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KodeGo STUDENT STARTER KIT

Welcome Kodegeeks,

We all know that you are all excited to start with your coding journey, here are some interesting tools you need to install in your rig before starting your journey.



GOOGLE CHROME



VISUAL STUDIO CODE



GIT



NODE JS



XAMPP



COMPOSER

What are they...



GOOGLE CHROME

Google Chrome browser is a free web browser used for accessing the internet and running web-based applications. The Google Chrome browser is based on the open source Chromium web browser project. Google released Chrome in 2008 and issues several updates a year.



VISUAL STUDIO CODE

Visual Studio Code is a popular code editor developed by Microsoft. It provides a wide range of features and extensions that make it a powerful tool for developers.



GIT

Most widely used modern version control system in the world today is Git. Git is a mature, actively maintained open source project originally developed in 2005 by Linus Torvalds



NODE JS

Node.js is a revolutionary JavaScript runtime built on Chrome's V8 JavaScript engine. It enables the execution of JavaScript code server-side, a pivotal shift from the traditional browser-only usage. Released in 2009, Node.js is known for its non-blocking, event-driven architecture, making it ideal for data-intensive, real-time applications. It's a cornerstone in modern web development, particularly for full-stack JavaScript development..



XAMPP

XAMPP is a free, open-source cross-platform web server solution stack package. It's a simple and lightweight Apache distribution that contains MariaDB, PHP, and Perl. XAMPP makes it extremely easy for developers to create a local web server for testing and deployment purposes. Since its release, it has been a popular tool among developers for its ease of installation and use, especially for those working with PHP..



COMPOSER

Composer is a dependency manager for PHP, providing a standard format for managing PHP software dependencies and required libraries. It is used in all modern PHP frameworks, such as Laravel and Symfony, and is a crucial tool for PHP developers. Released in 2012, Composer has become an integral part of PHP development, helping to ensure consistent and manageable codebases.

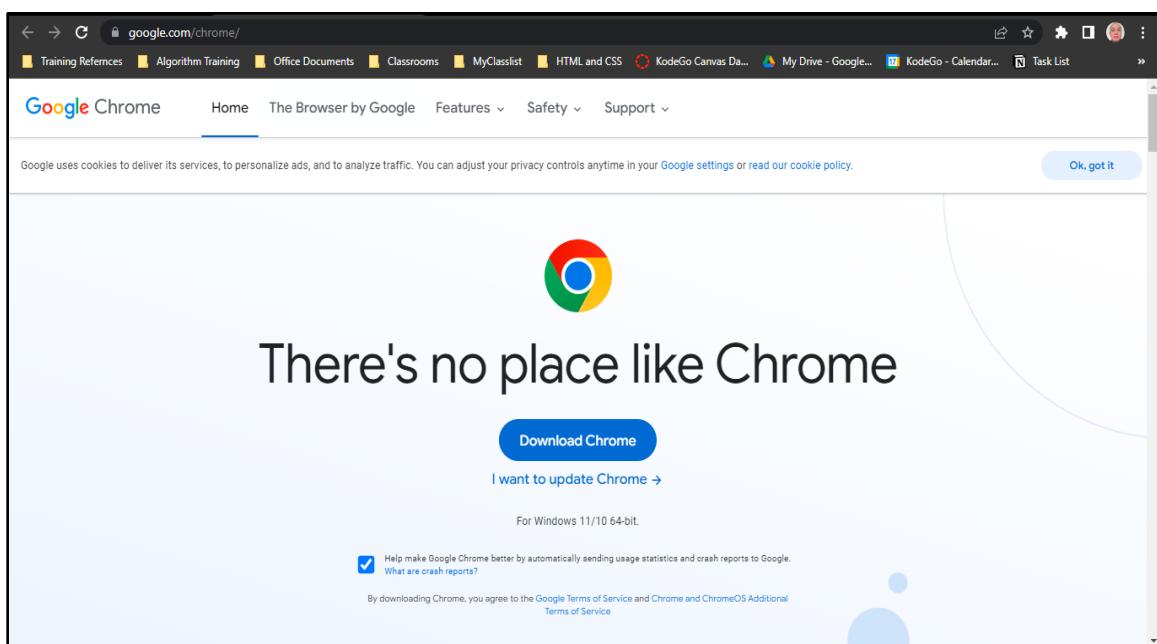


Installing Google Chrome



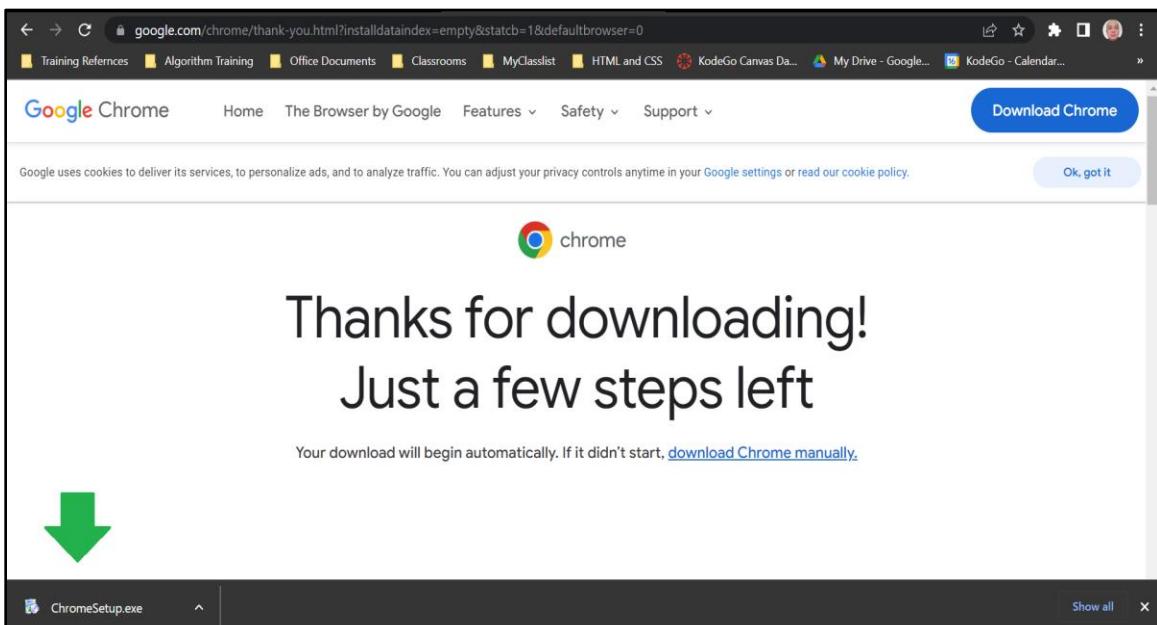
For Windows:

1. Go to <https://www.google.com/chrome/>



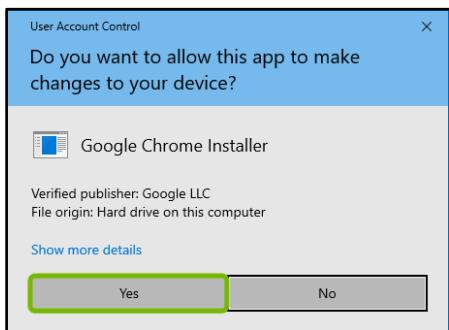
The screenshot shows the Google Chrome download page. At the top, there's a navigation bar with links like 'Training References', 'Algorithm Training', 'Office Documents', 'Classrooms', 'MyClasslist', 'HTML and CSS', 'KodeGo Canvas Da...', 'My Drive - Google...', 'KodeGo - Calendar...', and 'Task List'. Below the navigation bar, the main content area features the Google Chrome logo and the slogan 'There's no place like Chrome'. A large blue 'Download Chrome' button is prominently displayed. Below the button, there's a link 'I want to update Chrome →'. Further down, it says 'For Windows 11/10 64-bit.' and there's a checkbox for sending usage statistics and crash reports to Google, with a link 'What are crash reports?'. At the bottom, it says 'By downloading Chrome, you agree to the Google Terms of Service and Chrome and ChromeOS Additional Terms of Service'.

2. Download the installation file.



The screenshot shows the Google Chrome download confirmation page. The top navigation bar and links are identical to the previous page. The main content area now features the Google Chrome logo and the text 'Thanks for downloading! Just a few steps left'. Below this, it says 'Your download will begin automatically. If it didn't start, [download Chrome manually](#)'. A large green downward arrow icon is centered at the bottom. At the very bottom, there's a taskbar with icons for 'ChromeSetup.exe' and other pinned apps, along with 'Show all' and a close button.

3. If prompted, **click Run or Save**.
4. If you **choose Save**, to start installation, either: **Double-click the download**.
5. **Click Open file**.
6. If you're asked, "Do you want to allow this app to make changes to your device," click **Yes**.

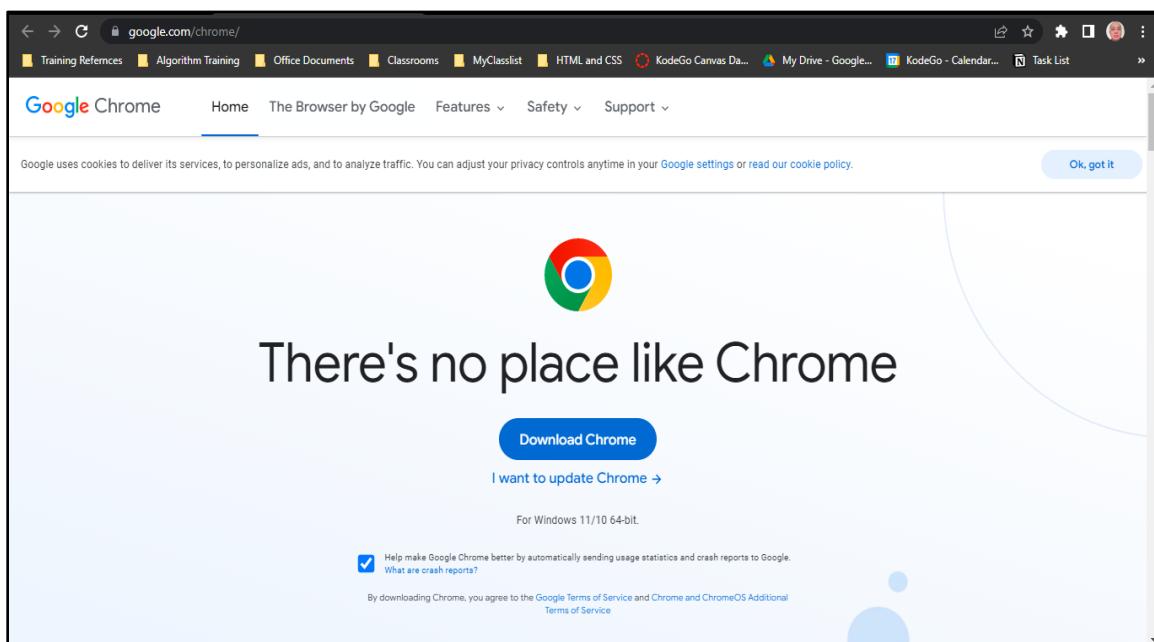


Start Chrome:

Windows 10 and up: A Chrome window opens after everything is done. You can make Chrome your default browser.

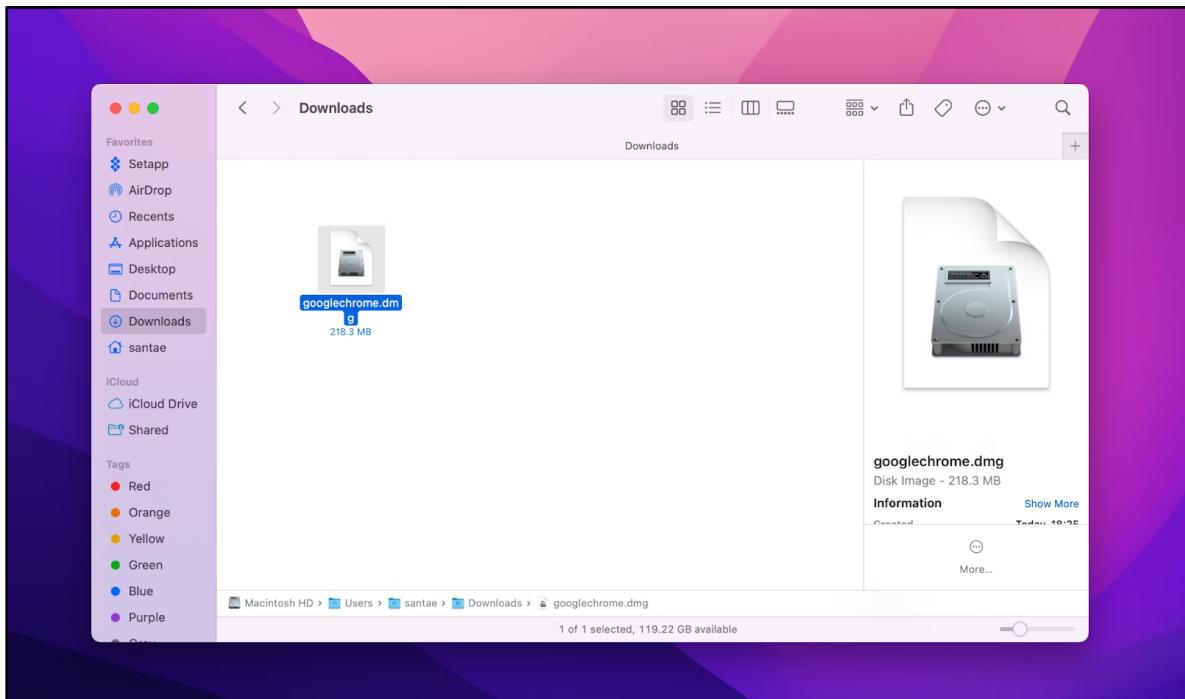


1. Got to <https://www.google.com/chrome/>

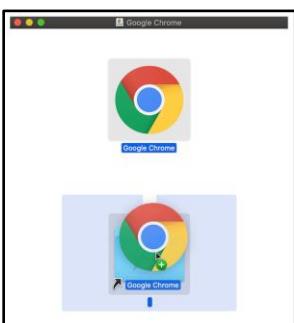


The screenshot shows a web browser window for Google Chrome. The address bar shows 'google.com/chrome/'. The main content area features the Google Chrome logo and the slogan 'There's no place like Chrome'. Below this is a large blue 'Download Chrome' button. Underneath the button, there's a link 'I want to update Chrome →'. At the bottom, it says 'For Windows 11/10 64-bit.' and includes a checkbox for sending usage statistics and crash reports to Google, with a link 'What are crash reports?'. At the very bottom, it states 'By downloading Chrome, you agree to the [Google Terms of Service](#) and [Chrome and ChromeOS Additional Terms of Service](#)'.

2. Download the installation file.
3. Open the file called "googlechrome.dmg."



4. In the window that opens, find Chrome.
5. Drag Chrome to the Applications folder.



6. You might be asked to enter the admin password.
7. If you don't know the admin password, drag Chrome to a place on your computer where you can make edits, like your desktop.

Open Chrome.

Open Finder. In the sidebar, to the right of Google Chrome, click Eject Eject.



Installing Visual Studio Code

Here is a step-by-step guide on how to install Visual Studio Code on your computer.

Step 1: System Requirements

Before installing Visual Studio Code, ensure that your computer meets the minimum system requirements:

Operating System:



Windows 7 (64-bit) or later



MacOS 10.12 or later

RAM: Minimum 4 GB.

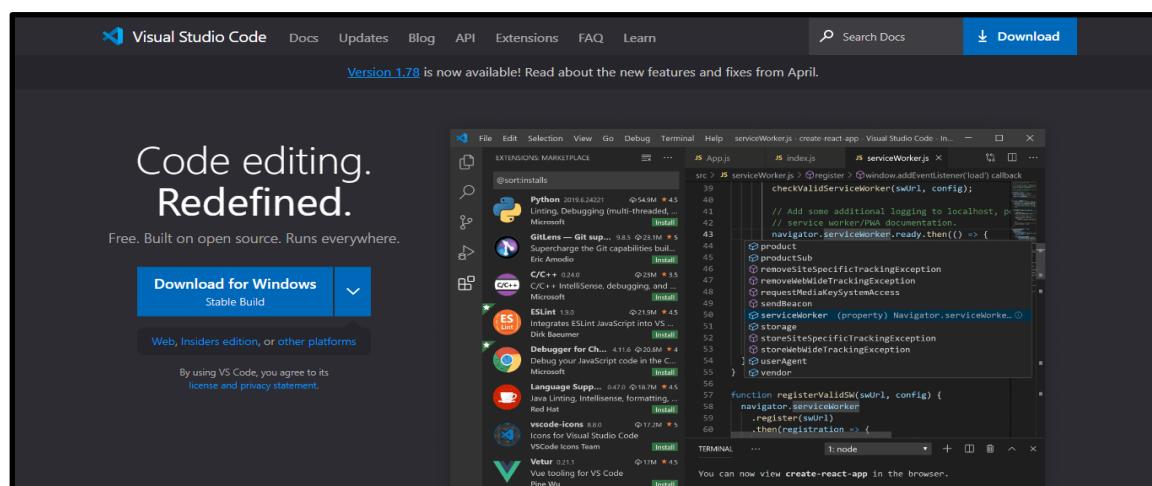
Disk Space: Minimum 200 MB.

Step 2: Download Visual Studio Code

To download Visual Studio Code, follow these steps:

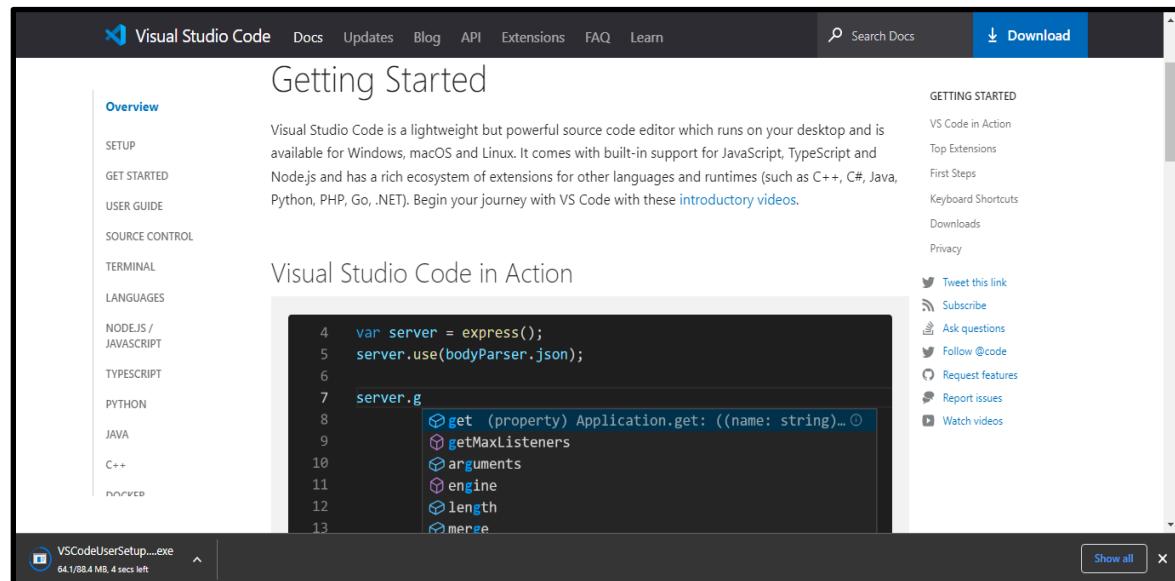
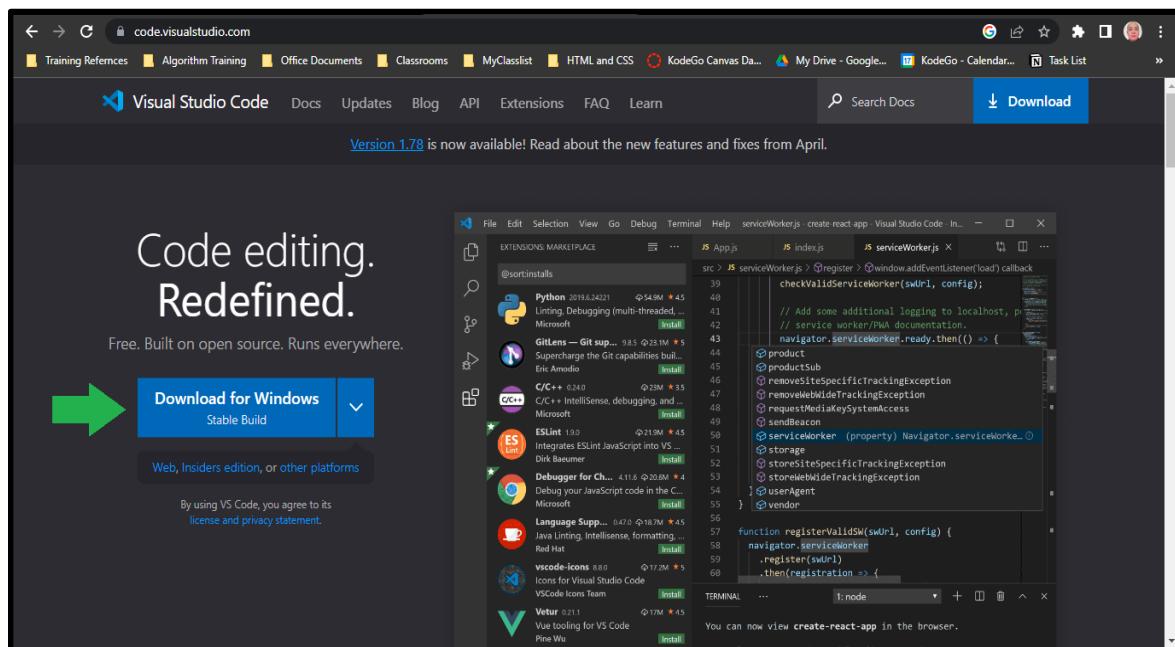
1. Open a web browser and visit the official Visual Studio Code website:

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



The screenshot shows the official Visual Studio Code website. At the top, there's a navigation bar with links for Visual Studio Code, Docs, Updates, Blog, API, Extensions, FAQ, and Learn. A blue "Download" button is prominent on the right. Below the navigation, a message says "Version 1.78 is now available! Read about the new features and fixes from April." The main content area features a large heading "Code editing. Redefined." with the subtext "Free. Built on open source. Runs everywhere." Below this, there are two download buttons: "Download for Windows" (Stable Build) and "Web, Insiders edition, or other platforms". A note below the buttons states "By using VS Code, you agree to its [licence](#) and [privacy statement](#)." To the right, there's a code editor window showing some JavaScript code related to service workers. At the bottom, a terminal window shows the command "create-react-app" being run, with the message "You can now view create-react-app in the browser." There's also a note about "Vue.js" and "Vue.js 2.6.10".

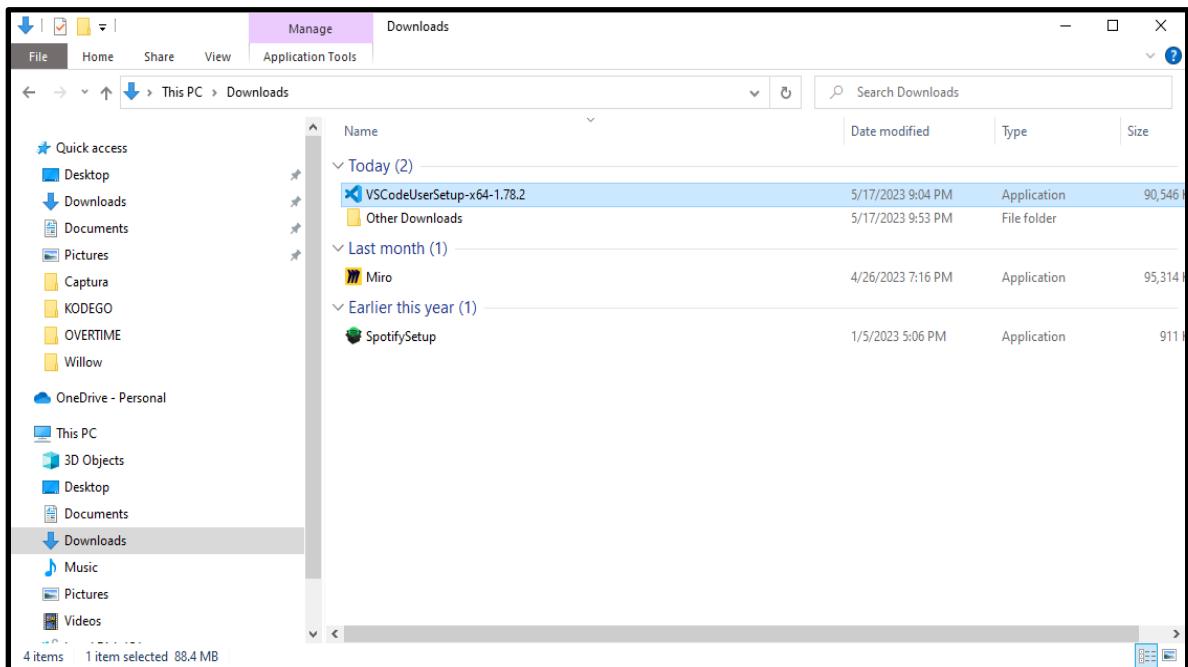
2. On the homepage, click on the **Download button**. The website will automatically detect your operating system and display the appropriate download link.



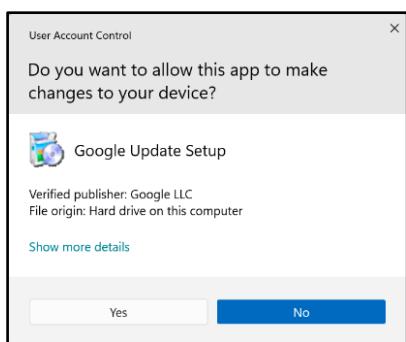
Step 3: Install Visual Studio Code. Once you have downloaded the installer, proceed with the installation

For Windows:

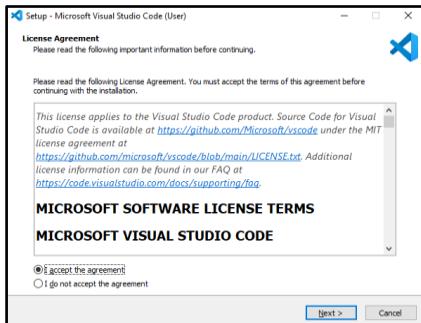
1. Locate the downloaded installer file (typically in your Downloads folder) and double-click on it.



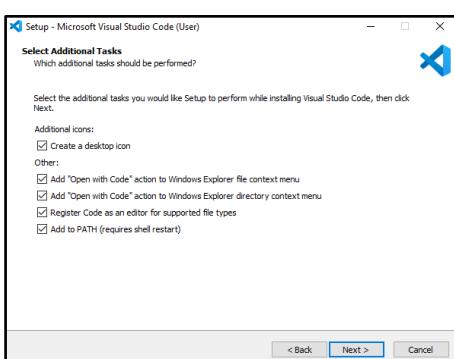
2. The User Account Control (UAC) dialog may appear asking for permission to make changes to your computer. Click **Yes**; to continue.



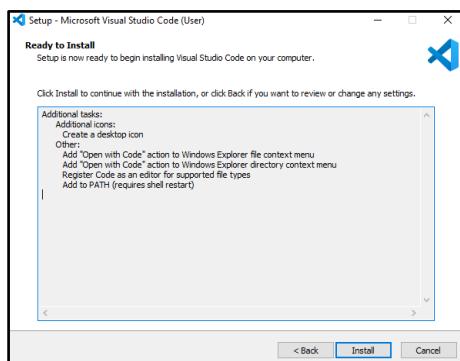
3. The Visual Studio Code Setup wizard will open. **Click Next** button to proceed.
4. Review the License Agreement and **click** on the **checkbox** to **accept** it. Then **Next**.



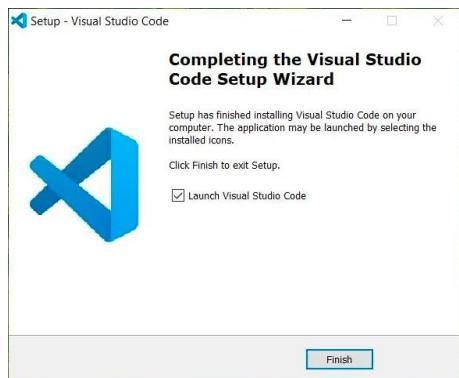
5. Choose the destination folder where you want to install Visual Studio Code or leave the default folder as is. **Click Next**.
6. Select the additional tasks you want, such as creating desktop shortcuts or adding the program to the PATH. **Click Next**.



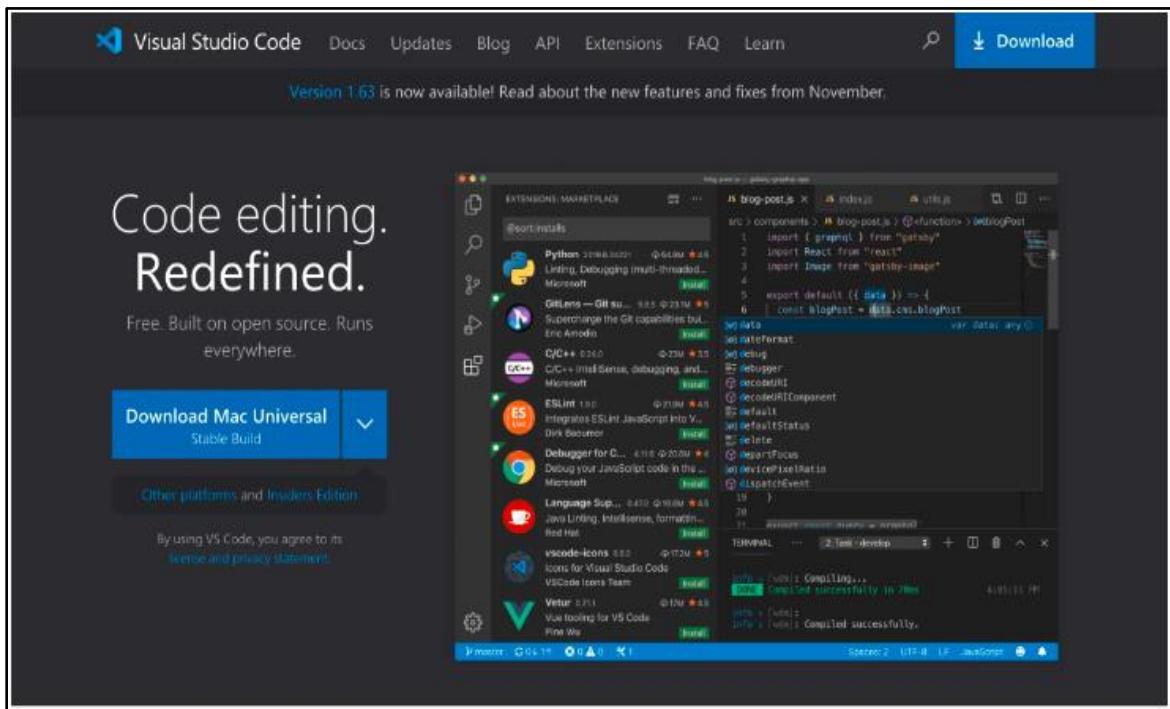
7. Finally, **click** on the **Install** button to begin the installation process. Visual Studio Code will be installed on your computer.



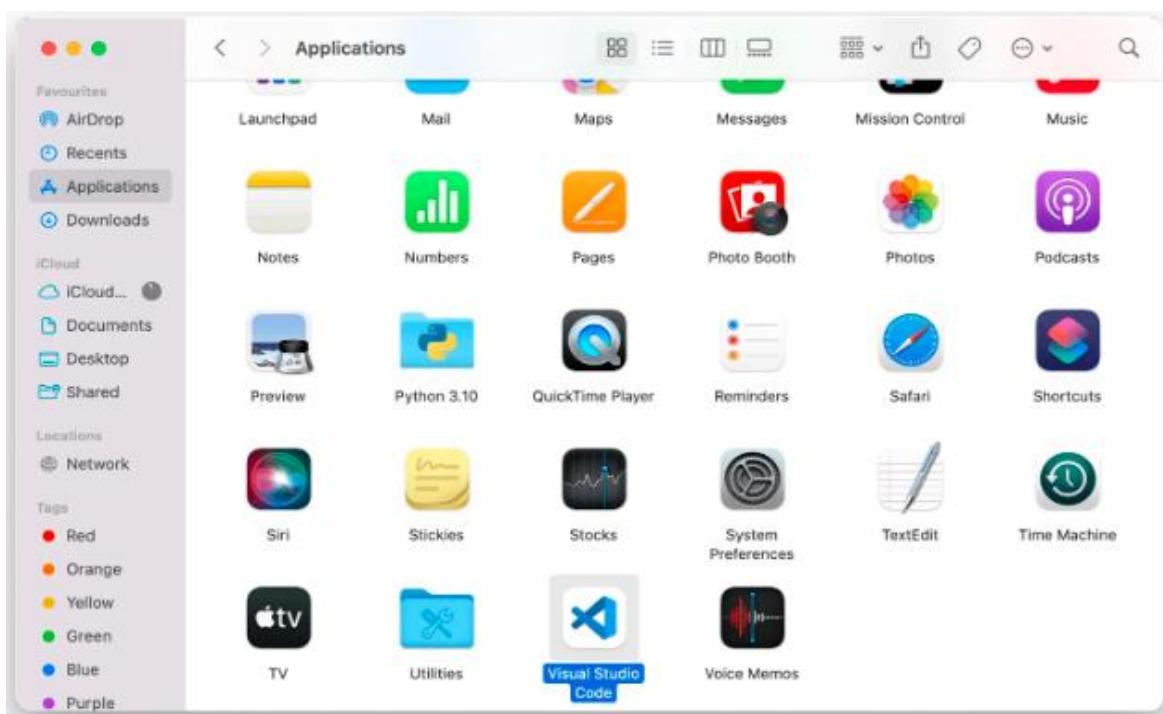
8. Once the installation is complete, click on the **Finish** button.



1. Locate the downloaded DMG file (typically in your Downloads folder) and double-click on it.



2. A new Finder window will open, containing the Visual Studio Code app icon. Drag and drop the app icon into the Applications folder to install it.



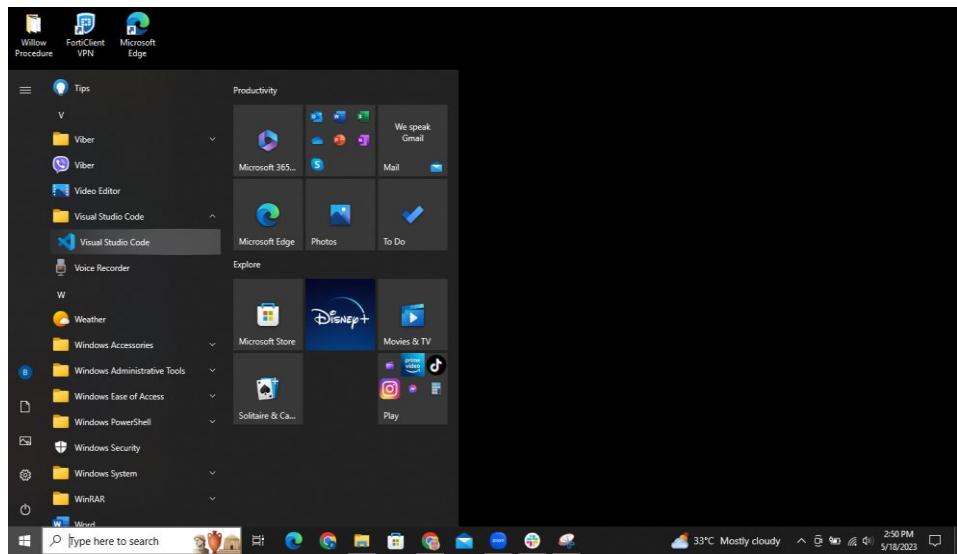
Step 4: Launch Visual Studio Code

After installing Visual Studio Code, you can launch it by following these steps:



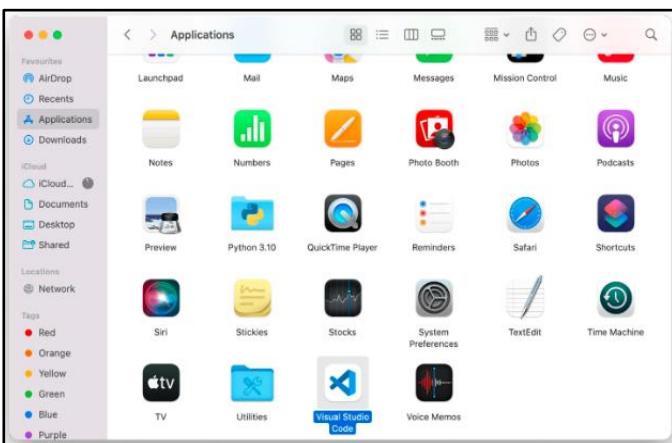
Windows:

Open the Start menu, **scroll down V** section, and click Visual Studio Code shortcut.



macOS:

Open the **Applications folder** and double-click on the Visual Studio Code app icon.



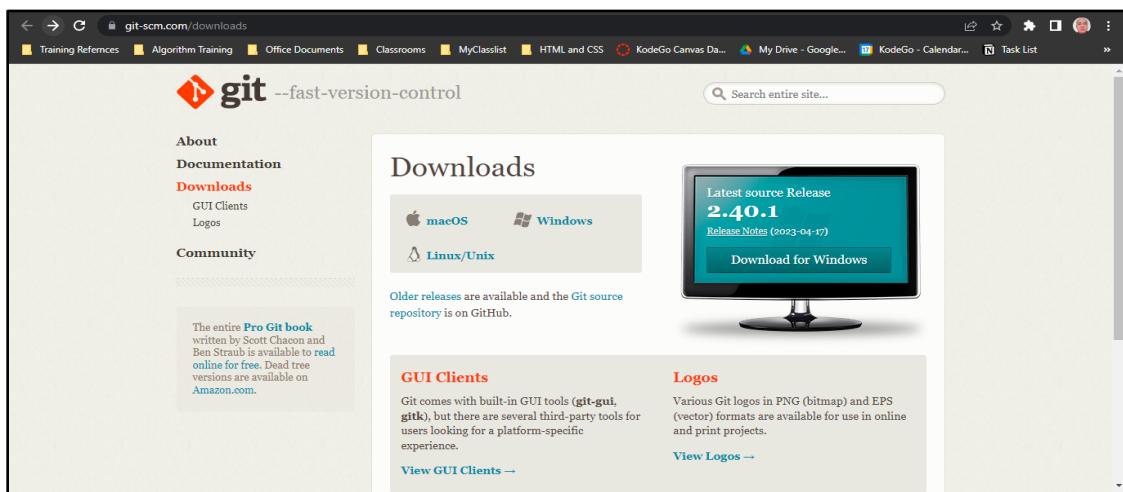
Congratulations! You have successfully installed Visual Studio Code on your computer. Now you can start using it for your coding projects. Enjoy coding!



Installing Git

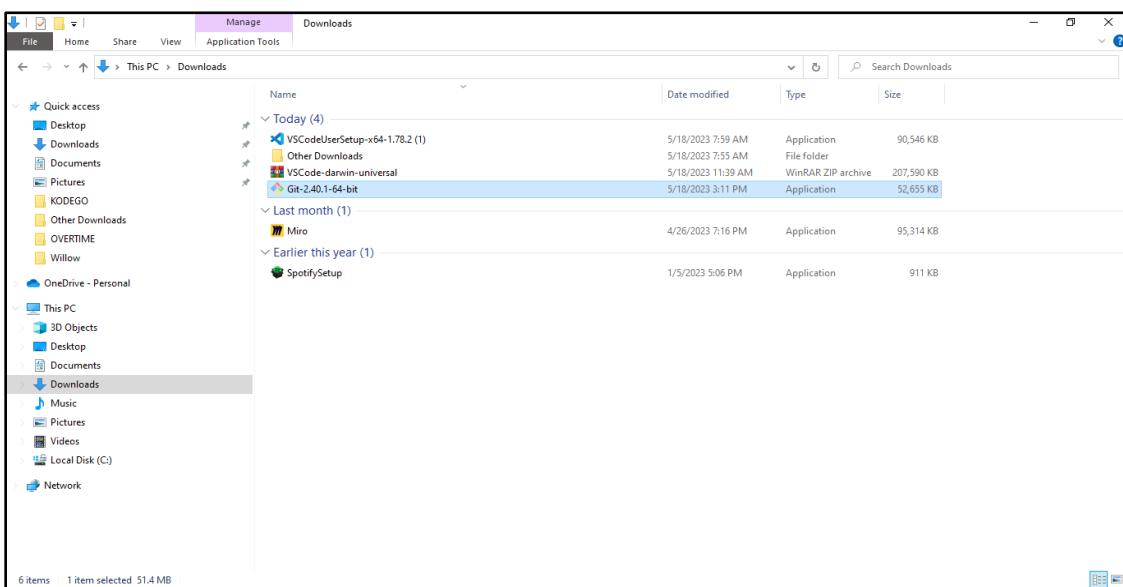
To install Git on Windows, follow these steps:

1. Visit the official Git website at [https://git-scm.com/](https://git-scm.com/downloads) and click on the "Download" button.



The screenshot shows the official Git website (git-scm.com) with the "Downloads" section selected. The "Windows" download link is highlighted. The page includes sections for "GUI Clients" (with links to "git-gui" and "gitk") and "Logos". A sidebar on the left provides information about the "Pro Git book" and links to "Documentation" and "Community".

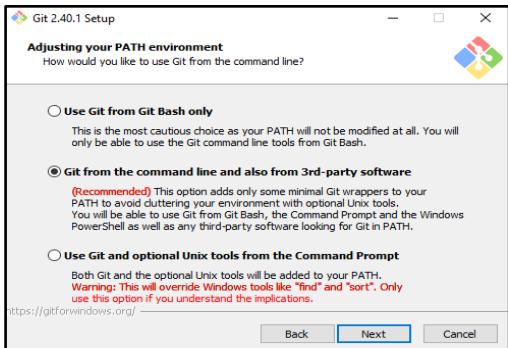
2. Once the download is complete, locate the downloaded file and double-click on it to start the installation.



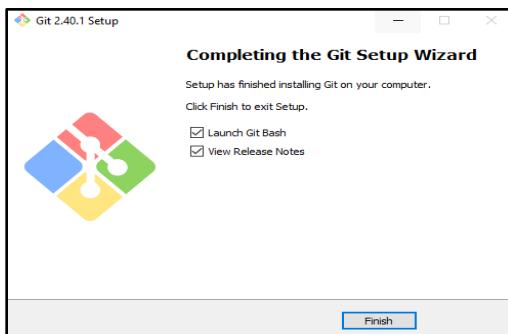
The screenshot shows the Windows File Explorer displaying the "Downloads" folder. The folder contains four items from today, one item from last month, and one item from earlier this year. The "VSCodeUserSetup-x64-1.78.2.exe" file is selected, indicating it is ready to be双clicked for installation.

| Name | Date modified | Type | Size |
|--------------------------------|--------------------|--------------------|------------|
| VSCodeUserSetup-x64-1.78.2 (1) | 5/18/2023 7:59 AM | Application | 90,546 KB |
| Other Downloads | 5/18/2023 7:55 AM | File folder | |
| VSCode-darwin-universal | 5/18/2023 11:39 AM | WinRAR ZIP archive | 207,590 KB |
| Git-2.40.1-64-bit | 5/18/2023 3:11 PM | Application | 52,655 KB |
| Miro | 4/26/2023 7:16 PM | Application | 95,314 KB |
| SpotifySetup | 1/5/2023 5:06 PM | Application | 911 KB |

3. The installer will guide you through the installation process. You can choose the default options unless you have specific preferences.
4. During the installation, make sure to select the option "Use Git from the Windows Command Prompt" to add Git to your system's PATH environment variable.



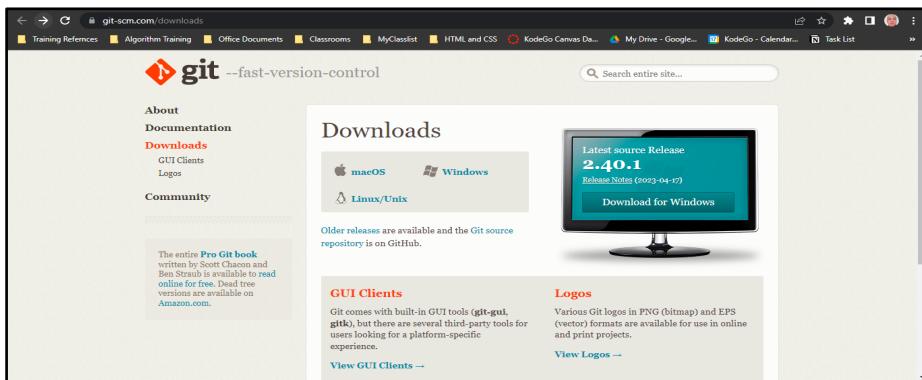
5. Complete the installation by clicking "**Next**" and then "**Finish**" when the process is complete.



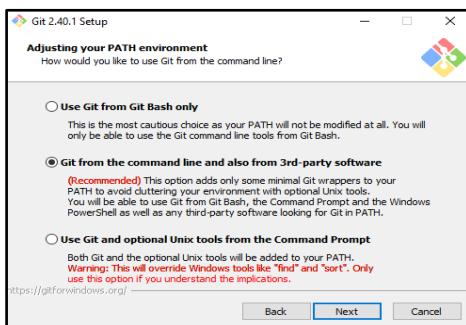


To install Git on macOS, you can follow these steps:

1. Visit the official Git website at <https://git-scm.com/> and click on the "Download" button.



2. Once the download is complete, locate the downloaded file (usually a .dmg file) and double-click on it to open it.
3. The disk image will open, and you'll see the Git installer package. Double-click on the package to start the installation.
4. The installer will guide you through the installation process. You can choose the default options unless you have specific preferences.
5. During the installation, make sure to select the option "Use Git from the command line" to add Git to your system's PATH environment variable.



6. Complete the installation by following the prompts and entering your administrator password if required.

After completing the installation, you can open a terminal or command prompt and type "git --version" to verify that Git is successfully installed on your system.

Installing Node.JS

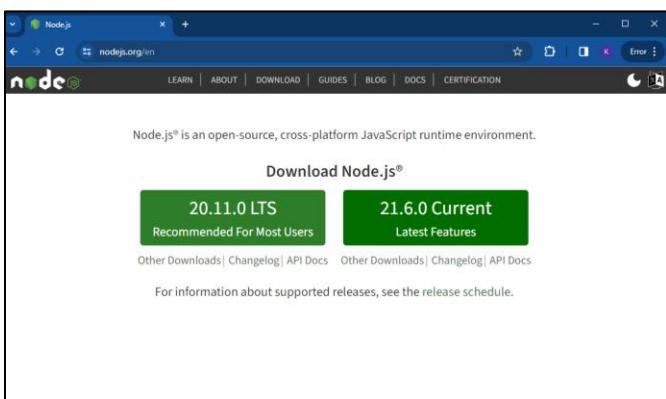
Node.js is an influential and widely-used open-source JavaScript runtime environment that executes JavaScript code outside of a web browser. By installing Node.js, developers gain the ability to create scalable and efficient web applications with ease. Its significance lies in its non-blocking, event-driven architecture, which makes it ideal for data-intensive real-time applications that run across distributed devices. Moreover, Node.js comes with a vast ecosystem of npm (Node Package Manager) modules, allowing developers to easily integrate various libraries and tools, enhancing productivity and capabilities. Installing Node.js is a crucial step for modern web development, enabling developers to harness the full potential of JavaScript on both the client and server sides.

Minimum Hardware Requirements

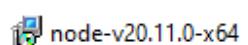
- RAM 4GB
- CPU Intel Core i3TM i3 HQ CPU @2.50 GHz
- 250 GB of HDD

Step by step Installation Guide

1. Go to <https://nodejs.org/en> to download the installer. Make sure you have downloaded the latest version which is recommended for Most Users of NodeJs which is highly recommended for those who are starting to learn NodeJs. It includes the NPM package manager.

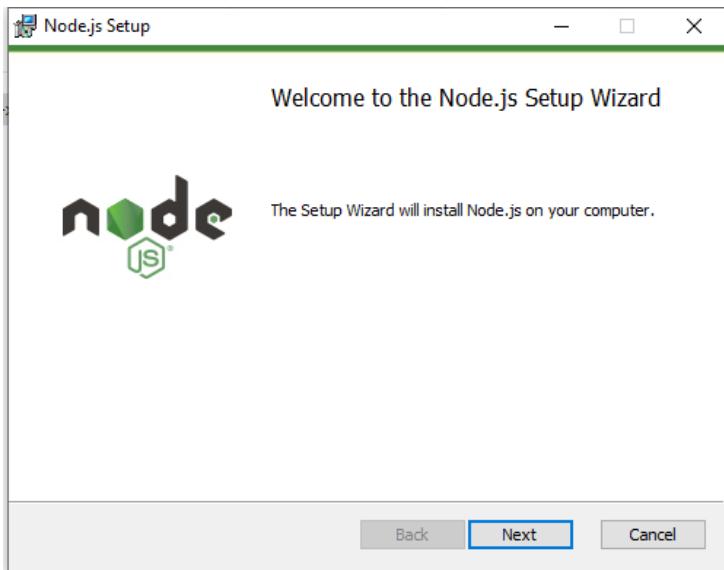


Now .msi file will be downloaded to your browser.

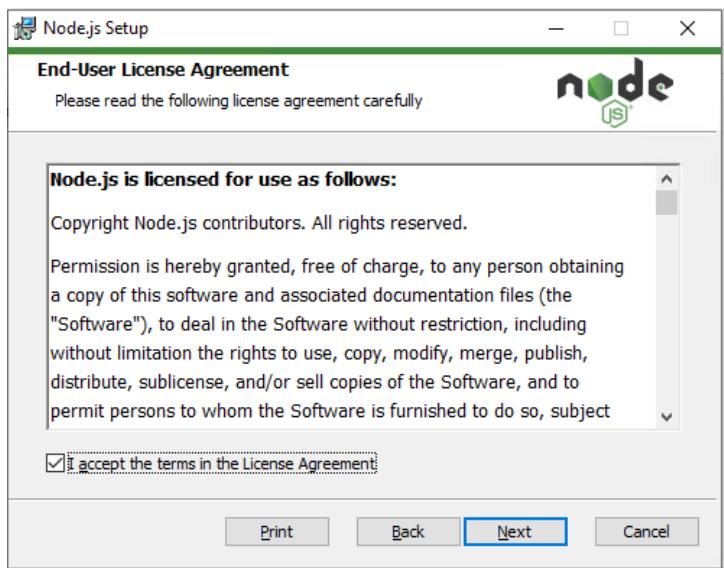


2. Double-click the downloaded file to install .msi binary files to initiate the installation process. Then give access to run the application.

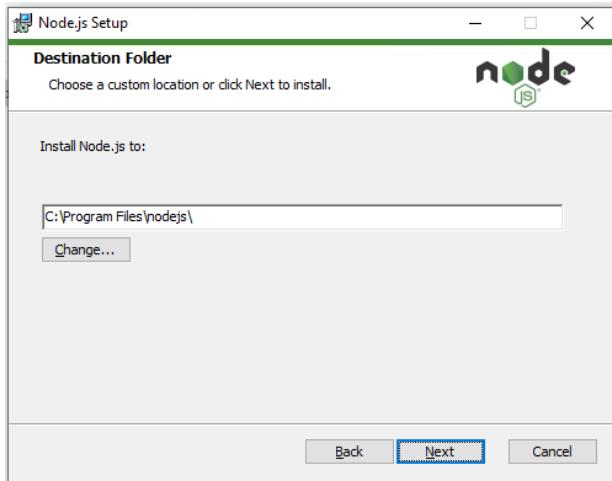
You will get a welcome message on your screen and click the “Next” button. The installation process will start.



Accept the terms in the License Agreement



By clicking on the Next button, you will get a custom page setup on the screen.

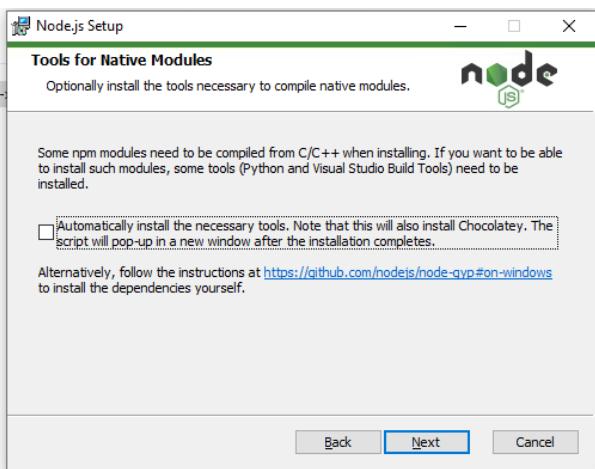


You should have 150MB of space to install Node.js and npm features.

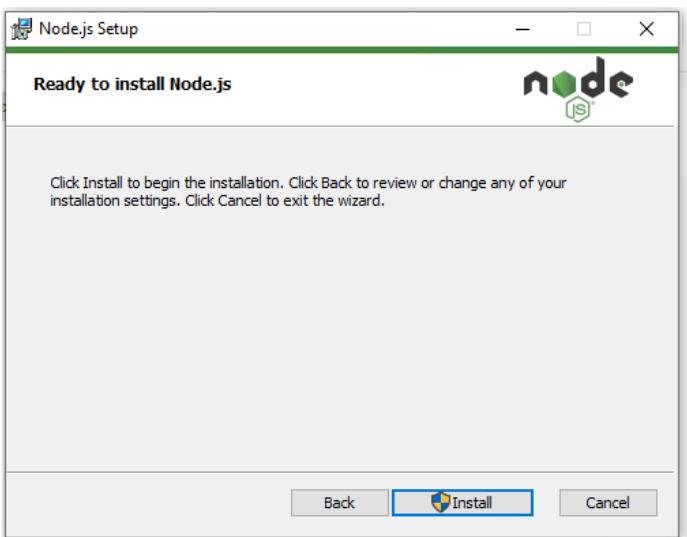
The following features will be installed by default:

- Node.js runtime
- Npm package manager
- Online documentation shortcuts
- Add to Path

You have the option to install Tools for native Modules. Simply select the checkbox and click Next if you want to do this, otherwise, simply click Next



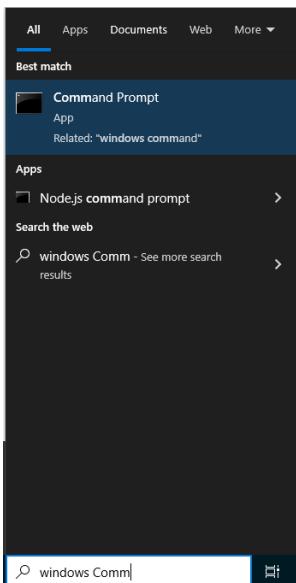
The setup is ready to install Node and NPM. Let's click on the Install button



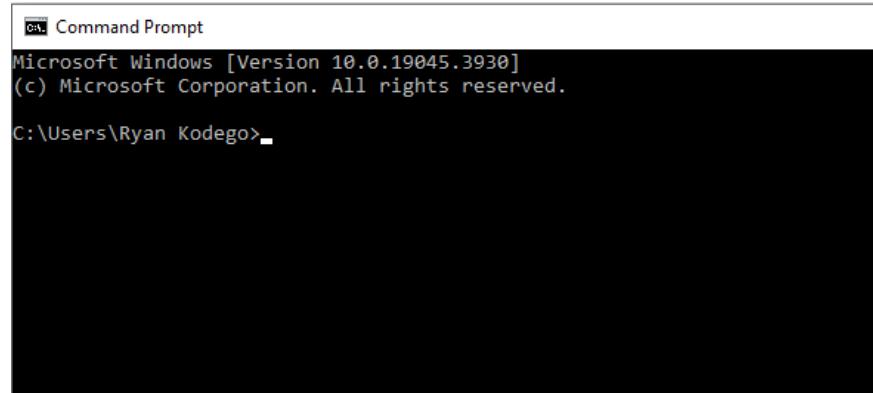
After the installation is complete, click Finish. Now you have NodeJs on your system.

3. Check Node.js and NPM Version

If you have a doubt whether you have installed everything correctly or not, let's verify it with "Command Prompt"



Command Prompt window will appear on the screen.



```
C:\ Command Prompt
Microsoft Windows [Version 10.0.19045.3930]
(c) Microsoft Corporation. All rights reserved.

C:\Users\Ryan Kodego>
```

To confirm Node installation, type *node -v* command.

To confirm NPM installation, type *npm -v* command.



```
C:\ Command Prompt
C:\>node -v
v20.11.0

C:\>npm -v
10.2.4

C:\>
```

In my case, the version of node.js is v20.11.0 and npm is 10.2.4. Congratulations, you have successfully installed NodeJS on your Machine.



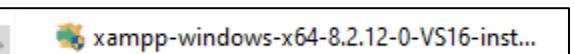
Installing XAMPP on Windows

XAMPP is an essential, free, and open-source cross-platform web server solution stack package, widely used for developing and testing web applications locally. It simplifies the process of installing and configuring Apache, MySQL, PHP, and Perl, making it an ideal choice for beginners and students learning PHP and web development. By installing XAMPP, learners can create a local server environment on their computers, allowing for safe and easy experimentation with PHP scripts and database management without the risk of affecting live websites. This installation is crucial for those embarking on the journey of web development, as it provides a realistic and versatile platform to practice coding, debug errors, and understand the intricacies of web applications. XAMPP's user-friendly interface and comprehensive documentation further enhance the learning experience, making it a popular choice for PHP enthusiasts and educators alike.

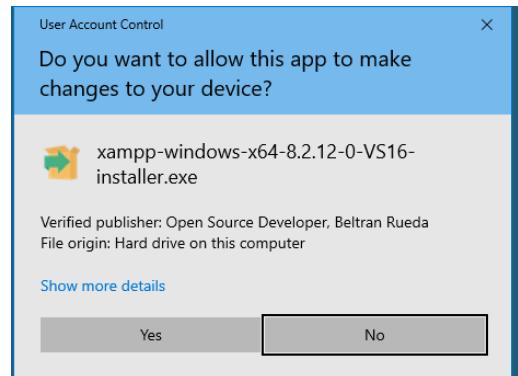
1. To install XAMPP on your PC go to: <https://apachefriends.org> and click on the XAMPP for Windows link.



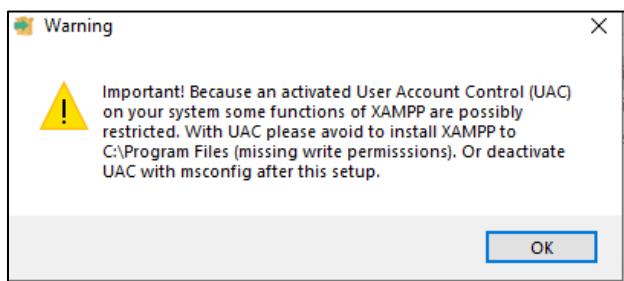
The download will start automatically. Once the download has completed, go to your Downloads folder and double-click on the installer to start the installation.



Allow UAC to make changes to your computer, select Yes



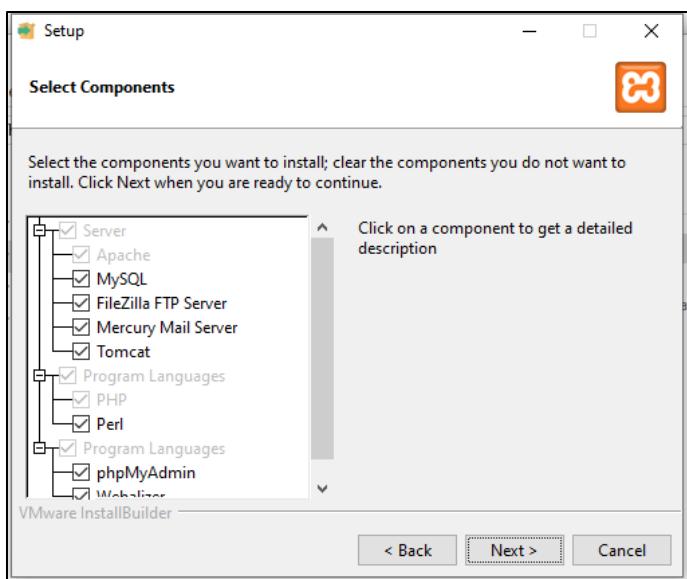
Follow the instructions to install XAMPP. Select Ok



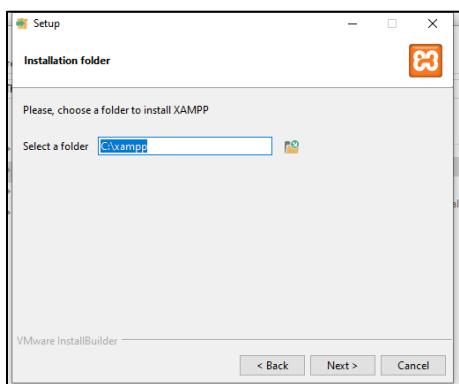
Select next



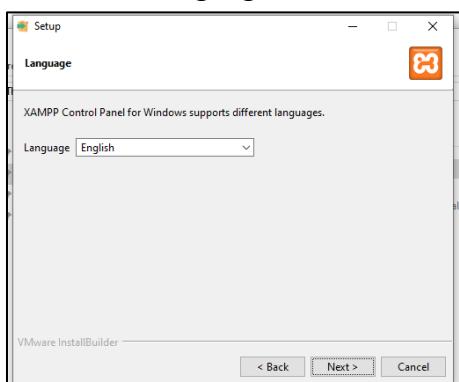
Select Next to install all the components



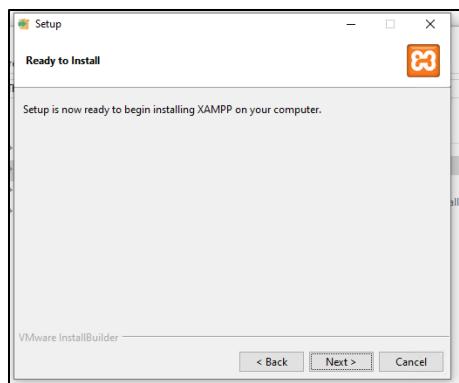
Select Next to install XAMPP on the designated folder



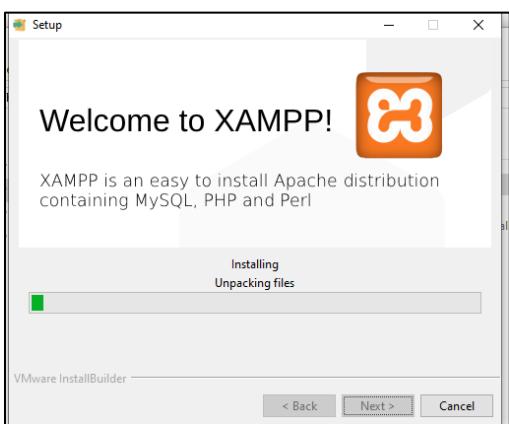
Select next to have English as the default Language



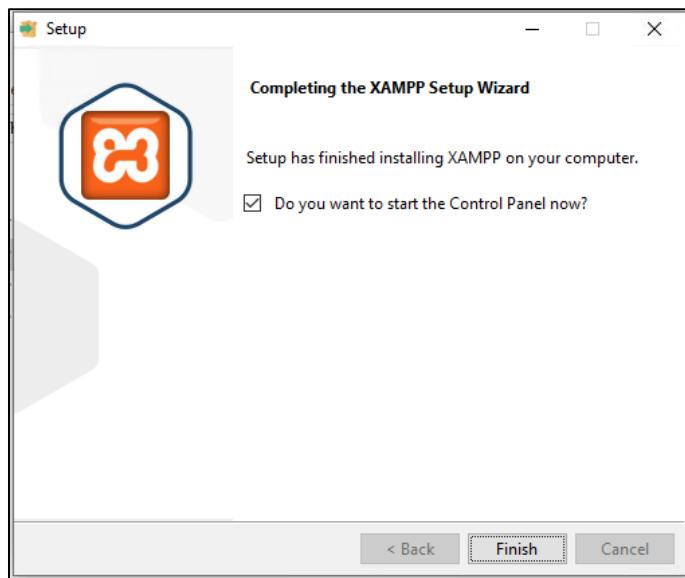
Select Next to install XAMPP on your computer



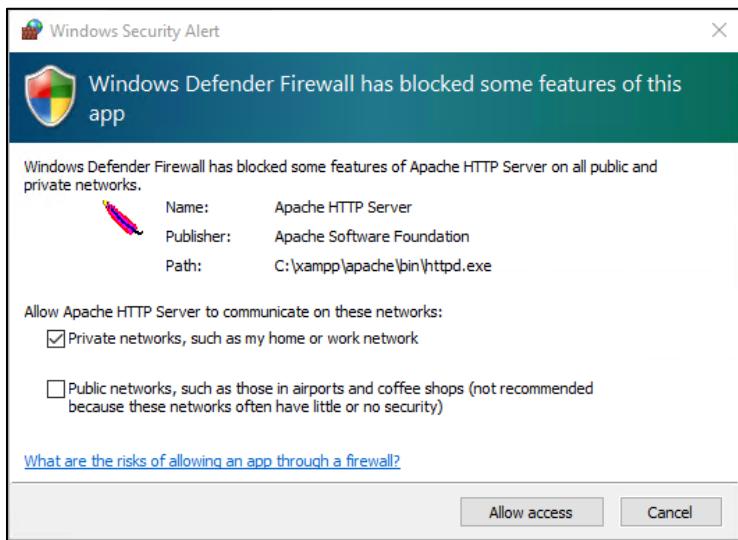
Wait for the installation to finish



Click Finish to Launch the Control Panel

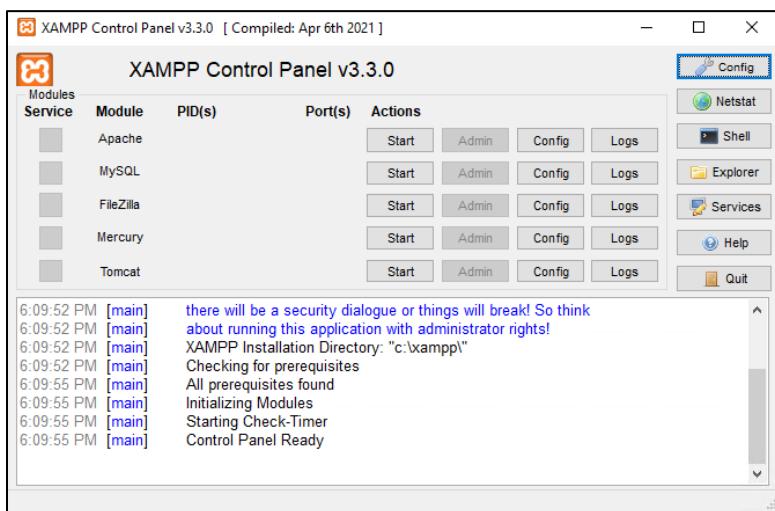


Allow Access so that you can utilize the Apache HTTP Server

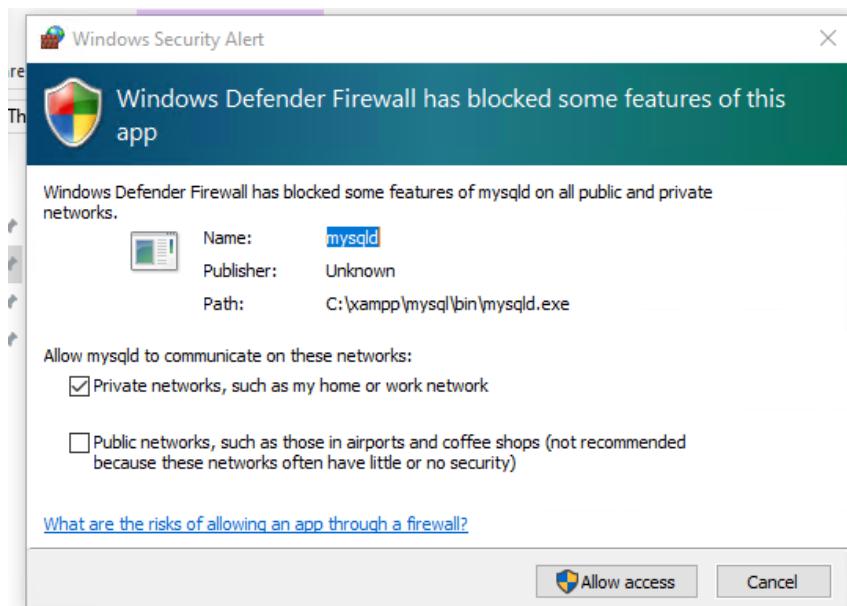


The XAMPP Interface

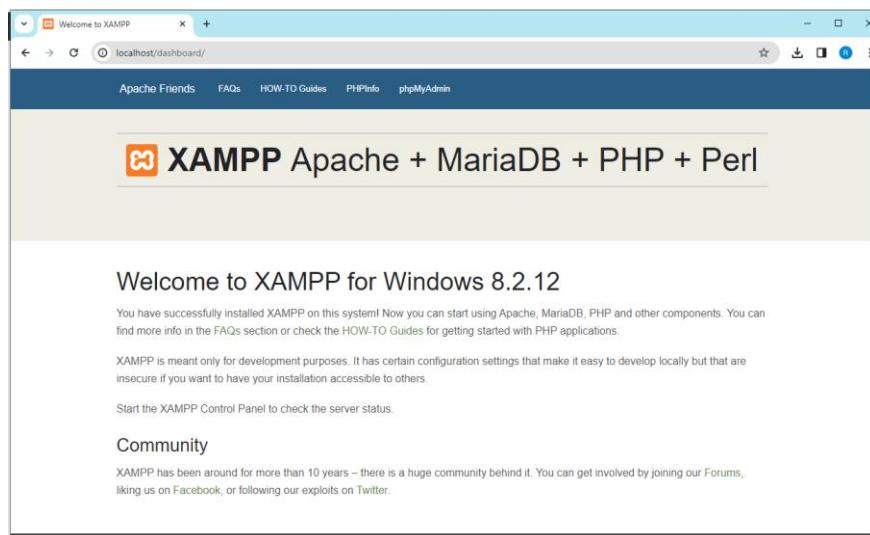
Here you can see the XAMPP interface. Click Start on the Apache and MySQL to check if its working well.



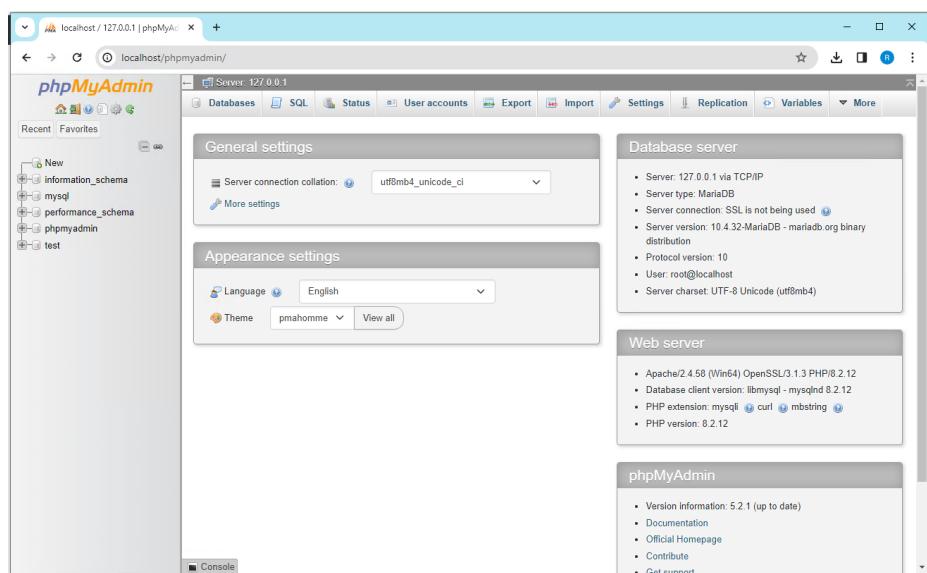
Select Allow Access again to grant access to mysql



Open your browser and go to your localhost: <http://localhost/dashboard/>. You should see similar screen on your browser as indicated on the image below:



Select phpMyAdmin, you should see similar screen below:



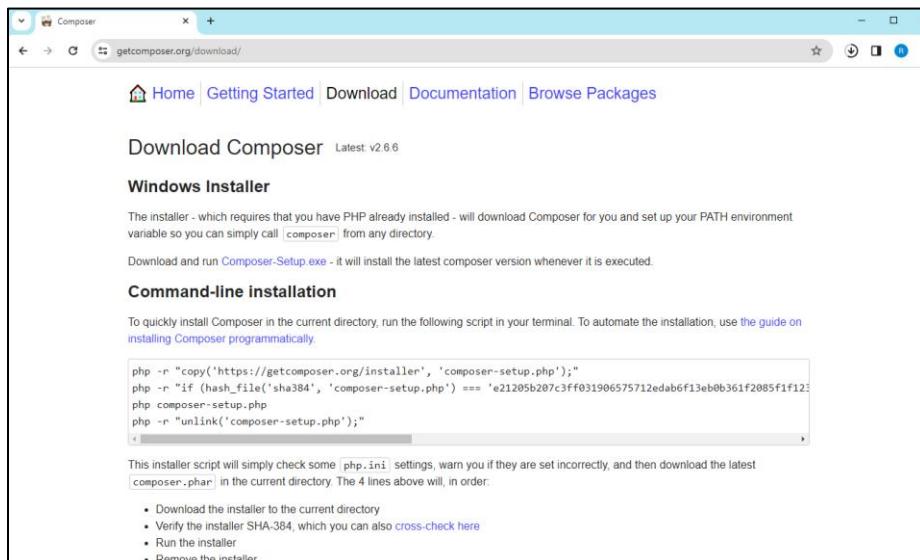
Congratulations, you have successfully installed XAMPP.



Installing Composer

Composer is a vital tool for modern PHP development, serving as a dependency manager that streamlines the process of using third-party libraries in your projects. By installing Composer, developers and learners can easily manage and update the specific versions of packages their projects require, ensuring consistency and compatibility. Its significance extends beyond mere package management; Composer also promotes best practices in software development, encouraging modular and maintainable code. For students and professionals alike, mastering Composer is crucial for efficient PHP development, as it allows seamless integration of a vast universe of PHP packages and frameworks available through Packagist, the PHP package repository. The installation of Composer is a fundamental step in setting up a robust and flexible development environment, paving the way for building more complex and feature-rich PHP applications.

1. Proceed to the official website to download the latest version of composer: <https://getcomposer.org/download/> click the link to download the Composer-Setup.exe file

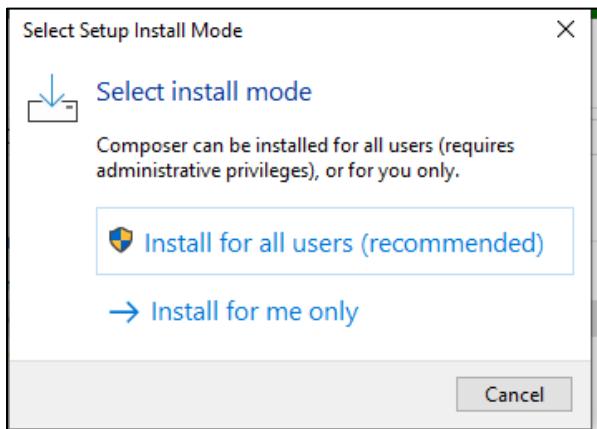


Note: The installer assumes PHP is already installed on your system. If you do not have PHP on your system, please refer above to install PHP

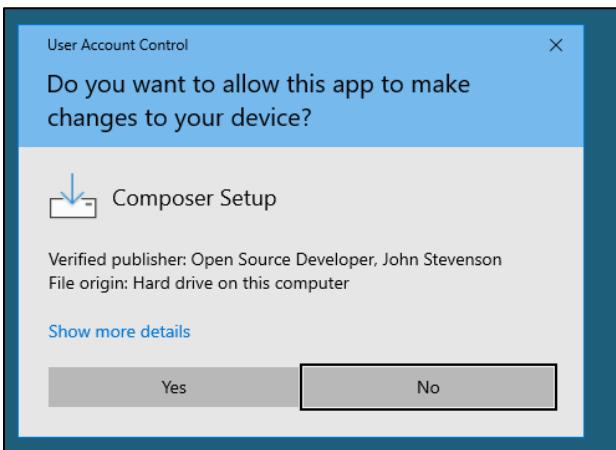
2. Launch installer and perform installation. Open the downloaded .exe file by double-clicking on it. Allow the file to make changes to your system. This will launch the Windows installer. For those

With experience using Composer on Windows 10, you can perform the installation in developer mode by clicking on the corresponding Developer mode box.

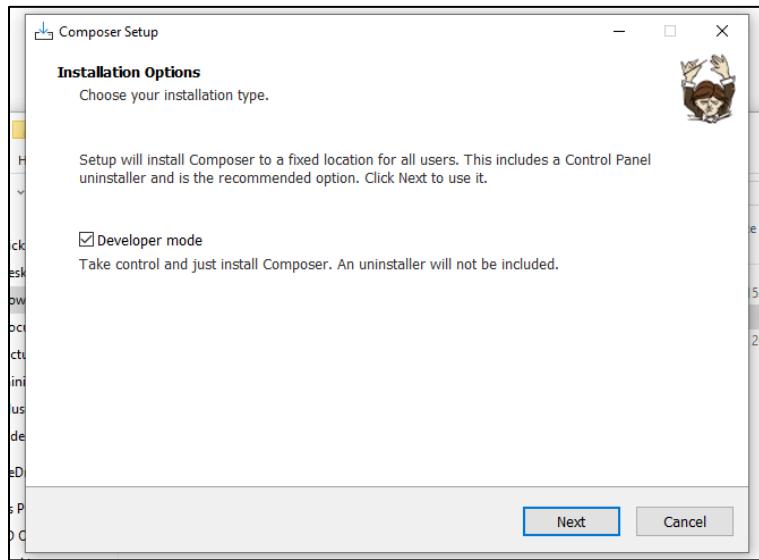
Select Install for all users (recommended)



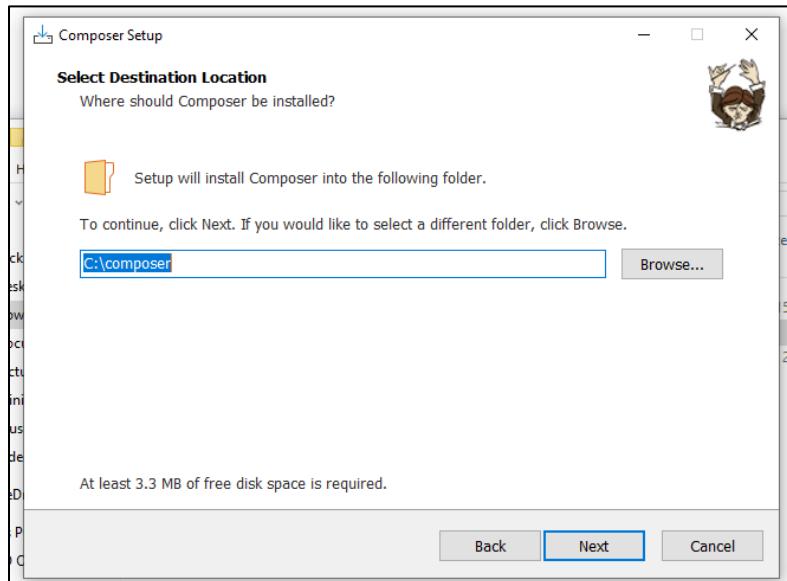
Allow UAC by selecting Yes



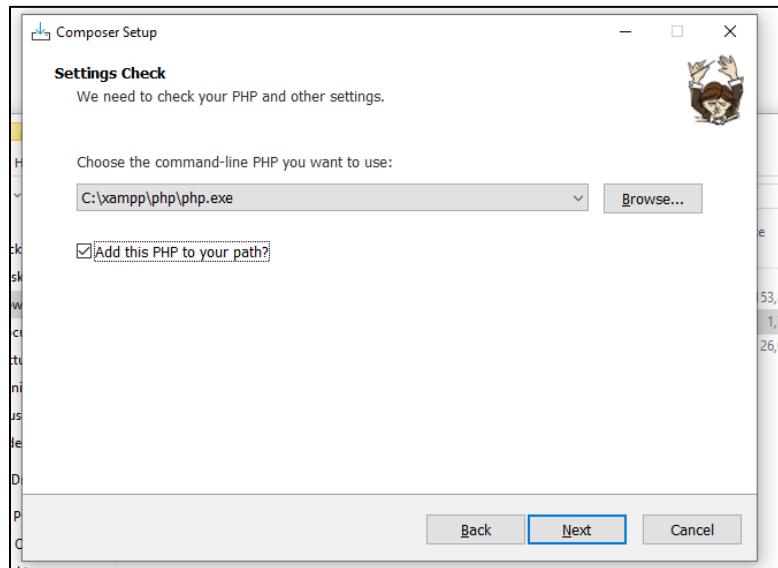
Select Developer Mode and click Next



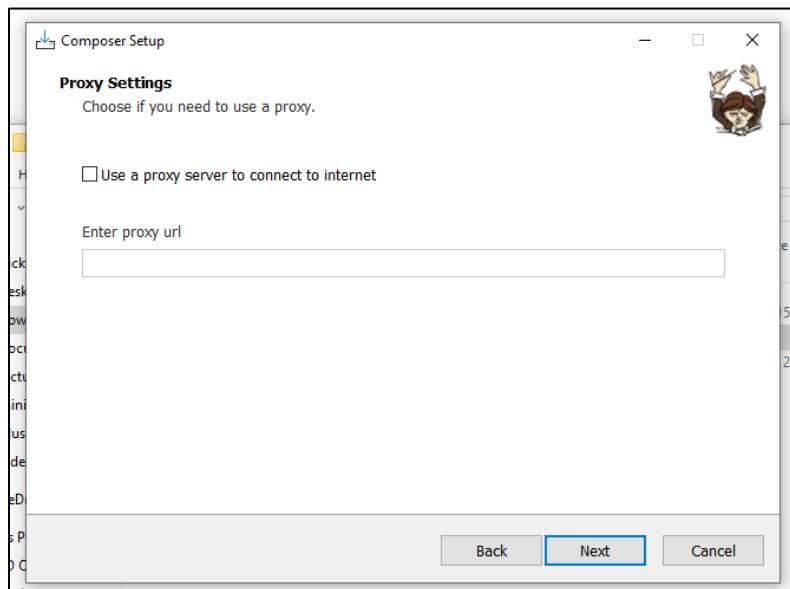
Accept the default path by selecting Next



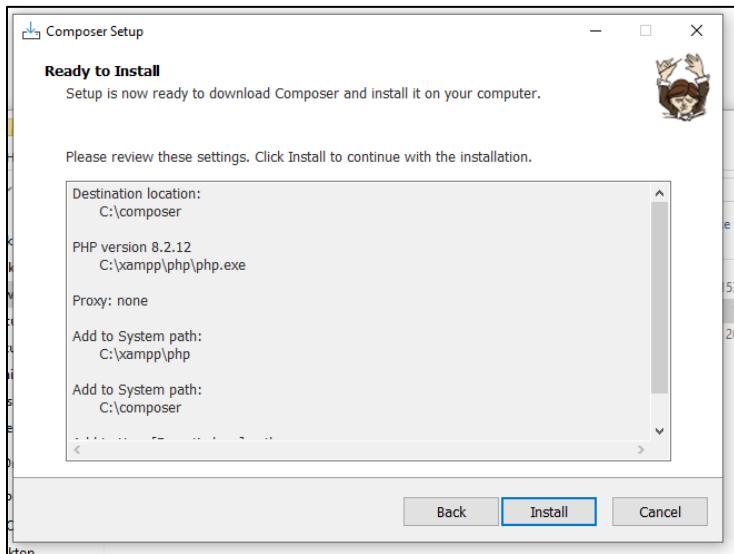
Add the PHP to your path and select next



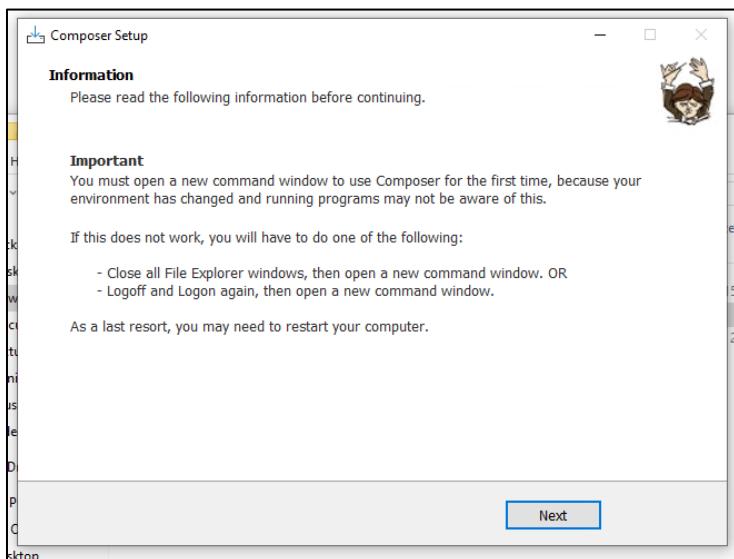
Select Next in your proxy settings



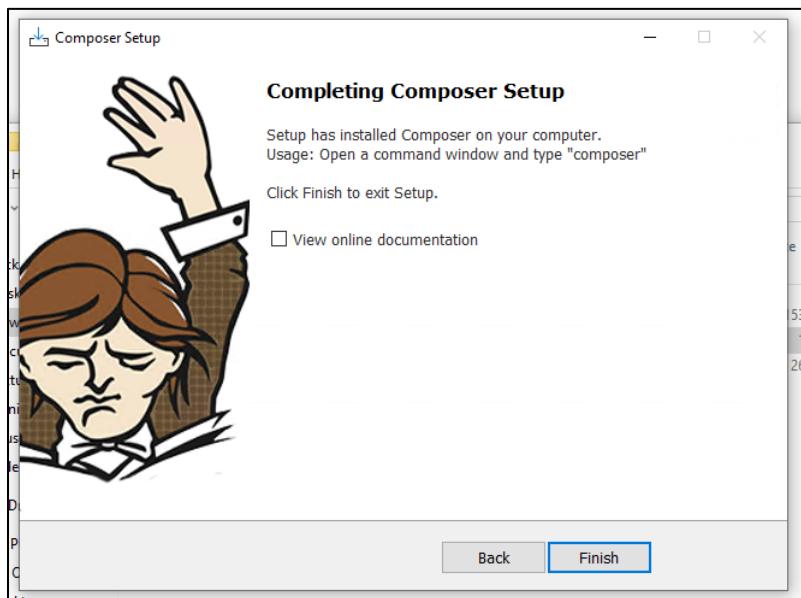
Click Install to start the installation of composer in your local machine



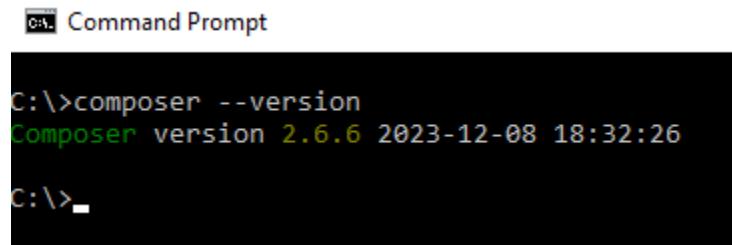
Click Next on the Composer Setup



Finally, click Finish



3. To ensure that the installation of PHP Composer on Windows 10 was successful, launch command prompt and type the following command: `composer --version`



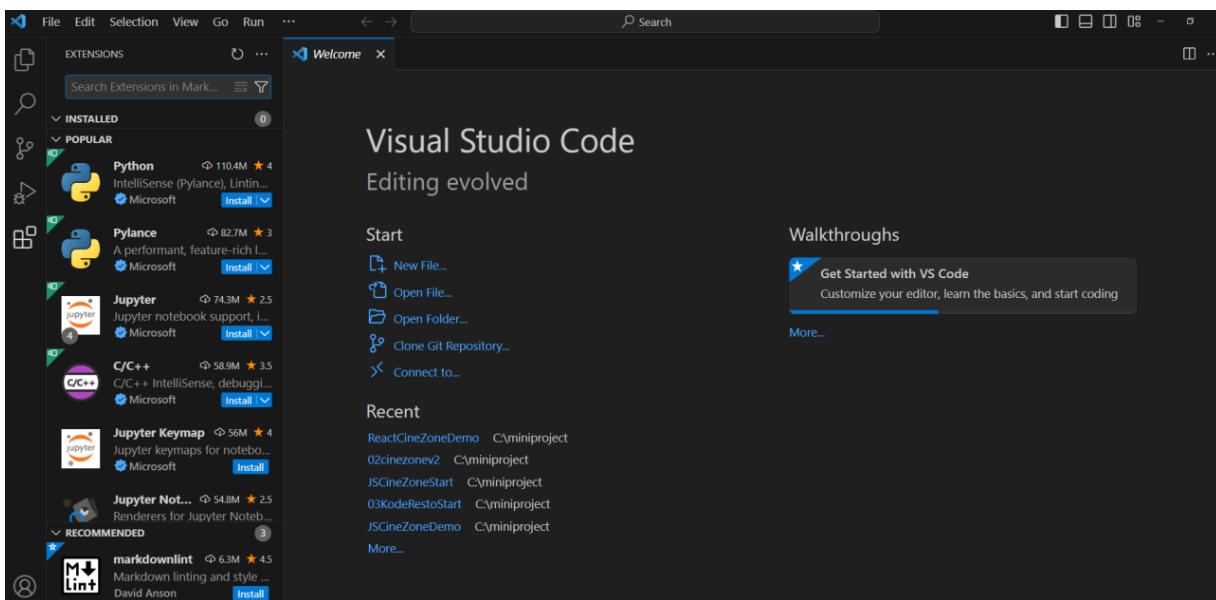
```
C:\>composer --version
Composer version 2.6.6 2023-12-08 18:32:26
C:\>
```

OPTIONAL INSTALLATION

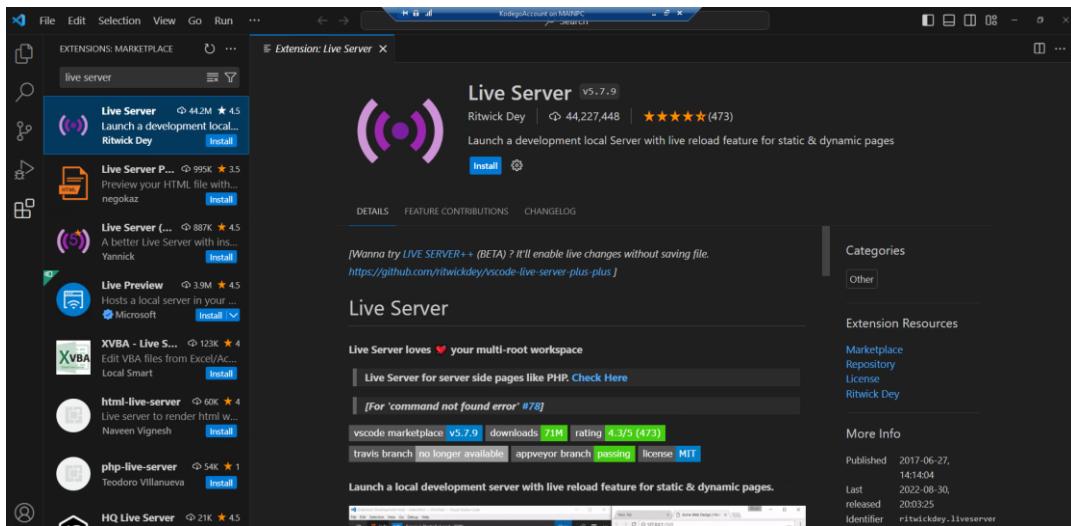
Live Server

The Live Server extension in Visual Studio Code is a remarkably useful tool for web developers, streamlining the development and testing process of web applications. When installed, it launches a local development server directly from VS Code, enabling real-time viewing of changes in a web browser. This feature is particularly significant for front-end development, as it allows developers to immediately see the impact of their HTML, CSS, or JavaScript changes without the need to manually refresh the browser. Live Server enhances productivity by providing instant feedback, making it easier to experiment with code and debug issues. Furthermore, its ability to simulate a server environment is invaluable for testing client-server interactions in web applications. By automating the reload process and providing a quick and efficient way to preview web pages, the Live Server extension becomes an essential tool in the modern web developer's toolkit, especially for those prioritizing rapid development and iteration.

To install Live server open VSCode and select extensions



Search for Live Server and click install



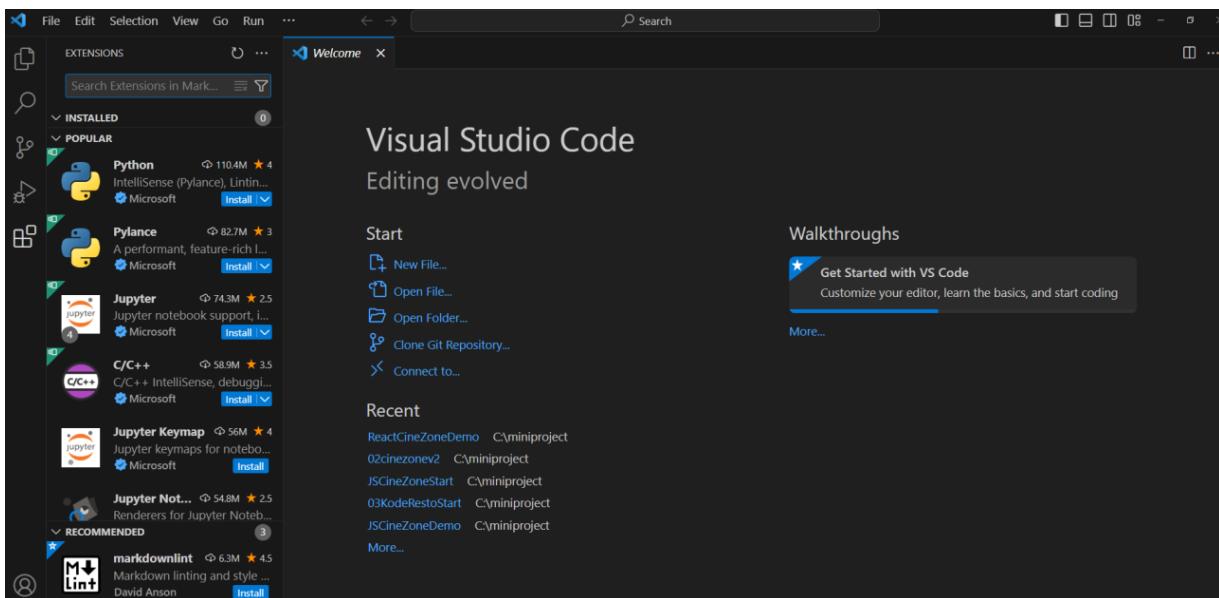
Congratulations, you now have live server on your local machine.

Prettier Code Formatter

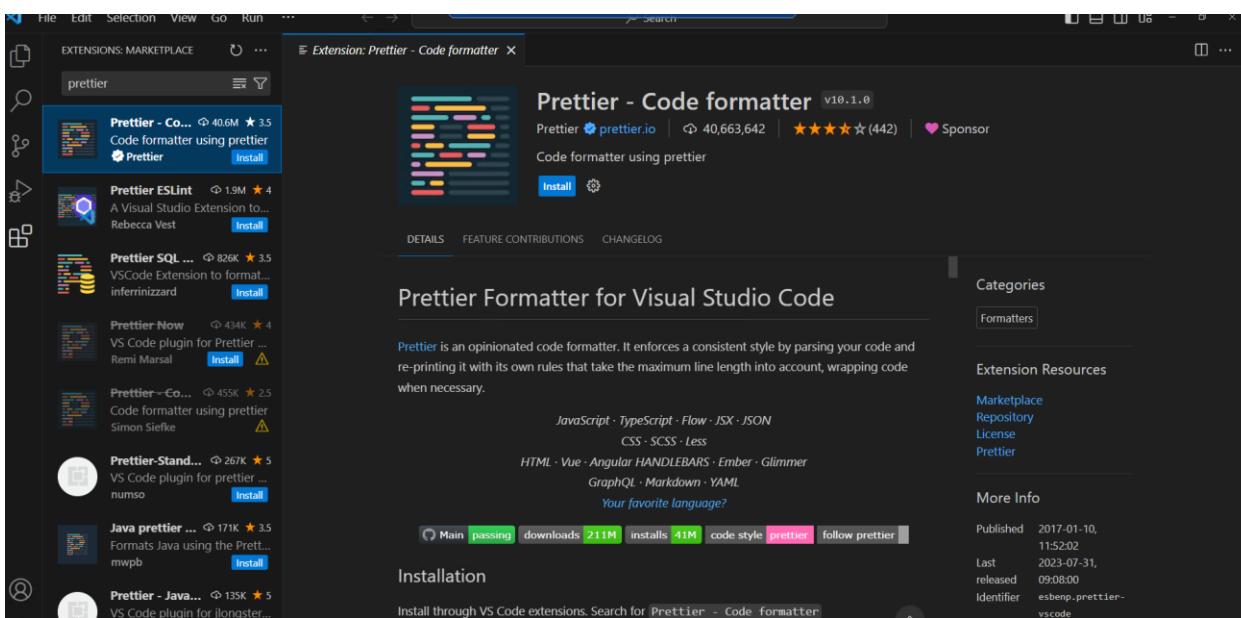
Prettier is an indispensable code formatter extension for Visual Studio Code that automatically formats code to ensure consistency and readability. By installing Prettier, developers can save time and reduce the effort involved in maintaining a clean and standardized codebase. It helps in enforcing a consistent style by parsing the code and re-printing it with its own rules, which takes the style of the input code into account. This leads to more maintainable and easier-to-read code structures, particularly beneficial in team environments where multiple developers contribute to the same project. Prettier supports many languages and integrates seamlessly with VS Code, making it a crucial tool for developers who value efficiency and aesthetic code presentation.



To install prettier, open VSCode and select Extensions.



Search for Prettier – Code Formatter and select Install

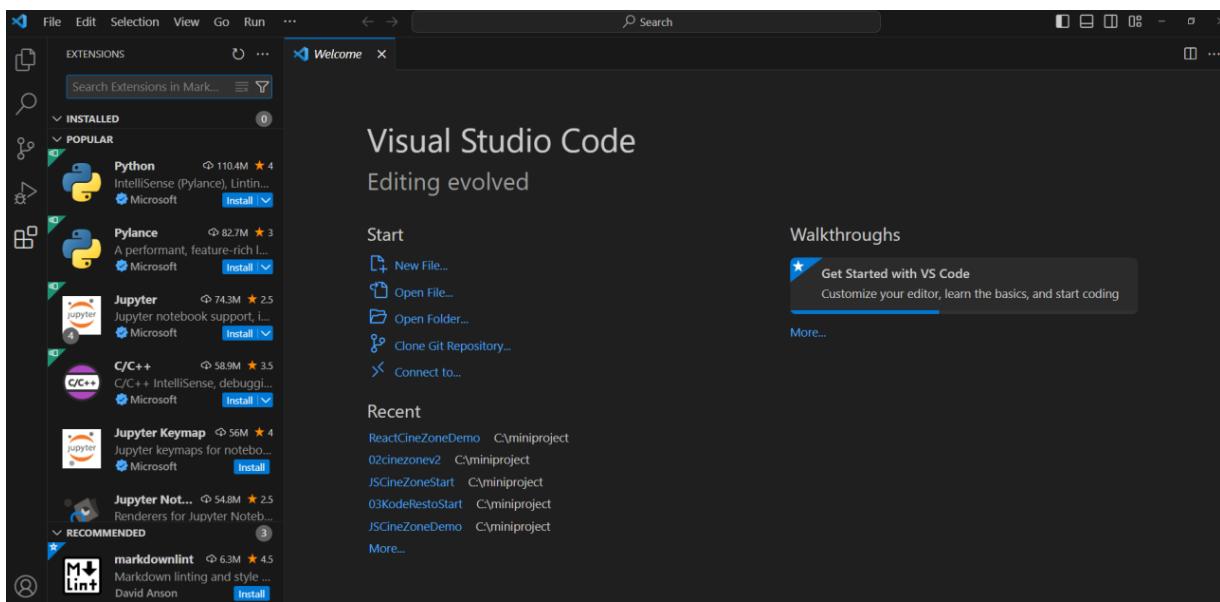


Congratulations. You now have Prettier on your local machine.

JavaScript (ES6) code snippets

JavaScript (ES6) code snippets in Visual Studio Code are a powerful tool for developers, significantly speeding up the coding process. ES6, or ECMAScript 2015, introduced many enhancements to the JavaScript language, including new syntax and features for writing more concise and maintainable code. By using ES6 snippets, developers can quickly insert common code patterns and structures, reducing typing effort and minimizing potential errors. These snippets cover various aspects of modern JavaScript development, such as arrow functions, class declarations, template literals, and destructuring assignments. Integrating ES6 snippets into the development workflow in VS Code not only boosts productivity but also helps in adopting modern JavaScript practices, making it a valuable asset for any JavaScript developer aiming to write efficient and up-to-date code.

To install JavaScript (ES6) code snippets, open VSCode and select Extensions.



Search for JavaScript (ES6) code snippets and select Install

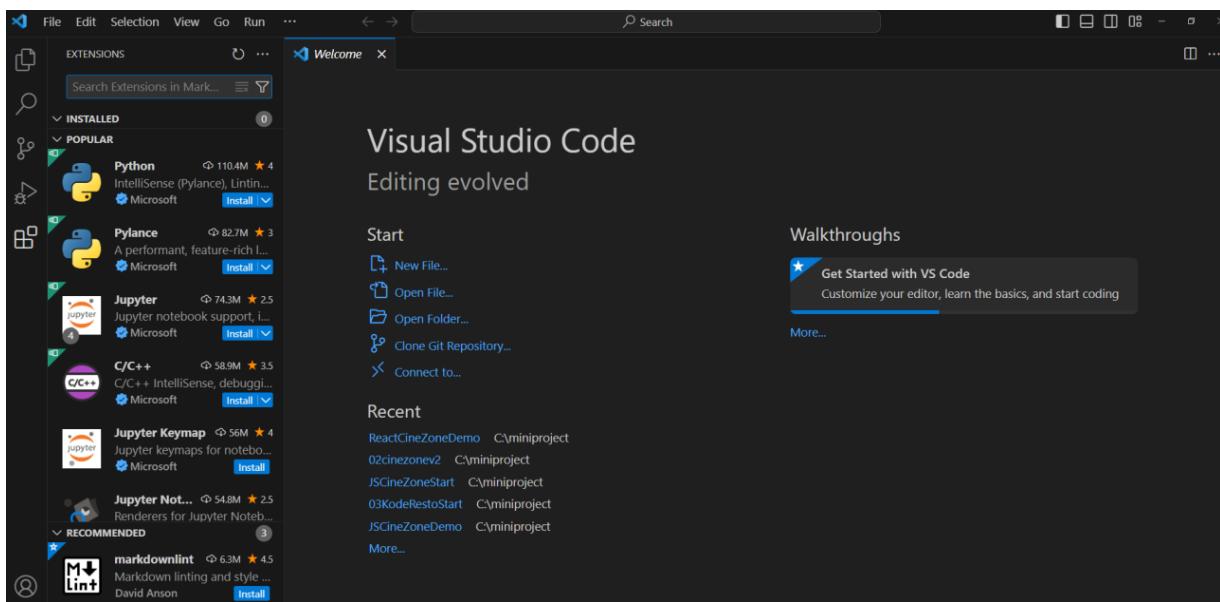


Congratulations, you now have JavaScript(ES6) code snippets on your local machine.

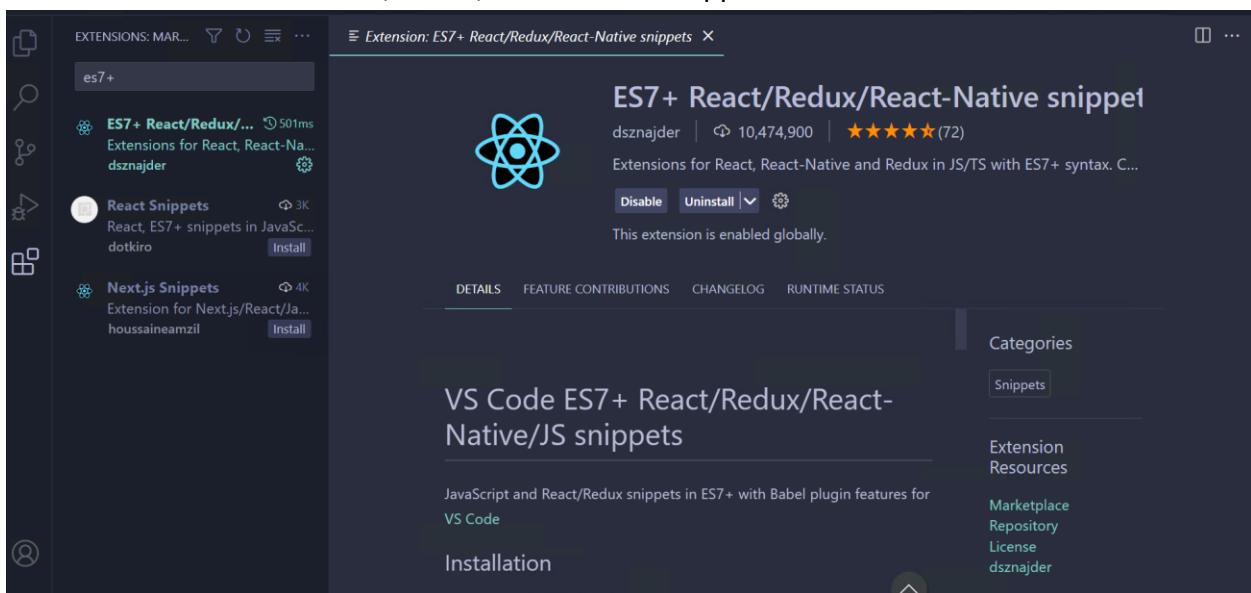
ES7+ React/Redux/React-Native Snippets

ES7+ React/Redux/React-Native snippets for Visual Studio Code are a crucial toolset for modern web and mobile app developers. These snippets provide quick access to frequently used React, Redux, and React Native code structures and patterns, compatible with ES7 and newer JavaScript versions. They enable developers to rapidly scaffold components, hooks, reducers, and actions, significantly reducing the time and effort needed to write boilerplate code. This efficiency is particularly beneficial in complex applications where consistent implementation of React and Redux patterns is essential. By streamlining the coding process, these snippets not only enhance productivity but also help maintain code quality and conformity to the latest development standards in the React ecosystem. For developers working in fast-paced environments or those new to React and Redux, these snippets are invaluable tools for accelerating development and embracing best practices in the realm of modern JavaScript frameworks.

To install ES7+ React/Redux/React-Native snippets extension, open VSCode and select extensions



Search for ES7+ React/Redux/React-Native Snippets and select install

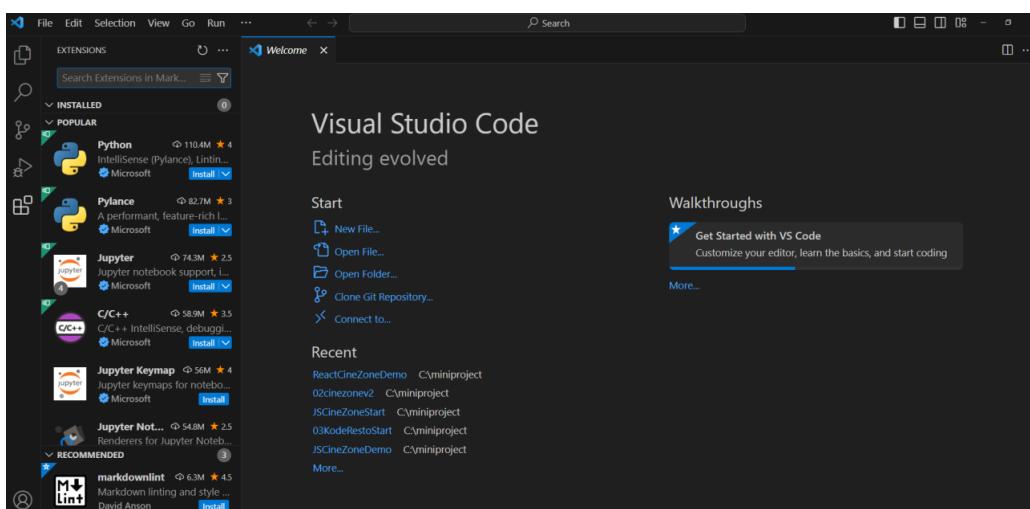


PHP Intelephense

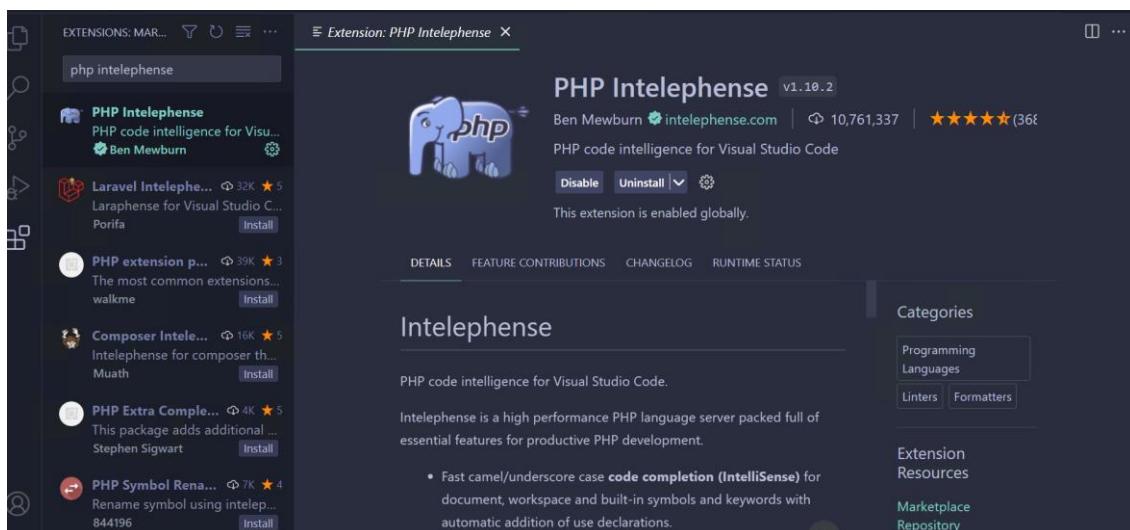
PHP Intelephense is a high-performance PHP language server extension for Visual Studio Code, widely acclaimed for its comprehensive capabilities in enhancing PHP development. This extension provides advanced features such as intelligent code completion, fast navigation, detailed symbol information, and powerful code analysis. By leveraging its sophisticated static analysis tools, PHP Intelephense detects errors and inefficiencies in code, offers suggestions for improvement, and ensures compatibility with PHP language standards. Its deep understanding of PHP syntax and language constructs greatly aids in refactoring, understanding complex

codebases, and writing more maintainable and error-free code. PHP Intelephense stands out for its speed and accuracy, making it a preferred choice for PHP developers seeking an efficient and productive coding environment in VS Code. Whether you're working on large-scale PHP projects or smaller web applications, PHP Intelephense enhances coding proficiency and elevates the overall development experience.

To install PHP Intelephense, open VSCode and select extensions



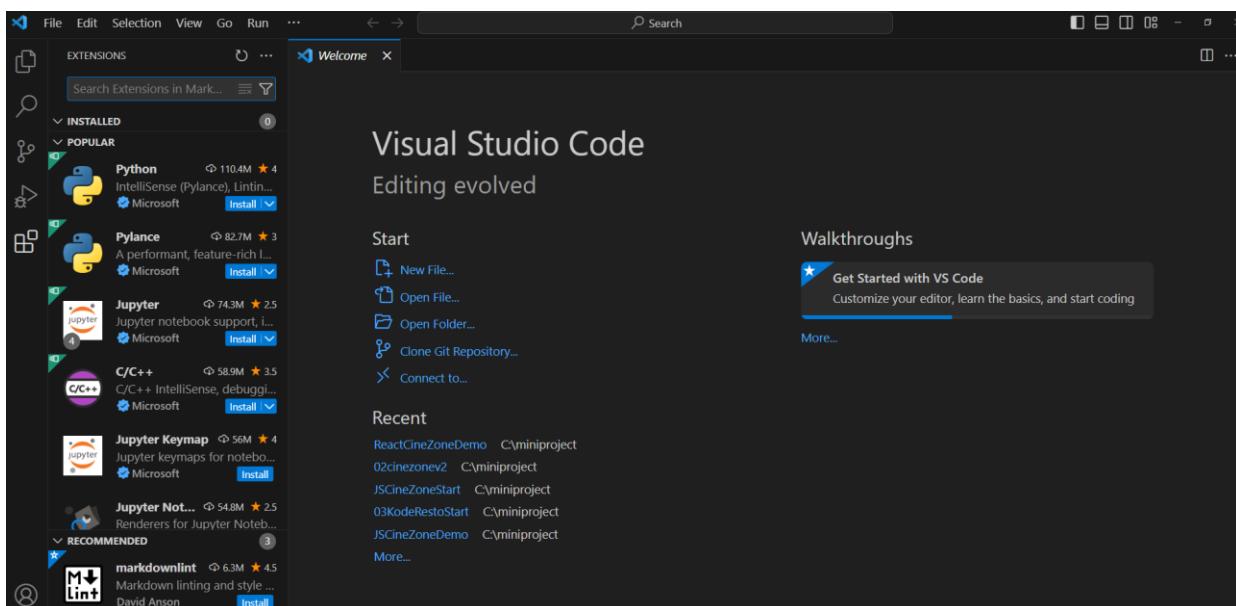
Search for PHP Intelephense and select install



PHP Namespace Resolver

The PHP Namespace Resolver is a highly beneficial extension for Visual Studio Code, designed to streamline namespace management in PHP development. Namespaces in PHP are essential for organizing code and preventing naming conflicts in larger applications. This extension aids developers by automatically adding and optimizing namespace declarations and use statements with ease. It efficiently resolves the correct namespaces for classes, allowing for quick insertion and organization. This feature is particularly useful in large projects with complex directory structures, as it helps maintain clarity and reduces the likelihood of errors related to incorrect namespace use. By simplifying namespace management, the PHP Namespace Resolver extension significantly enhances coding efficiency and accuracy, making it an essential tool for PHP developers in VS Code.

To install PHP Namespace Resolver, open VSCode and select extensions



Search for PHP Namespace Resolver and select install



Google Chrome Extensions

Embarking on the path to becoming a skilled web developer, the selection of appropriate tools plays a pivotal role. Google Chrome extensions such as JSON Formatter, React Developer Tools, and PHP View stand as essential instruments tailored to meet distinct requirements in the realm of web development.

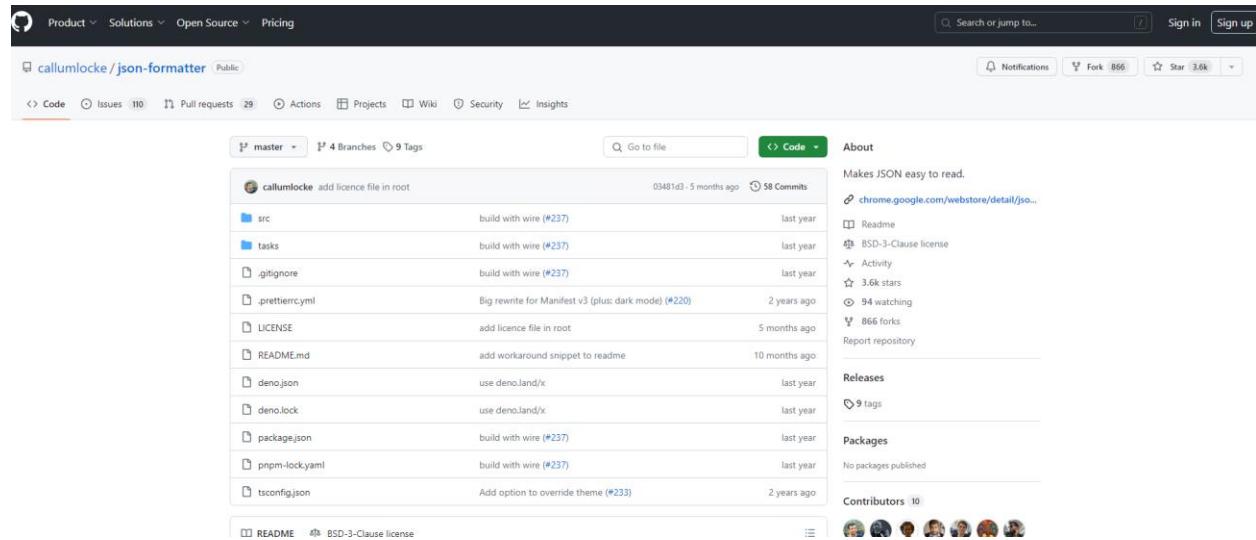
It's important to note that while there is a vast array of other extensions available, these selected ones represent the fundamental tools we will initially install. They provide a solid foundation for any aspiring web developer, addressing key aspects of development and debugging in a user-friendly manner.

JSON Formatter

JSON Formatter is a highly useful Google Chrome extension for web developers, particularly when working with JSON, a popular data interchange format. This tool is designed to beautify and make JSON data easier to read and interpret directly in the web browser. When dealing with APIs or server responses that return JSON, the raw data can be challenging to understand due to its compact and text-based nature. JSON Formatter addresses this by visually formatting JSON data into a more readable and collapsible tree format with syntax highlighting. This enhanced view aids in quicker debugging, better data analysis, and simplifies the process of developing and testing applications that use JSON. The extension is straightforward to use and

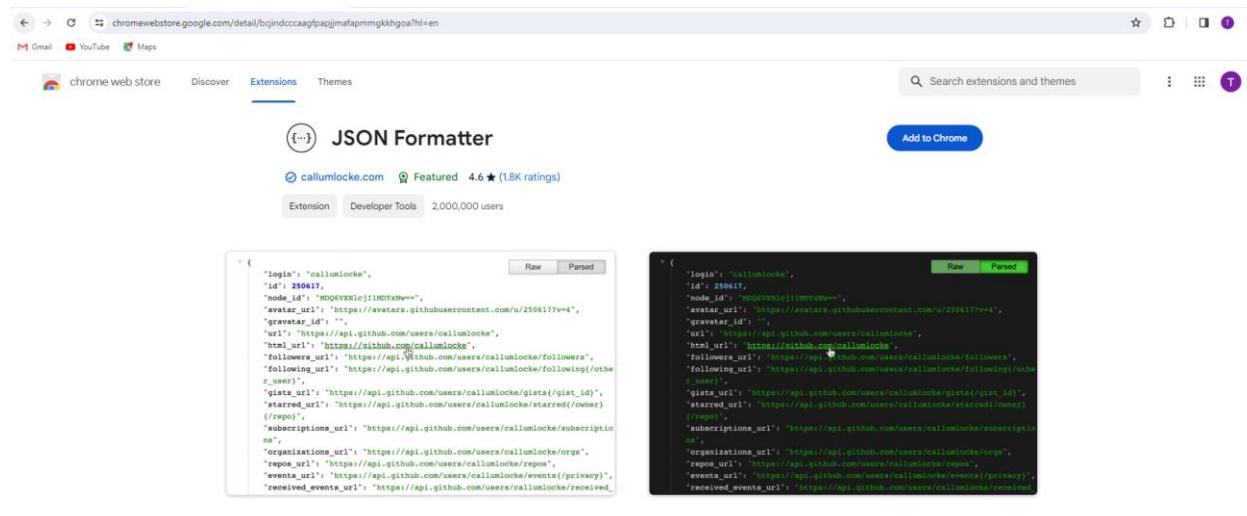
becomes an indispensable tool in a web developer's arsenal, especially when working extensively with JSON data in modern web applications.

To install JSON Formatter open google chrome and go to the url: <https://github.com/callumlocke/json-formatter> click the link to the extension:



The screenshot shows the GitHub repository page for 'callumlocke/json-formatter'. The repository has 4 branches and 9 tags. The commit history shows 58 commits over the last year. The repository is public and has a BSD-3-Clause license. It has 866 forks and 94 watchers. The repository is easy to read and includes a README and a BSD-3-Clause license file.

Click Add to Chrome



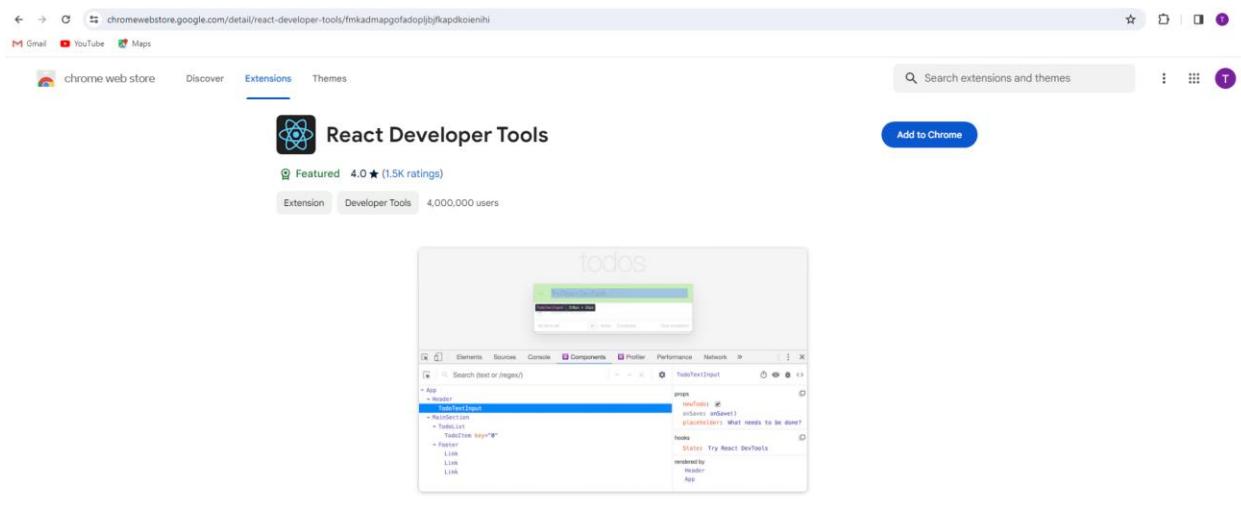
The screenshot shows the Chrome Web Store page for 'JSON Formatter'. The extension has 1.8K ratings and 2,000,000 users. It shows two examples of JSON data being formatted, demonstrating its functionality. The extension is available for download from the Chrome Web Store.

React Developer Tools

React Developer Tools is a must-have Chrome extension for developers working with React, a popular JavaScript library for building user interfaces. This powerful tool significantly enhances the debugging process and provides deeper insights into React applications. It integrates seamlessly into the Chrome Developer Tools, offering a dedicated React tab that allows developers to inspect the React component hierarchies in the browser. This includes viewing the current props, state, and context of each component, which is invaluable for understanding and diagnosing issues in complex React applications. Additionally, the extension enables developers to observe how components interact and update in real-time, facilitating a more efficient and effective development process. React Developer Tools is not just a debugging aid; it's an educational resource that deepens a developer's understanding of React principles and best practices, making it an essential tool for anyone working in the React ecosystem.

To install React Developer Tools, open your browser and proceed to:

<https://chromewebstore.google.com/detail/react-developer-tools/fmkadmapgofadopljbjfkapdkoienihi> then click Add to Chrome



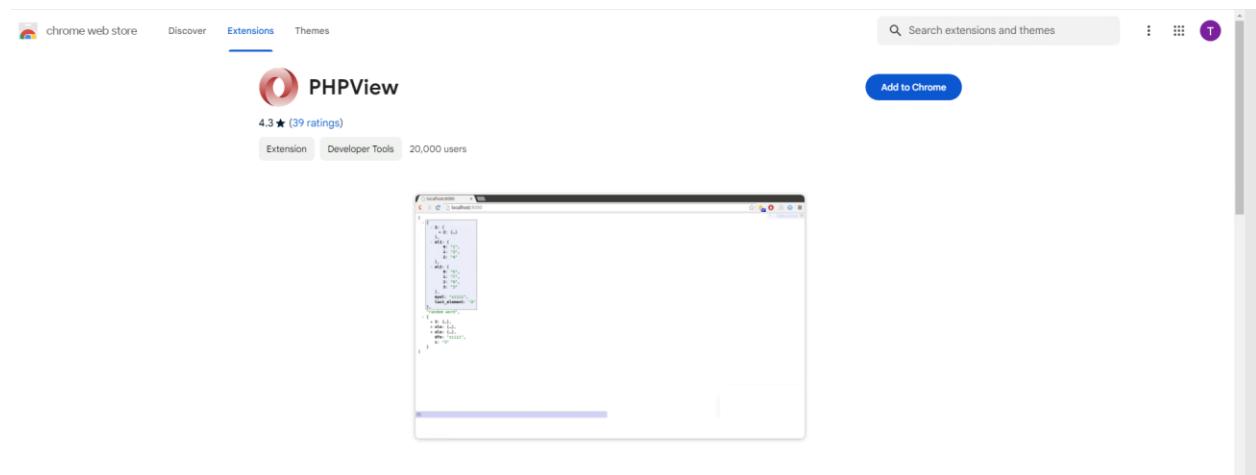
PHP View

PHP View is a practical Chrome extension designed for web developers working with PHP, one of the most widely used server-side scripting languages. This extension simplifies the process of viewing PHP source code directly in the browser. Typically, when PHP code is executed on the server, a browser displays the resulting HTML output, not the underlying PHP code. PHP View addresses this by allowing developers to easily view and analyze the PHP source code of web pages. This functionality is incredibly useful for educational purposes, debugging, and understanding the structure and logic of PHP scripts. By providing a straightforward method to inspect PHP code, PHP View becomes a valuable tool for both novice and experienced PHP developers, enhancing their ability to develop, learn, and debug PHP applications more efficiently.

To install PHP View, on your browser go to:

<https://chromewebstore.google.com/detail/phpview/nlkobfbkblfhlcobdomlhmpbbhmcbkfd>

and click Add to Chrome





IMPORTANT TERMINOLOGIES

Front-end:

The client-side portion of a web application that users interact with directly. It includes HTML, CSS, and JavaScript.

Back-end:

The server-side portion of a web application responsible for processing data and interacting with databases. It typically involves server-side programming languages, frameworks, and databases.

HTML (Hypertext Markup Language):

The standard markup language for creating the structure and content of web pages.

CSS (Cascading Style Sheets):

A stylesheet language used to describe the presentation and appearance of a web page, including layout, colors, and fonts.

JavaScript:

A programming language that enables interactive and dynamic features on web pages. It runs on the client-side and can manipulate HTML elements, handle events, and communicate with servers.

Node.js:

A JavaScript runtime environment that allows developers to execute JavaScript on the server side. It's built on Chrome's V8 JavaScript engine and enables the development of scalable network applications. Node.js uses an event-driven, non-blocking I/O model, making it efficient and suitable for data-intensive real-time applications.

npm (Node Package Manager):

The default package manager for Node.js, providing a repository of JavaScript packages. npm simplifies the process of sharing and reusing code, and it's essential for managing dependencies in Node.js applications. It also runs through the command line and helps in installing, updating, and managing libraries and packages in a Node.js environment.

API (Application Programming Interface):

A set of rules and protocols that allows different software applications to communicate and interact with each other.

HTTP (Hypertext Transfer Protocol):

The protocol used for transmitting data over the internet. It defines how web browsers and servers communicate and exchange information.

Database:

A structured collection of data that is organized and stored for easy access and retrieval. It is commonly used for storing and managing website data.

XAMPP:

A free, open-source cross-platform web server solution stack package, consisting of Apache HTTP Server, MariaDB database, and interpreters for scripts written in PHP and Perl. XAMPP is used to create a local web server environment, which is ideal for testing and development purposes, especially for PHP-based applications.

PHP:

A popular general-purpose scripting language that is especially suited to web development. PHP code is executed on the server, and it is used to create dynamic content on web pages. It can be embedded into HTML code or used in combination with various web template systems, web content management systems, and web frameworks.

Framework:

A pre-built set of tools, libraries, and components that provide a foundation for developing applications. Frameworks simplify and streamline the development process by providing predefined structures and functionalities.

Composer:

A tool for dependency management in PHP, enabling developers to manage the libraries their PHP project depends on. It works by declaring the libraries your project depends on and manages (install/update) them for you. Composer is widely used in modern PHP applications to ensure consistency and manage dependencies efficiently.

Laravel:

A web application framework with expressive, elegant syntax for PHP. Laravel aims to make the development process a pleasing one for the developer without sacrificing application functionality. It provides a rich set of functionalities along with a robust ecosystem and is particularly known for its elegant syntax, modular packaging system, and extensive features such as routing, sessions, caching, and authentication.

Version Control:

A system that records and manages changes to files over time. It allows multiple developers to work on the same codebase, track changes, and collaborate effectively. Git is a popular version control system used in web development.