

Installation Guide for Full-Stack Development Tools

Steps for installing Visual Studio Code

For Windows:

1. Go to <https://code.visualstudio.com/Download> and download the **Windows** version.
2. Open the downloaded .exe file to start the installation.
3. You can change the install folder to C:\VSCode or leave it as is.
4. Choose the following options:
 - Accept the license.
 - Add "Open with Code" to right-click menu.
 - Add to PATH (helps with using it in the terminal).
 - Register file types like .html, .css, .js with VS Code.
5. Finish the setup with default settings.

For macOS:

1. Go to <https://code.visualstudio.com/Download> and download the **macOS .zip** file.
2. Open the .zip file to get **Visual Studio Code.app**.
3. Move it to the **Applications** folder.
4. Open VS Code, press Cmd + Shift + P, and search for:

Shell Command: Install 'code' command in PATH

(This lets you open VS Code from the terminal.)

Steps for installing Node.js for React.js

1. Install Node.js (with npm)

Required to create and run React apps

2. Step-by-Step:

1. Open your browser and go to: <https://nodejs.org>
2. Click on “LTS” version (green button) — it's the stable version.
3. Download and run the installer like any normal software.
4. During installation:
 - Keep clicking Next
 - Accept license agreement
 - Don't change anything else
 - Finish the setup
5. Once installed, check if it works:
 - Open Command Prompt (press Windows + R, type cmd, hit Enter)
 - Type: **node -v**
[You should see something like: v18.19.0 (version may vary)]
 - Then type: **npm -v**
(Should see something like: 9.2.0)

Steps for installing Node.js for Backend Development

Node.js lets you run JavaScript on your computer/server, and it comes with **npm** (Node Package Manager) which helps install libraries like Express.

1. Go to the official Node.js website:

<https://nodejs.org>

2. Download the **LTS version** (recommended for most users).

3. Run the installer:

- On Windows: Follow the setup wizard, accept defaults.
- On Mac: Open the .pkg file and follow the instructions.
- On Linux: Use your package manager or download binaries.

4. Verify installation:

node -v

(You should see the Node.js version printed, e.g., v18.15.0)

5. Check npm (comes bundled with Node.js):

npm -v

(It should print npm's version)

Steps for operating Command Prompt

For **Windows**, follow the instructions below to use **command prompt**

1. Click the Start Menu (or press the Windows key).
2. Type Command Prompt or cmd.
3. Click on Command Prompt in the search results.

For **macOS**, follow the instructions below to use **command prompt**

To open Terminal on macOS:

1. Press Command + Space to open Spotlight Search.
2. Type Terminal and hit Enter.

Steps for installing Mysql workbench

1. Go to <https://dev.mysql.com/downloads/installer/>
2. Download the **MySQL Installer (Windows)**.

During setup, install:

- MySQL Server
- MySQL Workbench (optional)
- Choose a **root password** when asked — remember it.

Steps for installing MongoDB Shell

- Go to: <https://www.mongodb.com/try/download/community>
- Download the MongoDB Community Server for Windows.
- Run the installer and follow the setup.
- Choose Complete Setup.
- Optionally install MongoDB Compass (GUI).
- Enable "Install MongoDB as a Service" (recommended).
- Finish installation.