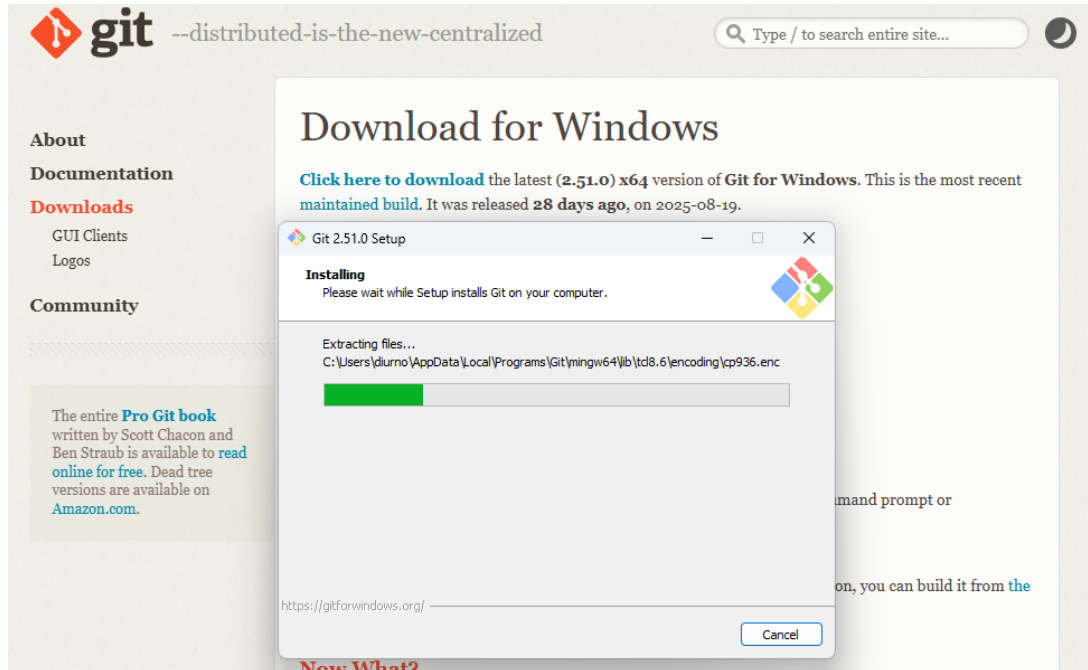
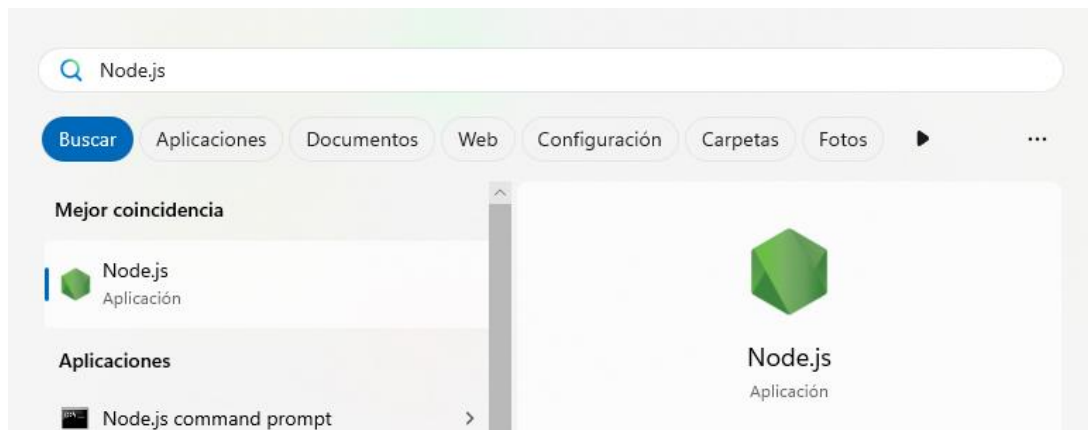


Ejercicio Unidad 1 (instalación servidor libro)

1. Para la instalación de Git accederemos al siguiente enlace: <https://git-scm.com/downloads/win> y clicaremos en “Click here to download”. Seguiremos los pasos de instalación como cualquier programa.



Por otro lado, ya tenemos instalado Node.js en este equipo, para verificarlo podemos abrir el menú de Windows para acceder al programa.



En caso de no tenerlo podremos descargarlo desde el siguiente enlace: <https://nodejs.org/es/download/>

Elegiremos la versión y arquitectura.

O obtiene una versión pre compilada de Node.js® para Windows usando la arquitectura

x64

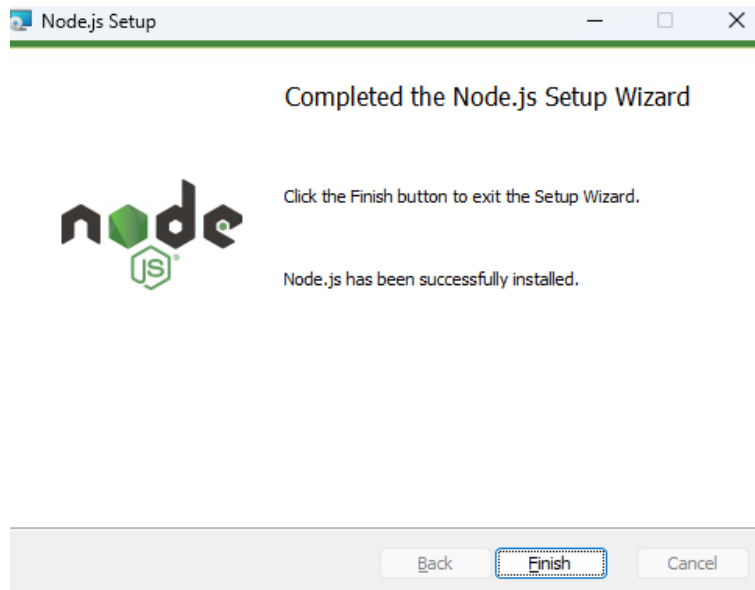


Windows Installer (.msi)



Standalone Binary (.zip)

Y seguiremos todos los pasos hasta su instalación.



2. Una vez instalado Node.js ejecutaremos el siguiente comando desde el cmd de Windows para instalar las dependencias.

```
Símbolo del sistema
Microsoft Windows [Versión 10.0.22631.4751]
(c) Microsoft Corporation. Todos los derechos reservados.

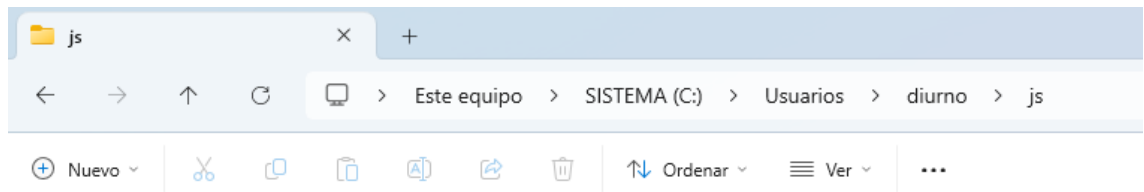
C:\Users\diurno>npm install -g bunyan gulp@4
```

```
C:\Users\diurno>npm install -g bunyan gulp@4
npm warn deprecated inflight@1.0.6: This module is not supported, and leaks memory. Do not use it. Check out lru-cache if
you want a good and tested way to coalesce async requests by a key value, which is much more comprehensive and powerfu
l.
npm warn deprecated glob@7.2.3: Glob versions prior to v9 are no longer supported
npm warn deprecated urix@0.1.0: Please see https://github.com/lydell/urix#deprecated
npm warn deprecated source-map-url@0.4.1: See https://github.com/lydell/source-map-url#deprecated
npm warn deprecated resolve-url@0.2.1: https://github.com/lydell/resolve-url#deprecated
npm warn deprecated source-map-resolve@0.5.3: See https://github.com/lydell/source-map-resolve#deprecated
npm warn deprecated inflight@1.0.6: This module is not supported, and leaks memory. Do not use it. Check out lru-cache i
f you want a good and tested way to coalesce async requests by a key value, which is much more comprehensive and powerfu
l.
npm warn deprecated rimraf@2.4.5: Rimraf versions prior to v4 are no longer supported
npm warn deprecated glob@6.0.4: Glob versions prior to v9 are no longer supported

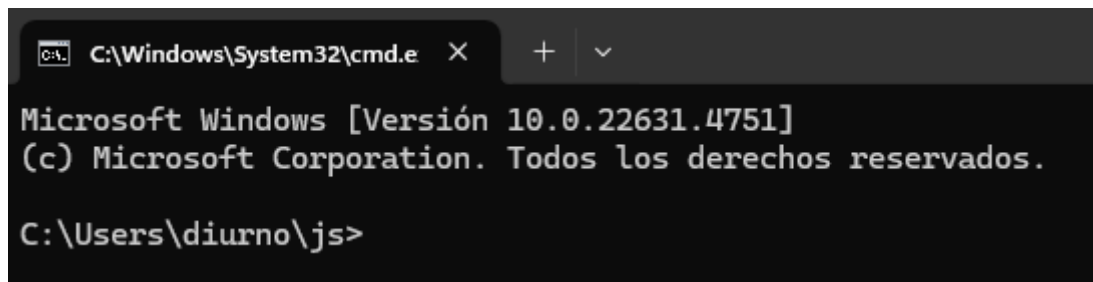
added 360 packages in 9s

18 packages are looking for funding
  run 'npm fund' for details
```

3. El siguiente paso será crear una carpeta llamada “js” en el directorio donde queramos instalar el libro. En mi caso, la ruta que elegí es la siguiente.



Escribiremos “cmd” en el explorador desde la ubicación de la carpeta para posicionarnos directamente en la ruta.



4. Vamos a clonar el repositorio del libro desde cmd con los comandos que se indican a continuación. Este repositorio permite lanzar un servidor en local con el libro.

`git clone https://github.com/javascript-tutorial/server`

```
C:\Users\diurno\js>git clone https://github.com/javascript-tutorial/server
Cloning into 'server'...
remote: Enumerating objects: 3242, done.
remote: Counting objects: 100% (407/407), done.
remote: Compressing objects: 100% (222/222), done.
remote: Total 3242 (delta 219), reused 340 (delta 172), pack-reused 2835 (from 1)
Receiving objects: 100% (3242/3242), 3.66 MiB | 12.93 MiB/s, done.
Resolving deltas: 100% (1441/1441), done.
```

`git clone https://github.com/javascript-tutorial/engine server/modules/engine`

```
C:\Users\diurno\js>git clone https://github.com/javascript-tutorial/engine server/modules/engine
Cloning into 'server/modules/engine'...
remote: Enumerating objects: 4053, done.
remote: Counting objects: 100% (359/359), done.
remote: Compressing objects: 100% (216/216), done.
remote: Total 4053 (delta 199), reused 190 (delta 141), pack-reused 3694 (from 2)
Receiving objects: 100% (4053/4053), 3.19 MiB | 7.63 MiB/s, done.
Resolving deltas: 100% (2453/2453), done.
```

5. Ahora nos posicionaremos en una de las carpetas que se han creado para descargar el libro en español con el siguiente comando.

`cd server/repo`

```
C:\Users\diurno\js>cd server/repo
```

git clone https://github.com/javascript-tutorial/es.javascript.info

```
C:\Users\diurno\js\server\repo>git clone https://github.com/javascript-tutorial/es.javascript.info
Cloning into 'es.javascript.info'...
remote: Enumerating objects: 81010, done.
remote: Counting objects: 100% (556/556), done.
remote: Compressing objects: 100% (238/238), done.
remote: Total 81010 (delta 390), reused 398 (delta 315), pack-reused 80454 (from 2)
Receiving objects: 100% (81010/81010), 716.94 MiB | 17.38 MiB/s, done.
Resolving deltas: 100% (47997/47997), done.
```

6. Volvemos a la carpeta server e instalamos las dependencias necesarias.

cd ..

```
C:\Users\diurno\js\server\repo>cd ..
```

npm install

```
C:\Users\diurno\js\server>npm install
npm warn deprecated inflight@1.0.6: This module is not supported, and leaks memory. Do not use it. Check out lru-cache if
you want a good and tested way to coalesce async requests by a key value, which is much more comprehensive and powerful.
npm warn deprecated source-map-url@0.4.1: See https://github.com/lydell/source-map-url#deprecated
npm warn deprecated rimraf@2.4.5: Rimraf versions prior to v4 are no longer supported
npm warn deprecated urix@0.1.0: Please see https://github.com/lydell/urix#deprecated
npm warn deprecated glob@6.0.4: Glob versions prior to v9 are no longer supported
npm warn deprecated source-map-resolve@0.5.3: See https://github.com/lydell/source-map-resolve#deprecated
npm warn deprecated resolve-url@0.2.1: https://github.com/lydell/resolve-url#deprecated
npm warn deprecated har-validator@5.1.5: this library is no longer supported
npm warn deprecated glob@7.1.3: Glob versions prior to v9 are no longer supported
npm warn deprecated request-promise@4.2.6: request-promise has been deprecated because it extends the now deprecated requ
est package, see https://github.com/request/request/issues/3142
npm warn deprecated koa-router@7.4.0: Please use @koa/router instead, starting from v9!
npm warn deprecated @babel/plugin-proposal-object-rest-spread@7.20.7: This proposal has been merged to the ECMAScript sta
ndard and thus this plugin is no longer maintained. Please use @babel/plugin-transform-object-rest-spread instead.
npm warn deprecated request@2.88.2: request has been deprecated, see https://github.com/request/request/issues/3142
npm warn deprecated node-uuid@1.4.8: Use uuid module instead
npm warn deprecated gm@1.25.1: The gm module has been sunset. Please migrate to an alternative. https://github.com/aheckm
ann/gm?tab=readme-ov-file#2025-02-24-this-project-is-not-maintained
npm warn deprecated uglify-es@3.10.0: support for ECMAScript is superseded by 'uglify-js' as of v3.13.0
npm warn deprecated debug@3.2.6: Debug versions >=3.2.0 <3.2.7 || >=4 <4.3.1 have a low-severity ReDos regression when us
ed in a Node.js environment. It is recommended you upgrade to 3.2.7 or 4.3.1. (https://github.com/visionmedia/debug/issue
s/797)
npm warn deprecated uuid@3.4.0: Please upgrade to version 7 or higher. Older versions may use Math.random() in certain
circumstances, which is known to be problematic. See https://v8.dev/blog/math-random for details.
npm warn deprecated core-js@2.6.12: core-js@<3.23.3 is no longer maintained and not recommended for usage due to the numb
er of issues. Because of the V8 engine whims, feature detection in old core-js versions could cause a slowdown up to 100x
even if nothing is polyfilled. Some versions have web compatibility issues. Please, upgrade your dependencies to the act
ual version of core-js.

added 1316 packages, and audited 1317 packages in 35s

167 packages are looking for funding
  run `npm fund` for details
```

54 vulnerabilities (1 low, 17 moderate, 7 high, 29 critical)

To address issues that do not require attention, run:
npm audit fix

To address all issues (including breaking changes), run:
npm audit fix --force

Run `npm audit` for details.

7. Para lanzar el servidor, nos tenemos que posicionar en la carpeta server dentro de js y lanzar el siguiente comando que arranca el servidor con el libro en español.

edit es

```
Microsoft Windows [Versión 10.0.22631.4751]
(c) Microsoft Corporation. Todos los derechos reservados.

C:\Users\diurno\js\server>edit es
```

```
C:\Users\diurno\js\server>call gulp edit | bunyan
[09:45:26] Using gulpfile ~\js\server\gulpfile.js
[09:45:26] Starting 'edit'...
[09:45:26] Starting 'webpack'...
[09:45:26] Starting 'engine:koa:tutorial:importWatch'...
[09:45:26] Starting 'livereload'...
[09:45:26] Starting 'server'...
Livereload server listening
```

```
[2025-09-16T07:45:39.543Z] INFO: tutorialImporter/9396 on ALUMNO088B3: importImage C:\Users\diurno\js\server\repo\es.jav
ascrip...info\9-regular-expressions\10-regexp-greedy-and-lazy\witch_lazy5.svg to C:\Users\diurno\js\server\public\en\arti
cle\regexp-greedy-and-lazy
[2025-09-16T07:45:39.544Z] INFO: tutorialImporter/9396 on ALUMNO088B3: importImage C:\Users\diurno\js\server\repo\es.jav
ascrip...info\9-regular-expressions\10-regexp-greedy-and-lazy\witch_lazy6.svg to C:\Users\diurno\js\server\public\en\arti
cle\regexp-greedy-and-lazy
[2025-09-16T07:45:39.545Z] INFO: tutorialImporter/9396 on ALUMNO088B3: syncArticle C:\Users\diurno\js\server\repo\es.jav
ascrip...info\9-regular-expressions\11-regexp-groups
[2025-09-16T07:45:39.586Z] INFO: tutorialImporter/9396 on ALUMNO088B3: importImage C:\Users\diurno\js\server\repo\es.jav
ascrip...info\9-regular-expressions\11-regexp-groups\regexp-nested-groups-matches.svg to C:\Users\diurno\js\server\public
\en\article\regexp-groups
[2025-09-16T07:45:39.587Z] INFO: tutorialImporter/9396 on ALUMNO088B3: importImage C:\Users\diurno\js\server\repo\es.jav
ascrip...info\9-regular-expressions\11-regexp-groups\regexp-nested-groups-pattern.svg to C:\Users\diurno\js\server\public
\en\article\regexp-groups
[2025-09-16T07:45:39.588Z] INFO: tutorialImporter/9396 on ALUMNO088B3: syncArticle C:\Users\diurno\js\server\repo\es.jav
ascrip...info\9-regular-expressions\12-regexp-backreferences
[2025-09-16T07:45:39.633Z] INFO: tutorialImporter/9396 on ALUMNO088B3: syncArticle C:\Users\diurno\js\server\repo\es.jav
ascrip...info\9-regular-expressions\13-regexp-alternation
[2025-09-16T07:45:39.676Z] INFO: tutorialImporter/9396 on ALUMNO088B3: syncArticle C:\Users\diurno\js\server\repo\es.jav
ascrip...info\9-regular-expressions\14-regexp-lookahead-lookbehind
[2025-09-16T07:45:39.718Z] INFO: tutorialImporter/9396 on ALUMNO088B3: syncArticle C:\Users\diurno\js\server\repo\es.jav
ascrip...info\9-regular-expressions\15-regexp-catastrophic-backtracking
[2025-09-16T07:45:39.758Z] INFO: tutorialImporter/9396 on ALUMNO088B3: syncArticle C:\Users\diurno\js\server\repo\es.jav
ascrip...info\9-regular-expressions\16-regexp-sticky
[2025-09-16T07:45:39.800Z] INFO: tutorialImporter/9396 on ALUMNO088B3: syncArticle C:\Users\diurno\js\server\repo\es.jav
ascrip...info\9-regular-expressions\17-regexp-methods
[2025-09-16T07:45:39.842Z] INFO: importWatch/9396 on ALUMNO088B3: Import complete
```

Si hemos realizado todos los pasos correctamente, podremos acceder al libro mediante el siguiente enlace: <http://localhost:3000/>

localhost:3000

The Modern JavaScript Tutorial

Part 1

El lenguaje JavaScript

Aquí aprenderemos JavaScript, empezando desde cero y llegaremos hasta conceptos avanzados como POO.

Nos concentraremos en el lenguaje mismo con el mínimo de notas específicas del entorno.

Una introducción

1.1 Una introducción a JavaScript

1.2 Manuales y especificaciones

1.3 Editores de Código

1.4 Consola de desarrollador

Fundamentos de JavaScript

2.1 ¡Hola, mundo!

2.2 Estructura del código

2.3 El modo moderno, "use strict"

2.4 Variables

2.5 Tipos de datos

2.6 Interacción: alert, prompt, confirm

2.7 Conversiones de Tipos

2.8 Operadores básicos, matemáticas

2.9 Comparaciones

2.10 Ejecución condicional: if, '?'

2.11 Operadores Lógicos

2.12 Operador Nullish Coalescing '??'

2.13 Bucles: while y for

2.14 La sentencia "switch"

2.15 Funciones

2.16 Expresiones de función

2.17 Funciones Flecha, lo básico

2.18 Especiales JavaScript

Calidad del código

3.1 Debugging en el navegador

3.2 Estilo de codificación

3.3 Comentarios

3.4 Código limpio

3.5 Automatización de pruebas con Mocha

3.6 Polyfills y transpiladores

Objetos: lo básico

4.1 Objetos

4.2 Referencias de objetos y copia

4.3 Recolección de basura

4.4 Métodos de objeto, "this"

4.5 Constructor, operador "new"

4.6 Encadenamiento opcional '?'

4.7 Tipo Symbol

4.8 Conversión de objeto a valor primitivo