning fields can vary from document to document and data structure can be changed over time

<https://www.mongodb.com/download-center/community>

The screenshot shows the MongoDB Download Center website. The browser address bar displays the URL <https://www.mongodb.com/download-center/community>. The website header includes the MongoDB logo and navigation links: Products, Solutions, Customers, Resources, Learn, What is MongoDB?, Contact, Search, and a Sign in button. The main heading is "MongoDB Download Center". Below this, there are tabs for "Cloud", "Server", and "Tools", with "Server" being the active tab. A prompt says "Select the server you would like to run:". There are two main options: "MongoDB Community Server" (labeled "FEATURE RICH. DEVELOPER READY.") and "MongoDB Enterprise Server" (labeled "ADVANCED FEATURES. PERFORMANCE GRADE."). Under the Community Server option, there are dropdown menus for "Version" (set to "4.0.6 (current release)") and "OS" (set to "Windows 64-bit x64"). Below these is a "Package" dropdown set to "MSI". A large green "Download" button is positioned to the right of the package dropdown. To the right of the download options, there is a list of links: "Release notes", "Changelog", "All version binaries", and "Installation instructions".