

This document provides a guide to installing Visual Studio Code (VS Code) and configuring it for Java development.

Part 1: Installing Visual Studio Code (VS Code)

<https://www.youtube.com/watch?v=naL0cZNQh1g>

1. Download the Installer

1. **Navigate to the Official Download Page:** Open your web browser and go to the official Visual Studio Code website. <https://code.visualstudio.com/>
2. **Select Your System:** Click the prominent blue download button for your specific operating system (Windows, macOS, or Linux). This will download the installer file (e.g., VSCodeUserSetup-x64-*.exe on Windows, or a .zip/.dmg on Mac).

2. Run the Installation

1. **Launch the Installer:** Double-click the downloaded file to start the installation process.
2. **Accept the Agreement:** Review and accept the License Agreement.
3. **Choose Installation Options:**
 - **Destination Folder:** It's usually safe to leave the default location.
 - **Additional Tasks (Windows/Linux): Crucially, ensure the "Add to PATH" option is checked.** This allows you to open VS Code quickly from your terminal or command prompt by typing code.
4. **Finish:** Click **Install**, and once complete, select **Launch Visual Studio Code**.

Part 2: Configuring VS Code for Java

To successfully run Java code in VS Code, you need two things: a Java Development Kit (JDK) on your system, and the right extensions in VS Code.

https://www.youtube.com/watch?v=1_cF4nJP96c

1. Install the Java Development Kit (JDK)

- **Requirement:** VS Code requires a JDK (version 1.8 or later) to compile and run Java programs. <https://www.oracle.com/java/technologies/downloads/>

- To verify installation, run the command “java -version” and “javac -version”
 - If successful, you should see something like “openjdk version “21.0.1” and “javac 25”.
 - If unsuccessful, you may need to add the JDK to your system PATH
 - https://www.youtube.com/watch?v=1_cF4nJP96c (2:00-3:40)

2. Install the Extension Pack for Java

1. Open Extensions View:

- In VS Code, click the **Extensions** icon (the four squares) in the left-hand sidebar, or press Ctrl+Shift+X (or Cmd+Shift+X on Mac).
- This pack includes tools like Language Support for Java, Debugger for Java, and Maven/Gradle Integration.

2. Search and Install:

- In the search bar, type Extension Pack for Java.
- The result should be published by Microsoft. Click the **Install** button.

3. Run Your First Java Program

1. **Create a Folder:** Create a new folder on your computer for your Java project and open it in VS Code (**File > Open Folder...**).

2. **Create a File:** In the Explorer view, create a new file named App.java.

3. Write Code:

```
1. public class App {
    public static void main(String[] args) {

        System.out.println("Hello World!");
    }
}
```

4. **Run:** Click the **Run** button (a small green play icon) that appears above the main method. The output will appear in the VS Code terminal.

1. If no Run button appears, you can right-click anywhere in the editor and select “Run Java”