

How to Open VS Code and Run a Simple JavaScript File

Introduction: What Is VS Code and Why It Helps You

Visual Studio Code is a free code editor from Microsoft. It works on Windows Mac and Linux. It has features that make writing code easier. You get color highlighting helpful suggestions and built in tools. With VS Code you can write JavaScript and many other languages. When you pair it with Node.js you can run code right on your computer. This guide will walk you through opening VS Code and running your first JavaScript file.

How to Open VS Code

1. Find the VS Code Icon
 - On Windows look at your desktop or your taskbar.
 - On Mac look in your Applications folder or Launchpad.
2. Double Click or Click Once and Press Enter
 - Double click the icon on your desktop.
 - Or click once and press Enter if it is on your taskbar or in your dock.
3. Wait for VS Code to Load
 - You will see a welcome screen with icons and options.
 - If you see a popup for updating choose to update or ignore for now.

How to Create and Save a JavaScript File

1. Open a New File
 - Click File in the top menu.
 - Click New File.
2. Select the Language Mode
 - Look at the bottom right corner.
 - You will see Plain Text. Click it.
 - A list will open. Scroll or type JavaScript.
 - Click JavaScript.
3. Write Your First Code
 - In the blank file type the following code:

```
console.log('Hello from VS Code')
```
 - This code prints a message to the console.
4. Save the File

- Click File in the top menu.
- Click Save As.
- In the save dialog choose a folder you can find easily like Documents.
- Name the file hello.js (the js extension tells VS Code it is JavaScript).
- Click Save.

How to Open the Terminal Inside VS Code

1. Open the Terminal Panel
 - Click View in the top menu.
 - Click Terminal.
 - A panel opens at the bottom with a prompt.
2. Check Your Current Folder
 - The terminal shows a folder path.
 - If you are not in the folder where you saved hello.js you need to change folder.
3. Change to the Right Folder
 - Type cd followed by the path to your folder. For example:

```
cd Documents
```

- Press Enter.
- Now the prompt shows that you are in Documents.

How to Run the File Using Node.js

1. Run the File
 - In the terminal type node hello.js
 - Press Enter.
2. See the Output
 - You should see Hello from VS Code printed in the terminal.
 - If you see that message it means Node.js ran your code.

Troubleshooting Common Issues

Issue 1: Command Not Found

- If you see node is not recognized type node --version and press Enter.
- If you still get an error it means Node.js is not installed or not in your system path.
- Revisit the Node.js install guide and reinstall.

Issue 2: Wrong Folder

- If the terminal cannot find hello.js you will see an error.
- Make sure you saved the file in the folder you are in.
- Use the cd command to move to the correct folder.

Issue 3: Typo in File Name

- If you named the file Hello.js with a capital H you must type node Hello.js
- File names are case sensitive on some systems.

Issue 4: Missing .js Extension

- If you saved the file as hello without .js the node command will not run.
- Always include .js at the end.

Tips for Experimenting with More Code

- Try console.log with other messages.

```
console.log('Today is a great day to code')
```

- Create more files like test.js and run them.
- Use simple math in your code.

```
console.log(2 + 3)
```

- Save often and run your code after each change.
- Explore built in JavaScript functions like Date.

```
console.log(new Date())
```

Common Mistakes to Avoid

- Forgetting to save the file before running it.
- Leaving the terminal in the wrong folder.
- Typing the wrong file name in the node command.
- Using quotes that do not match like opening with single quote and closing with double quote.

```
console.log("Mixing quotes") // This will cause an error
```

Wrap Up and Encouragement

You have opened VS Code created and saved a JavaScript file opened the terminal and run your code. You saw your message printed on screen. This is a big first step in your coding journey. Keep playing with code. Try new console.log messages math expressions and simple functions. Over time you will feel more at ease with VS Code and Node.js. Remember to take breaks and ask for help when you need it. You are building important skills and every step counts. Happy coding!