

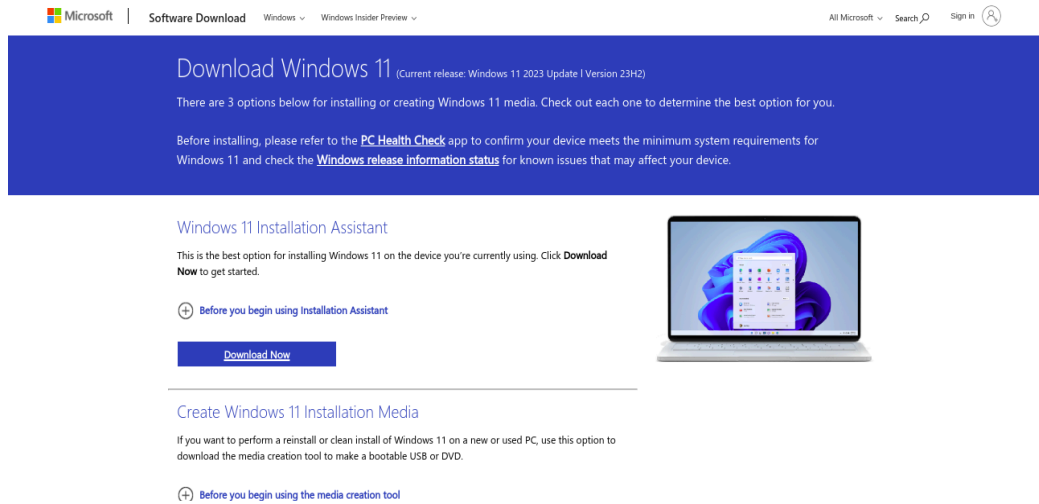
Setting Up Developer Environment

1. Select Your Operating System (OS)

Download and Install Windows 11:

1. Go to the Windows 11 download page:

<https://www.microsoft.com/software-download/windows11>



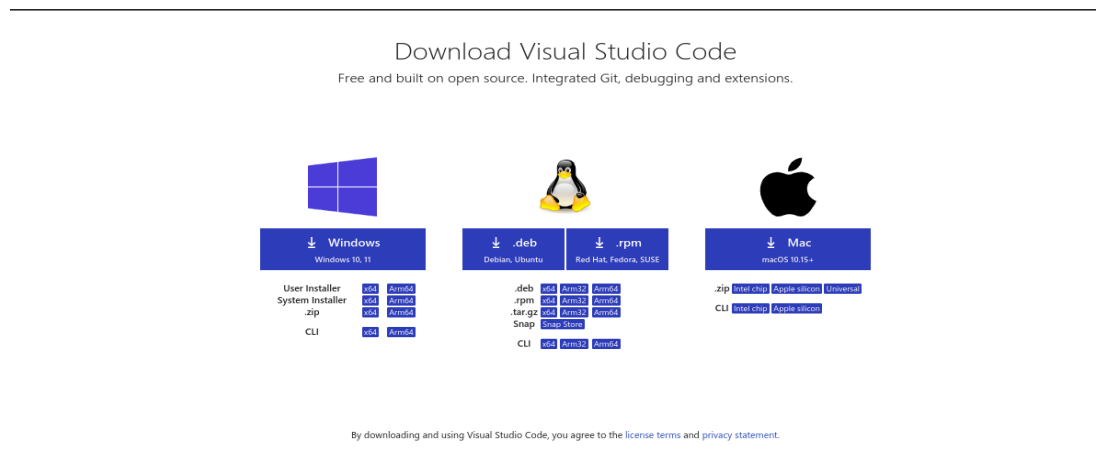
2. Click on "Download now" and follow the instructions to create installation media.

3. Boot from the installation media and follow the prompts to install Windows 11.

2. Install an Integrated Development Environment (IDE)

Download and Install Visual Studio Code:

1. Go to the Visual Studio Code download page: <https://code.visualstudio.com/Download>

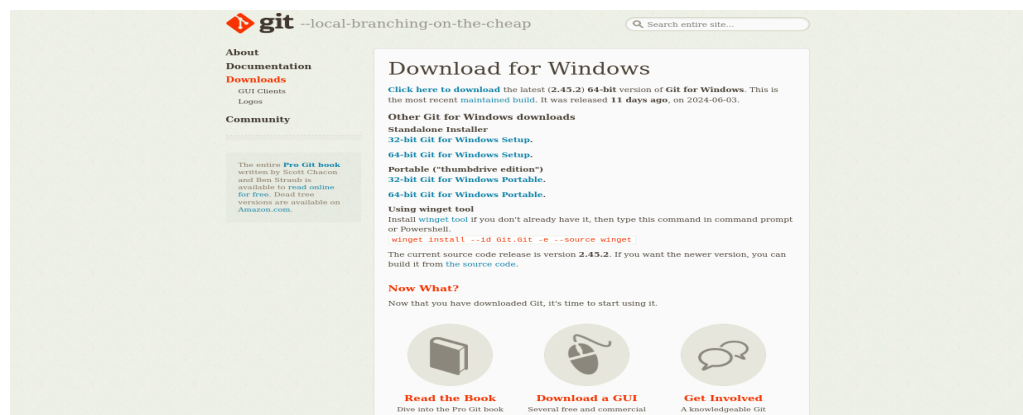


2. Choose the version for Windows and download the installer.
3. Run the installer and follow the installation wizard to complete the setup.

3. Set Up Version Control System

Install Git:

1. Go to the Git download page: <https://git-scm.com/download/win>



2. Download the installer and run it, following the installation steps.

Configure Git:

1. Open a terminal (Command Prompt or Git Bash) and run the following commands:

'''

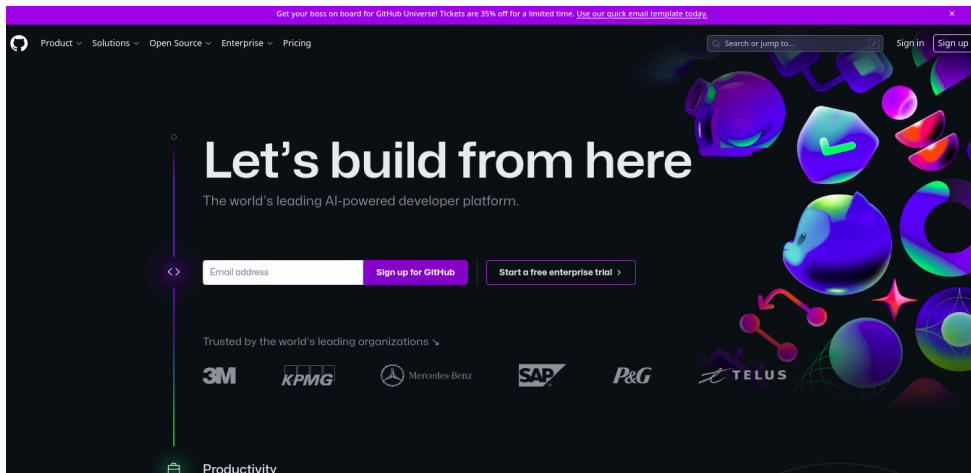
git config --global user.name "Benard Karanja"

git config --global user.email "benardopeter41@gmail.com"

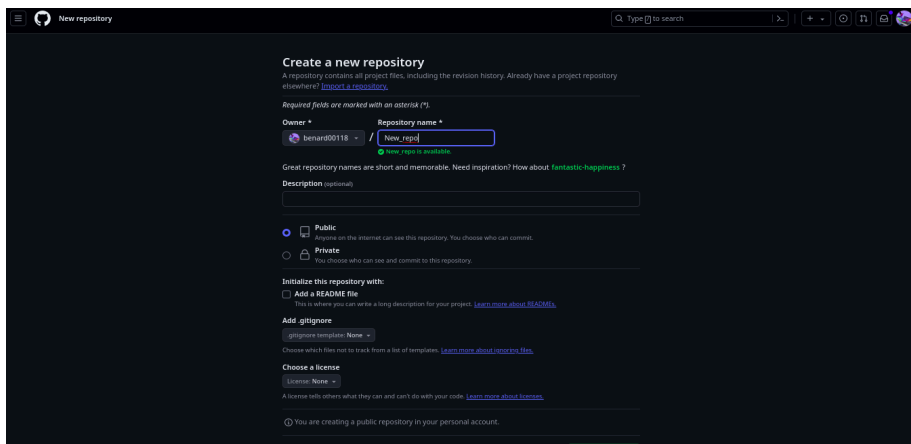
'''

Create a GitHub Account:

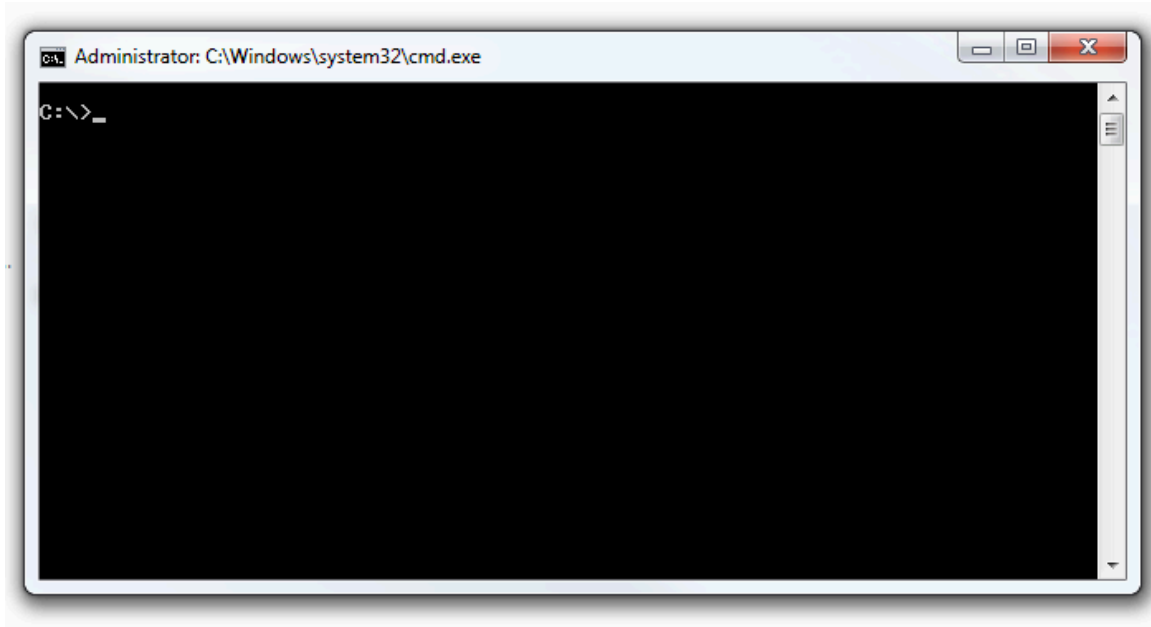
1. Go to GitHub: <https://github.com> and sign up for a new account.



Initialize a Git Repository and Make Your First Commit:



1. Navigate to your project directory in the terminal.



2. Initialize a Git repository:

```
'''  
git init  
'''
```

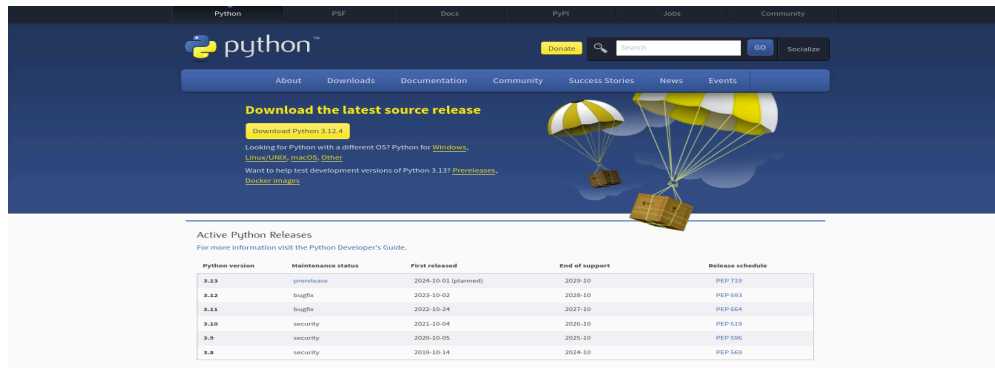
3. Create a new file and make your first commit:

```
'''  
echo "# MyProject" >> README.md  
git add README.md  
git commit -m "First commit"  
'''
```

4. Install Necessary Programming Languages and Runtimes

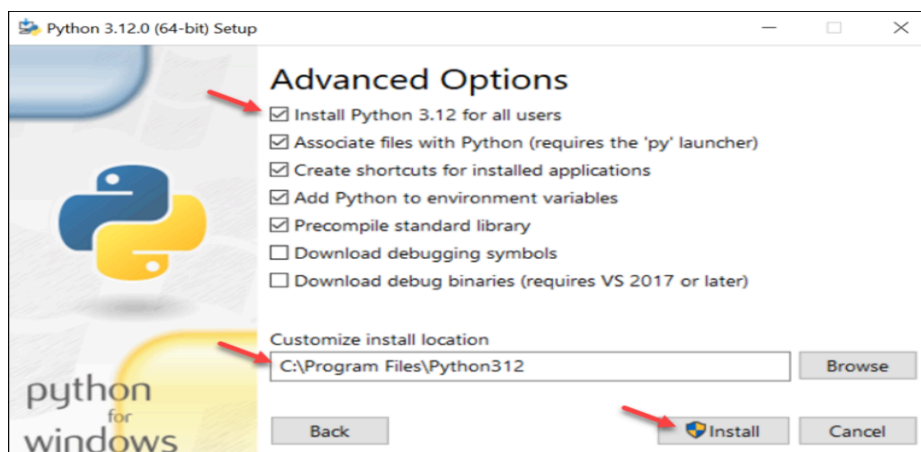
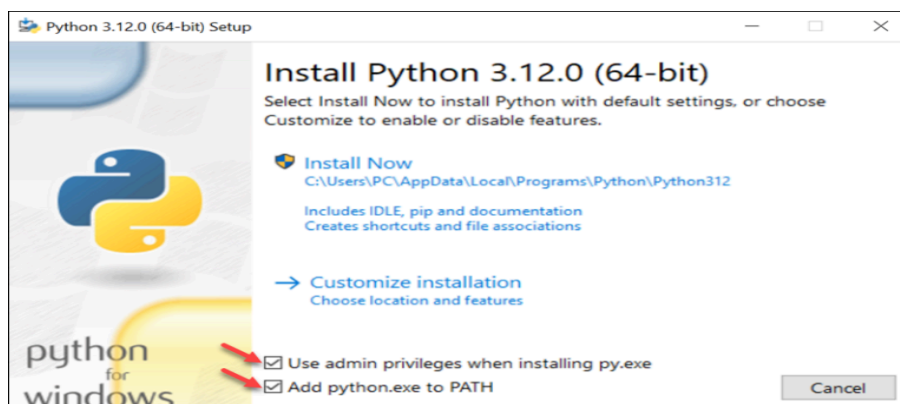
Install Python:

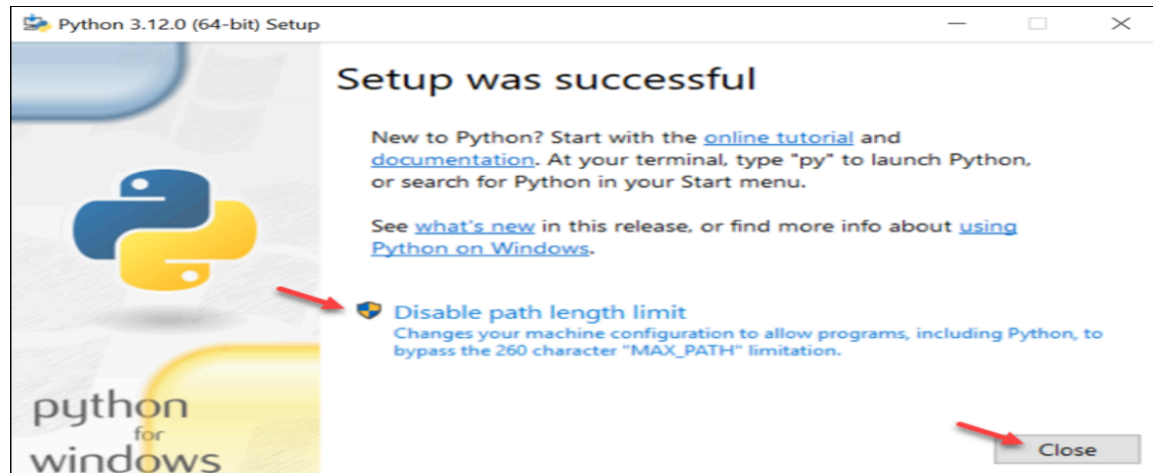
1. Go to the Python download page: <https://www.python.org/downloads/>



2. Download the installer and run it, ensuring you check the option to add Python to your PATH.

3. Follow the installation steps.





5. Install Package Managers

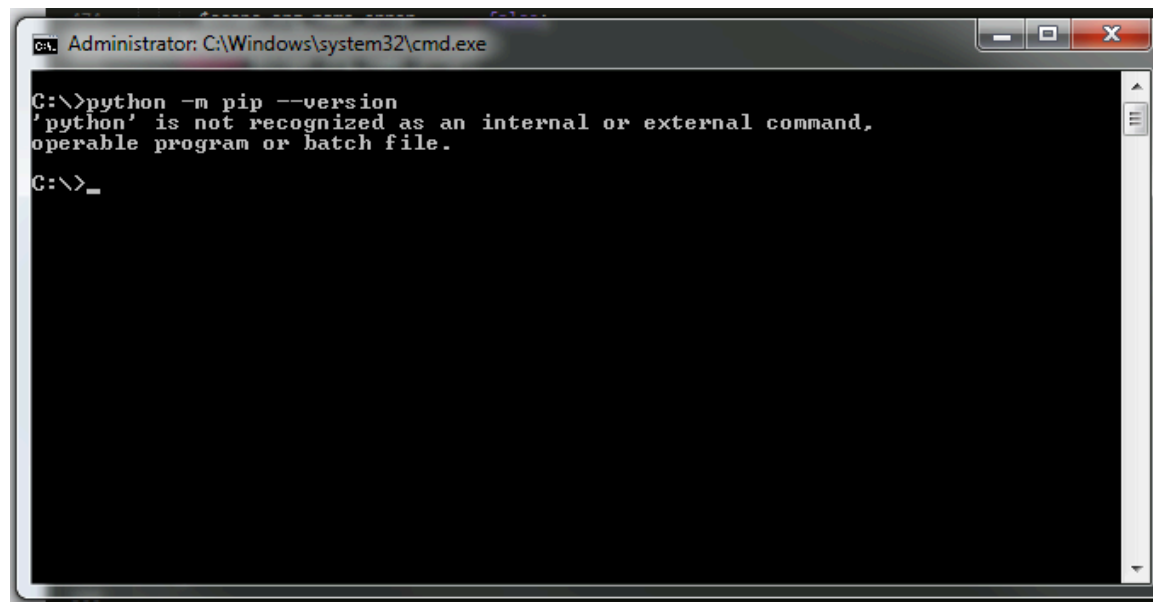
Install pip for Python:

- Pip is included with Python installation by default. You can verify it by running:

'''

pip --version

'''

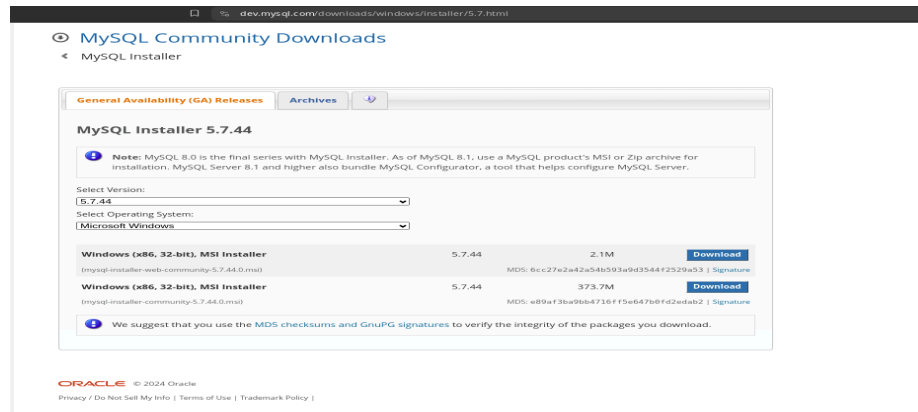


6. Configure a Database (MySQL)

Download and Install MySQL:

1. Go to the MySQL download page:

<https://dev.mysql.com/downloads/windows/installer/5.7.html>

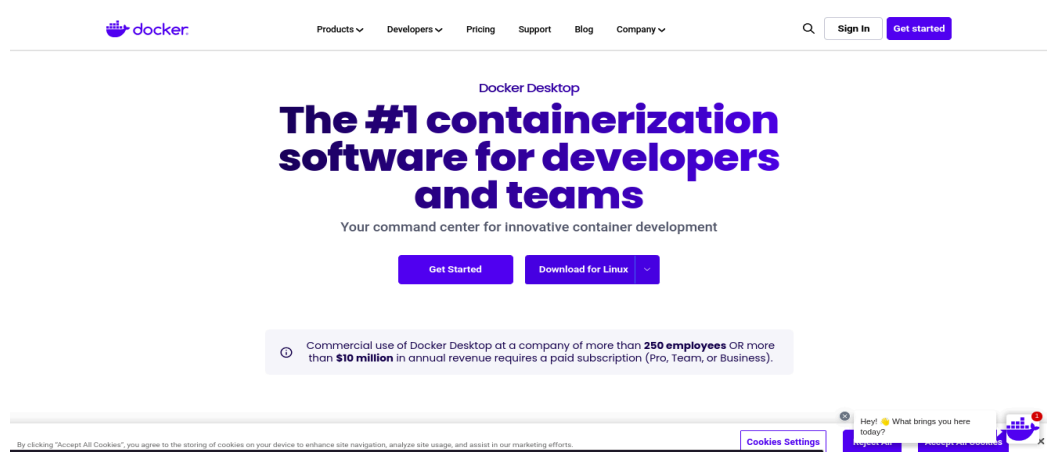


2. Download the MySQL Installer and run it.
3. Follow the installation steps, choosing the appropriate configuration for your setup.

7. Set Up Development Environments and Virtualization (Optional)

Install Docker:

1. Go to the Docker download page: <https://www.docker.com/products/docker-desktop>




2. Download Docker Desktop for Windows and install it.
3. Follow the setup instructions to get Docker up and running.

8. Explore Extensions and Plugins

Install Extensions in Visual Studio Code:

1. Open Visual Studio Code and go to the Extensions view (Ctrl+Shift+X).
2. Search for and install useful extensions like:

-Github Classroom



GitHub Classroom

VS 9.4 Preview

GitHub [github.com](#) | 187,979 | ★★★★★ (9)

Browse, edit and collaborate on your GitHub Classroom assignments

[Disable](#) [Uninstall](#)

⚠ This extension is deprecated as it is no longer being maintained.

DETAILS FEATURES CHANGELOG EXTENSION PACK

GitHub Classroom

This extension is no longer in active development. The one click "Open in VS Code" experience for opening the assignment from your GitHub repository will still work, but some features of the extension may not work as expected.

The **GitHub Classroom** extension allows you to browse your classroom assignments, and begin working on them in a single click. You can **open assignments**, sync your progress back to GitHub, and see **auto-grading** test results, directly within Visual Studio Code. When working on a group assignment, you can view the other students in your group, and **collaboratively edit and debug** together in real-time. Additionally, you can **view and reply to feedback** that your teacher/TA has left, without having to ever leave your editor.

Prerequisites

Before installing this extension, make sure you have the following prerequisites:

1. An active [GitHub account](#)
2. Membership in one or more [GitHub Classroom](#) courses
3. [Git](#) installed on your computer

This extension allows you to get started without having any Git experience. So don't worry about needing to learn anything in order start working on an assignment.

Getting Started

Once you've satisfied the prerequisites, perform the following steps to get started:

1. [Install this extension](#) and reload VS Code

Categories

Education


Resources

Marketplace
Issues
License
GitHub

More Info

Published	2021-08-09, 19:08:11
Last released	2023-11-02, 18:44:58
Last updated	2024-06-05, 13:49:24
Identifier	github-classroom

-Github Pull request



GitHub Pull Requests

VS 88.1

GitHub [github.com](#) | 21,800,654 | ★★★★★ (164)

Pull Request and Issue Provider for GitHub

[Disable](#) [Uninstall](#) [Switch to Pre-Release Version](#)

This extension is enabled globally.


DETAILS FEATURES CHANGELOG DEPENDENCIES

GitHub Pull Requests

Review and manage your GitHub pull requests and issues directly in VS Code

This extension allows you to review and manage GitHub pull requests and issues in Visual Studio Code. The support includes:

- Authenticating and connecting VS Code to GitHub and GitHub Enterprise.
- Listing and browsing PRs from within VS Code.
- Reviewing PRs from within VS Code with in-editor commenting.
- Validating PRs from within VS Code with easy checkouts.
- Terminal integration that enables UI and CLIs to co-exist.
- Listing and browsing issues from within VS Code.
- Hover cards for "@" mentioned users and for issues.
- Completion suggestions for users and issues.
- A "Start working on issue" action which can create a branch for you.
- Code actions to create issues from "todo" comments.



Categories

Other


Resources

Marketplace
Issues
Repository
License
GitHub

More Info

Published	2018-09-08, 02:09:31
Last released	2024-05-31, 11:28:24
Last updated	2024-06-05, 12:49:24
Identifier	github-vscode-pull-request-github

-Python



Python

VS 2024.18.10

Microsoft [microsoft.com](#) | 125,069,660 | ★★★★★ (192)

Python language support with extension access points for IntelliSense (Pylance), Debugging (Python Debugger), lint...

[Disable](#) [Uninstall](#)

This extension is enabled globally.

DETAILS FEATURES CHANGELOG EXTENSION PACK

Python extension for Visual Studio Code

A Visual Studio Code extension with rich support for the Python language (for all actively supported Python versions), providing access points for extensions to seamlessly integrate and offer support for IntelliSense (Pylance), debugging (Python Debugger), formatting, linting, code navigation, refactoring, variable explorer, test explorer, and more!

Support for vscode.dev

The Python extension does offer *some* support when running on `vscode.dev` (which includes `github.dev`). This includes partial IntelliSense for open files in the editor.

Installed extensions

The Python extension will automatically install the following extensions by default to provide the best Python development experience in VS Code:

- **Pylance** - to provide performant Python language support
- **Python Debugger** - to provide a seamless debug experience with debugpy

These extensions are optional dependencies, meaning the Python extension will remain fully functional if they fail to be installed. Any or all of these extensions can be [disabled](#) or [uninstalled](#) at the expense of some features. Extensions installed through the marketplace are subject to the [Marketplace Terms of Use](#).

Extensibility

The Python extension provides pluggable access points for extensions that extend various feature areas to further enhance your Python development experience. These extensions are all optional and depend on [certain configuration and preferences](#).

Categories

Programming Languages
Debuggers | Other
Data Science
Machine Learning

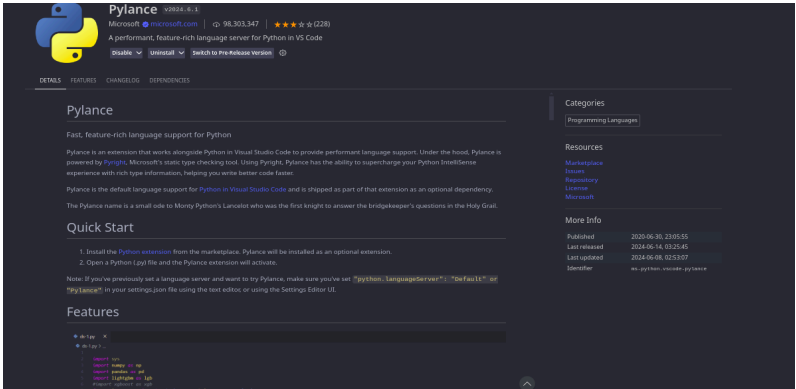
Resources

Marketplace
Issues
Repository
License
Microsoft

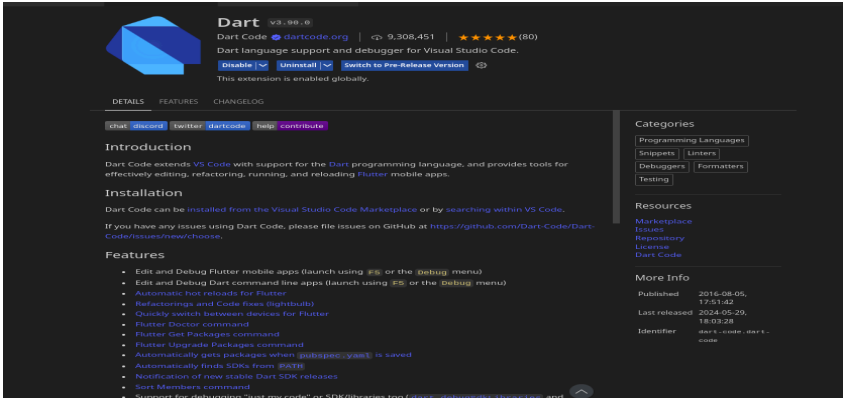
More Info

Published	2016-01-19, 18:03:11
Last released	2024-06-06, 01:36:54
Last updated	2024-06-06, 06:23:38
Identifier	ms-python.python

-Pylance

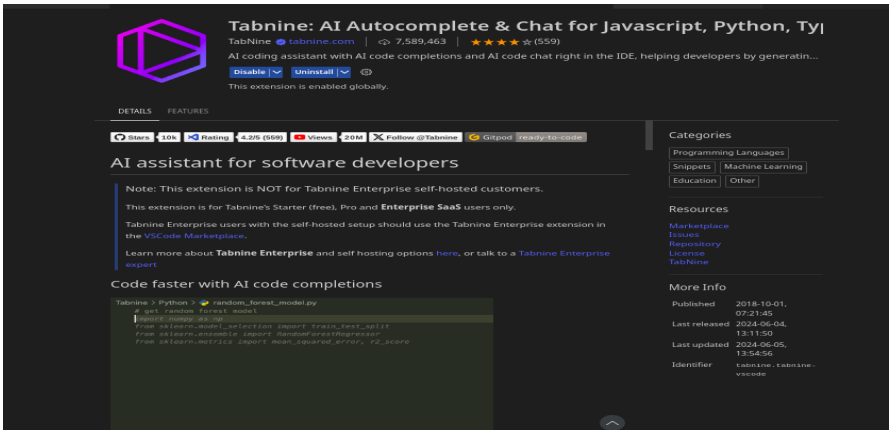


-Dart

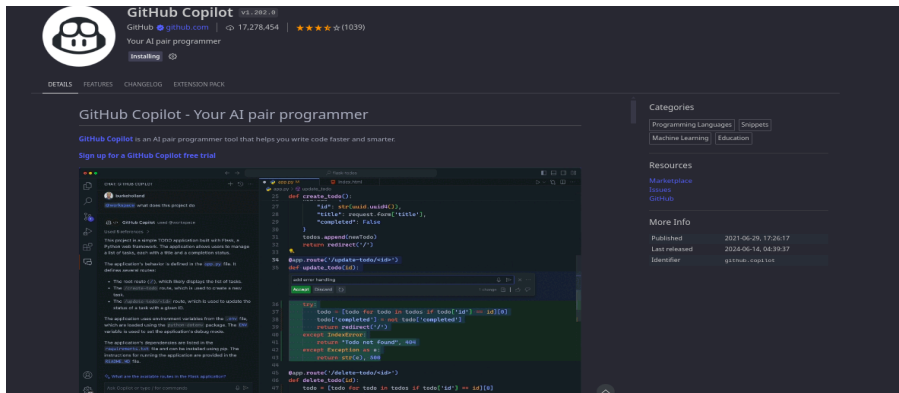


-Tabnine

-Github Copilot



-SQL sever



Challenges and Solutions

Challenges:

User Configuration Errors

- **Challenge:** After installing Git, committing changes failed due to missing user configuration (username and email).

Solution: Configured the user information using:

```
git config --global user.name "My Name"
```

```
git config --global user.email "myemail@gmail.com"
```

Git challenged me in nearly every aspect but I used openAI and the community member to help me overcome them

