VSCode Extensions for Development

This guide will help you install essential extensions for various development environments in Visual Studio Code.

List of Common extensions for Developers

Language	Extension Name	Publisher
Java	Extension Pack for Java	Microsoft
Python	Python	Microsoft
Spring Boot	Spring Boot Extension Pack	VMWare
Python	Python	Microsoft
NodeJS	Node.js Extension Pack	Wade Anderson
Dotnet	C#	Microsoft
Docker	Docker	Microsoft
Kubernetes	Kubernetes	Microsoft

1. Java Development

To set up a Java development environment in VSCode, install the following extensions:

- **Extension Pack for Java**: This pack includes essential tools like Language Support for Java(TM) by Red Hat, Debugger for Java, Java Test Runner, Maven for Java, and Visual Studio IntelliCode.

Steps:

1. Open VSCode.
2. Go to the Extensions view by clicking on the Extensions icon in the Activity Bar on the side of the window or by pressing `Ctrl+Shift+X`.
3. Search for "Extension Pack for Java".
4. Click "Install" on the Extension Pack for Java.

- **Spring Boot Extension Pack**: This pack includes essential tools like Spring Boot Tools, Spring Initializr Java Support, and Spring Boot Dashboard.

Steps:

1. Open VSCode.
2. Go to the Extensions view by clicking on the Extensions icon in the Activity Bar on the side of the window or by pressing `Ctrl+Shift+X`.
3. Search for "Spring Boot Extension Pack".
4. Click "Install" on the Spring Boot Extension Pack by Pivotal.

2. Python Development

For Python development, you need the following extension:

- **Python**: This extension provides rich support for the Python language, including features like IntelliSense, linting, debugging, and more.

Steps:

1. Open VSCode.
2. Go to the Extensions view.
3. Search for "Python".
4. Click "Install" on the Python extension by Microsoft.

- **Installing Python Linter**

To enhance your Python development experience, you can install a linter like `pylint` to help you identify and fix code issues.

Steps:

1. Open the terminal in VSCode by pressing `` `Ctrl+` ``.
2. Install `pylint` by running the command:

```
pip install pylint
```

3. Configure the linter in VSCode:
   - Open the Command Palette by pressing `Ctrl+Shift+P`.
   - Type "Python: Select Linter" and select it.
   - Choose `pylint` from the list.

Now, `pylint` will automatically check your Python code for issues and provide feedback directly in the editor.

3. NodeJS Development

To develop NodeJS applications, install the following extensions:

- **Node.js Extension Pack**: This pack includes Node.js Modules Intellisense, npm, npm Intellisense, and more.

Steps:

1. Open VSCode.
2. Go to the Extensions view.
3. Search for "Node.js Extension Pack".
4. Click "Install" on the Node.js Extension Pack.

4. Dotnet Development

For Dotnet development, you need the following extension:

- **C#**: This extension provides rich support for C# development, including features like IntelliSense, debugging, and more.

Steps:

1. Open VSCode.
2. Go to the Extensions view.
3. Search for "C#".
4. Click "Install" on the C# extension by Microsoft.

- **Installing Dotnet formatter**

To enhance your Dotnet development experience, you can install a linter like `dotnet-format` to help you identify and fix code issues.

Steps:

1. Open VSCode.
2. Open the terminal in VSCode by pressing `` `Ctrl+` ``.
3. Install `dotnet-format` by running the command:

```
dotnet tool install -g dotnet-format
```

4. Configure the linter in VSCode:
    - Open the Command Palette by pressing `Ctrl+Shift+P`.
    - Type "Preferences: Open Settings (JSON)" and select it.
    - Add the following configuration:

```
"dotnet-format.enable": true
```

Now, `dotnet-format` will automatically check your Dotnet code for issues and provide feedback directly in the editor.

5. Docker & Kubernetes

To work with Docker and Kubernetes, install the following extensions:

- **Docker**: This extension makes it easy to create, manage, and debug containerized applications.
- **Kubernetes**: This extension provides a rich experience for developing and managing Kubernetes clusters.

Steps:

1. Open VSCode.
2. Go to the Extensions view.

3. Search for "Docker".
4. Click "Install" on the Docker extension by Microsoft.
5. Search for "Kubernetes".
6. Click "Install" on the Kubernetes extension by Microsoft.