

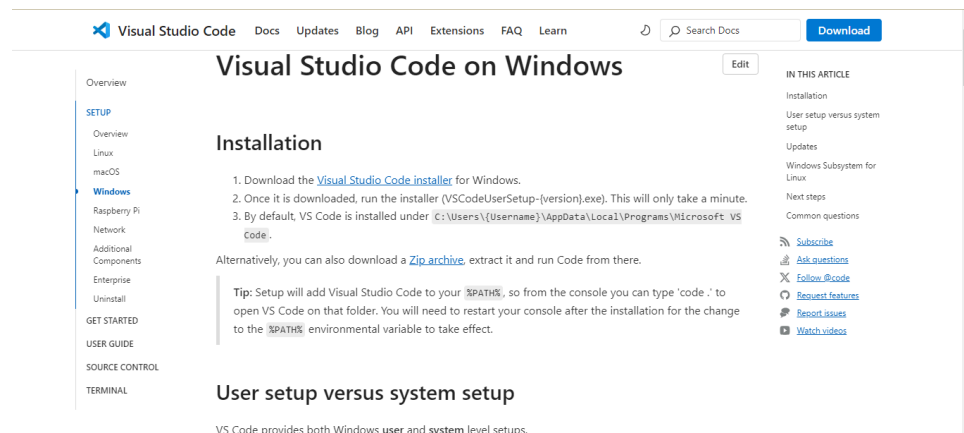
# Git and GitHub Workshop Documentation

## Installation

### Code editor (vscode) installation

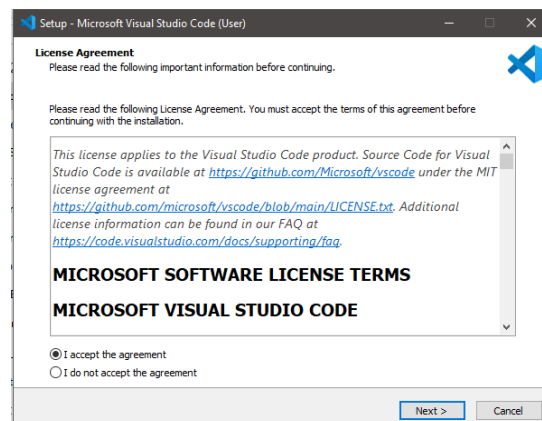
#### Step1

1. Download the [Visual Studio Code installer](https://code.visualstudio.com/docs/setup/windows) for Windows. Use this link-  
<https://code.visualstudio.com/docs/setup/windows>



#### Step2

Once it is downloaded, run the installer (VSCodeUserSetup-{version}.exe). This will only take a minute.



## Step3

By default, VS Code is installed under

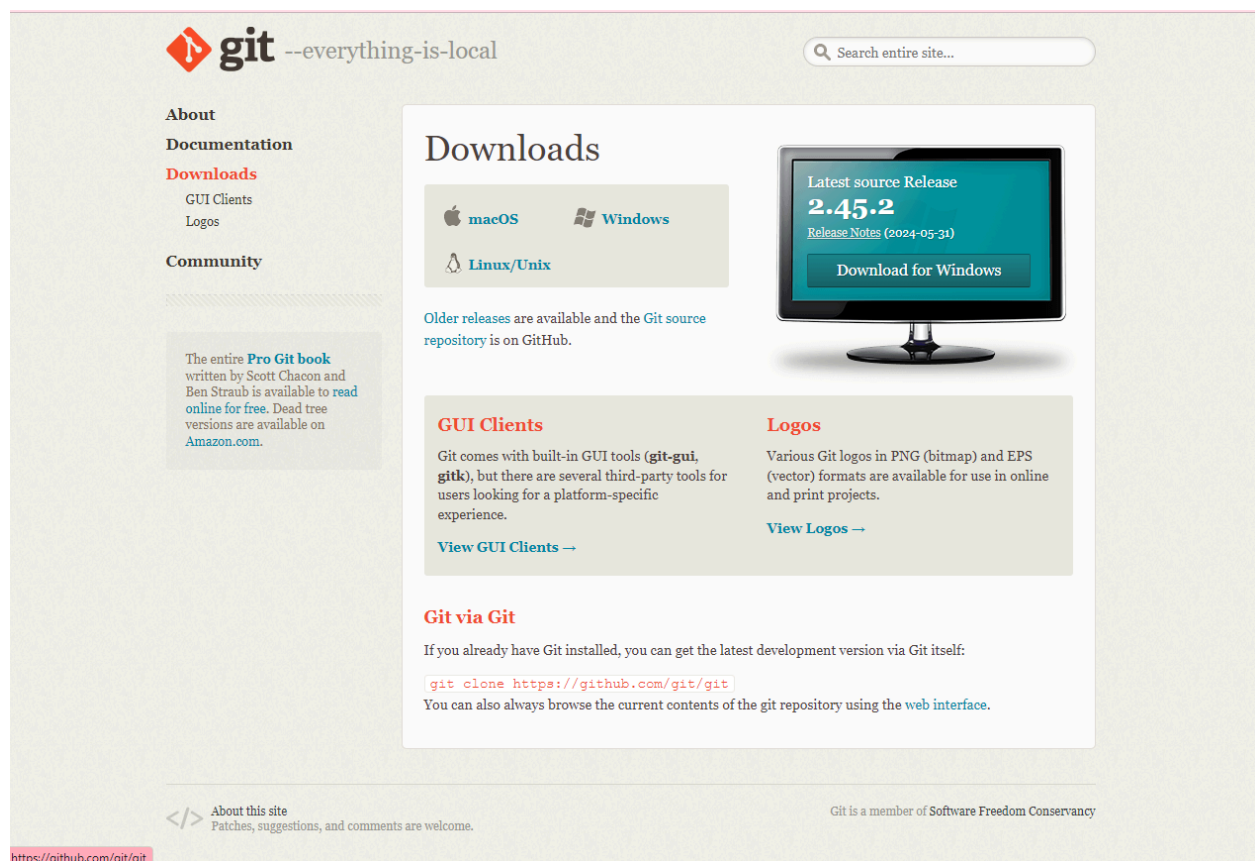
`C:\Users\{Username}\AppData\Local\Programs\Microsoft VS Code.`

## Git Installation

### Git for Windows

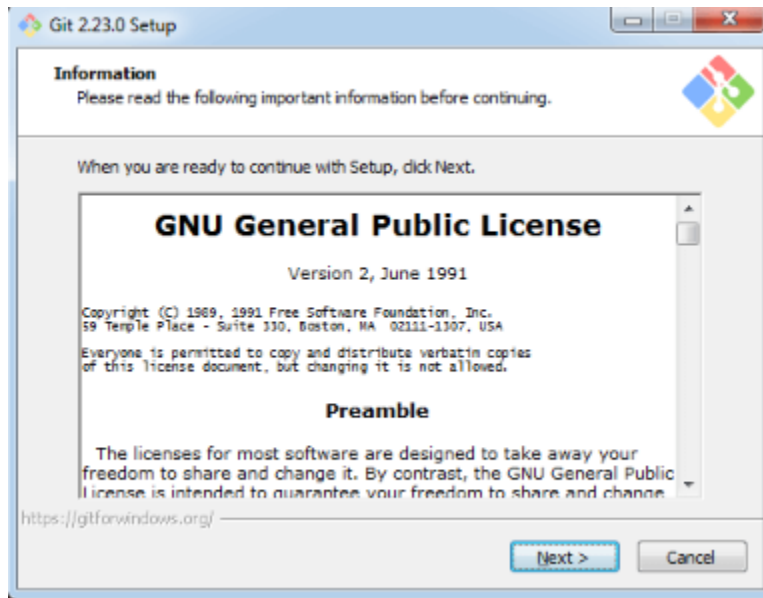
#### Step1

To download the Git installer, visit the Git's official site and go to download page. The link for the download page is <https://git-scm.com/downloads>. The page looks like as



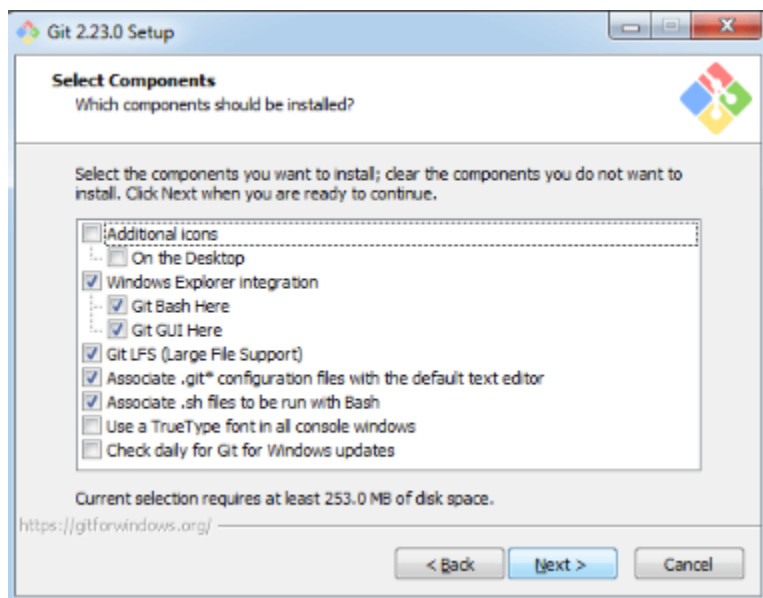
## Step2

Click on the downloaded installer file and select **yes** to continue. After the selecting **yes** the installation begins, and the screen will look like as



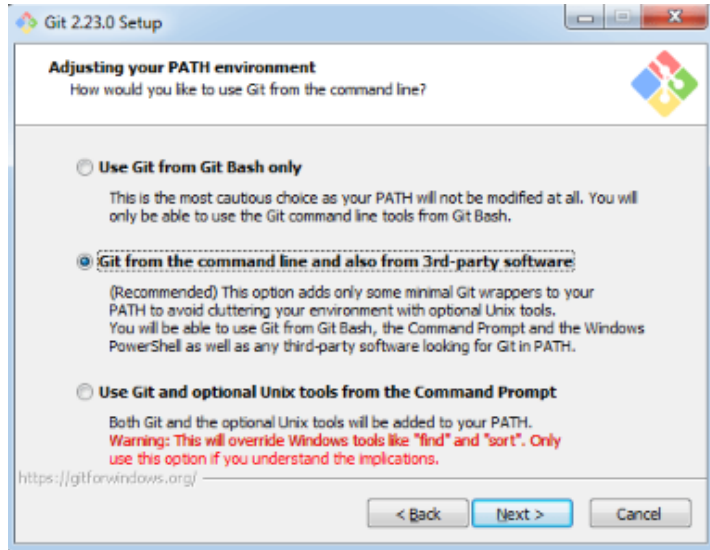
## Step3

Default components are automatically selected in this step. You can also choose your required part.



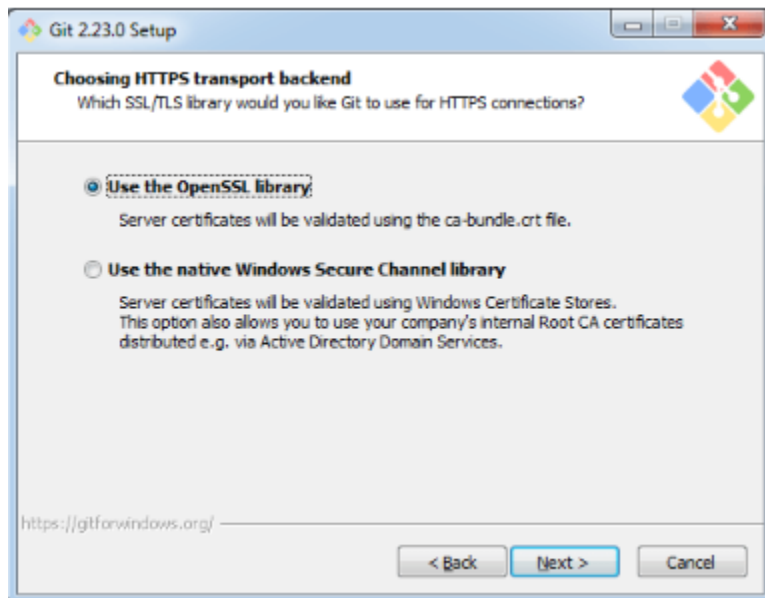
## Step4

The default Git command-line options are selected automatically. You can choose your preferred choice. Click **next** to continue.



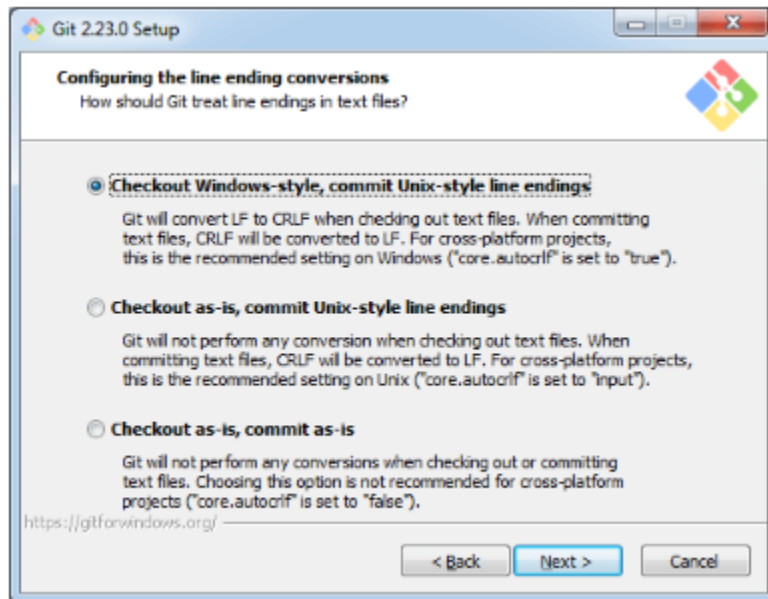
## Step5

The default transport backend options are selected in this step. Click **next** to continue.



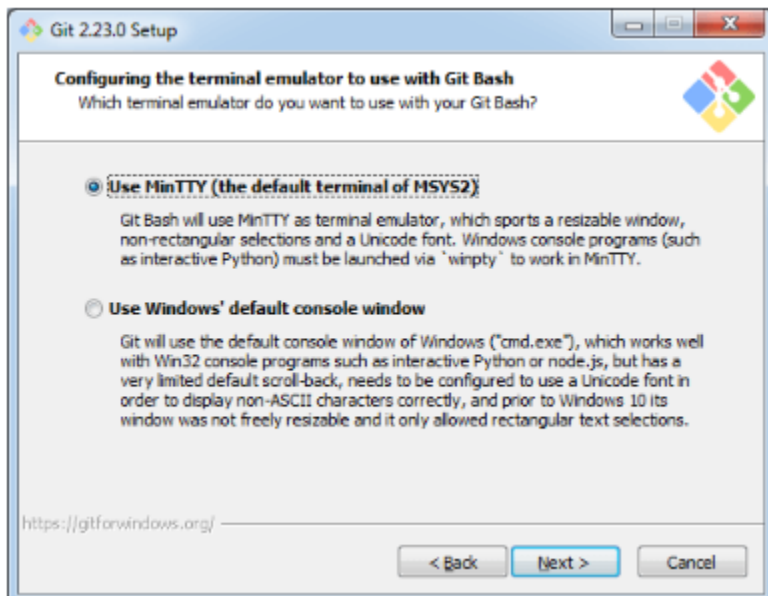
## Step6

Select your required line ending option and click next to continue.



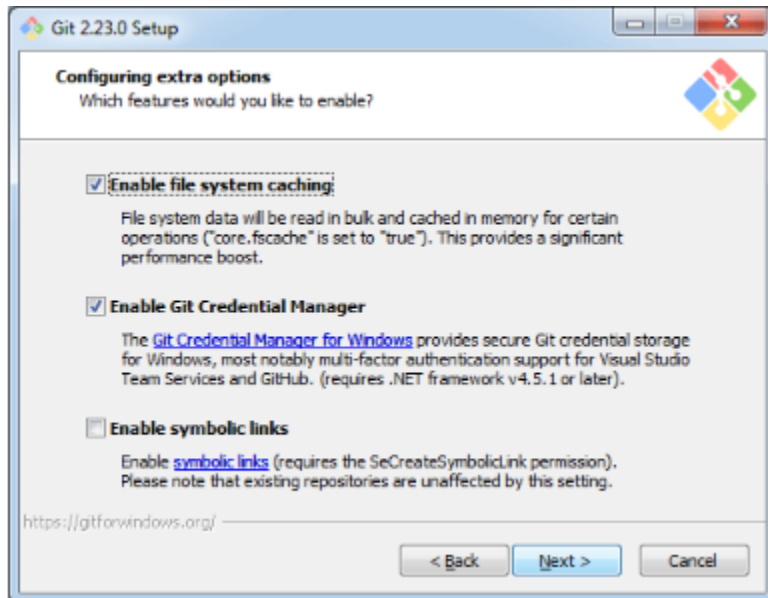
## Step7

Select preferred terminal emulator clicks on the **next** to continue.



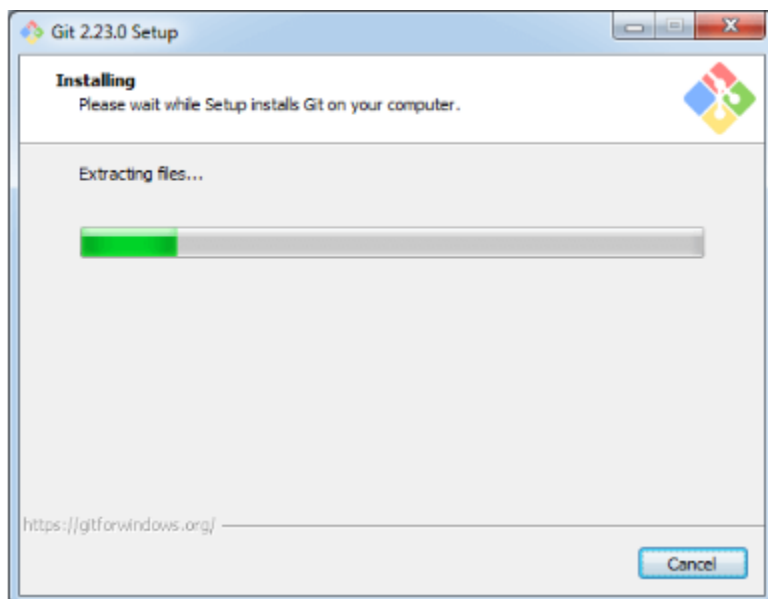
## Step8

This is the last step that provides some extra features like system caching, credential management and symbolic link. Select the required features and click on the **next** option.



## Step9

The files are being extracted in this step.



**Disclaimer:** While giving commands don't use \$ symbol. Just copy the line next to the symbol.

## Git for Linux (Ubuntu)

### Step1: Start the General OS and Package update

First of all, we should start the general OS and package updates. To do so, run the below command:

```
$ sudo apt-get update
```

Now we have started the general OS and package updates. After this, we will run the general updates on the server so that we can get started with installing Git. To do so, run the following commands:

### Step2: Install Git

To install Git, run the below command:

```
$ sudo apt-get install git-core
```

The above command will install the Git on your system, but it may ask you to confirm the download and installation.

### Step3: Confirm Git the installation

To confirm the installation, press the 'y' key on the editor. Now, Git is installed and ready to use.

When the central installation is done, first check to ensure the executable file is set up and accessible. The best way to do this is the git version command. It will be run as:

```
$ sudo git --version
```

### Step4: Configure the Git for the First use

Now you can start using Git on your system. You can explore many features of the version control system. To go with Git, you have to configure the initial user access process. It can be done with the git config command.

Suppose I want to register a user whose user name is "Harsh" and email address is "Harsh@xyz", then it will be done as follows:

To register a username, run the below command:

```
$ sudo git config --global user.name "Harsh"
```

To register an email address for the given author, run the below command:

```
$ sudo git config --global user.email "Harsh@xyz"
```

---

## Git for MacOS

### Step 1: Install Homebrew

You can find Terminal in your Applications folder under Utilities or by using Spotlight (Cmd + Space and then type "Terminal"). Paste the following command into Terminal and press Enter:

```
$ /bin/bash -c "$(curl -fsSL  
https://raw.githubusercontent.com/Homebrew/install/HEAD/install.sh)"
```

### Step 2: Add Homebrew to Your PATH

Run these two commands in Terminal to add Homebrew to your PATH:

```
$ (echo; echo 'eval "$(/opt/homebrew/bin/brew shellenv)'"') >>  
/Users/parthchavan/.zprofile  
$ eval "$(/opt/homebrew/bin/brew shellenv)"
```



Verify Homebrew installation

```
$ brew help
```

### **Step 3: Install Git Using Homebrew**

**Install Git:**

```
brew install git
```

**Verify Git installation:**

```
git --version
```

### **Step 4: Configure Git**

**Set Your Username:**

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

**Set Your Email:**

```
git config --global user.email "your.email@example.com"
```

**Set Your Default Text Editor:**

```
git config --global core.editor "code -wait"
```

**Set the Default Branch Name:**

```
git config --global init.defaultBranch main
```

**Enable Colored Output:**

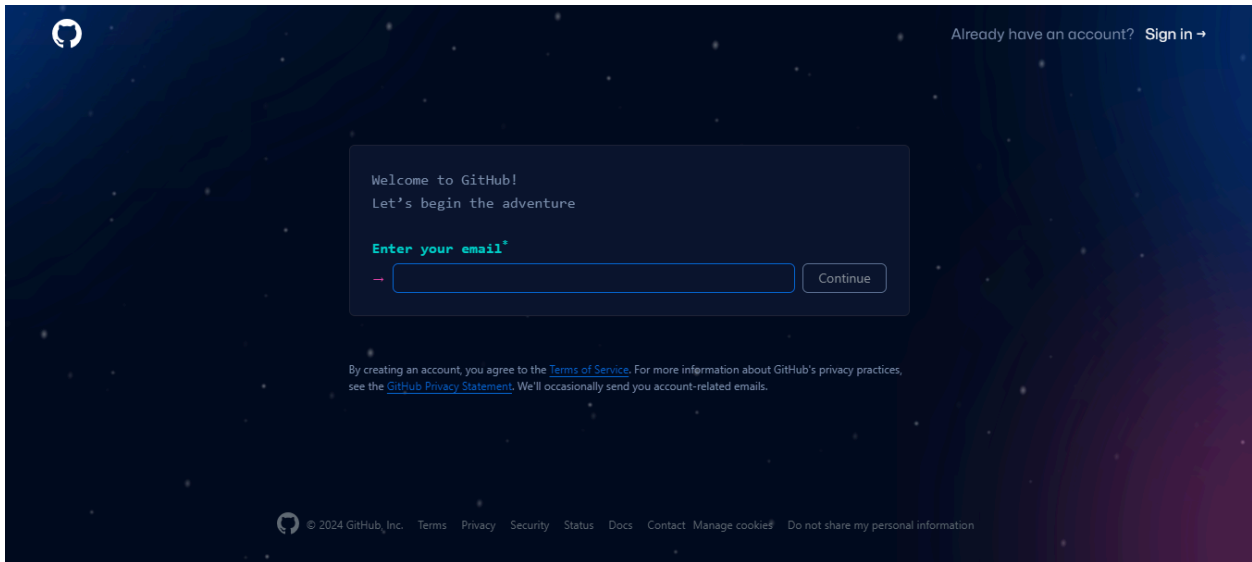
```
git config --global color.ui true
```

# Sign Up or Sign In in GitHub account

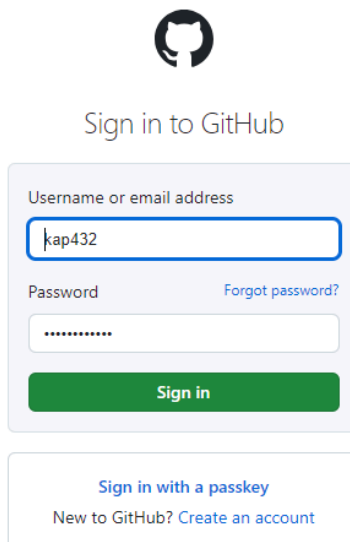
## Step1: Creating an account

To sign up for an account on GitHub.com, navigate to <https://github.com/> and follow the prompts. To keep your GitHub account secure you should use a strong and unique password. For more information, see "[Creating a strong password](#)."

For Sign Up

The image shows the GitHub sign-up page. At the top left is the GitHub logo. At the top right, it says "Already have an account? [Sign in](#) →". The main content area has a dark blue background with a starry pattern. A central white box contains the text "Welcome to GitHub! Let's begin the adventure". Below this is a label "Enter your email\*" and a text input field. To the right of the input field is a "Continue" button. Below the input field, there is a small text block: "By creating an account, you agree to the [Terms of Service](#). For more information about GitHub's privacy practices, see the [GitHub Privacy Statement](#). We'll occasionally send you account-related emails." At the bottom of the page, there is a footer with the GitHub logo, "© 2024 GitHub, Inc.", and links for "Terms", "Privacy", "Security", "Status", "Docs", "Contact", "Manage cookies", and "Do not share my personal information".

For Sign In

The image shows the GitHub sign-in page. At the top center is the GitHub logo. Below it is the text "Sign in to GitHub". The main form is a white box with a light gray border. It has two input fields: "Username or email address" and "Password". The first field contains the text "kap432". To the right of the password field is a link "Forgot password?". Below the input fields is a green "Sign in" button. At the bottom of the form, there is a link "Sign in with a passkey" and a link "New to GitHub? [Create an account](#)".

## Step2 : Configuring two-factor authentication using a TOTP app

1. Download a TOTP app of your choice to your phone or desktop.
2. In the upper-right corner of any page on GitHub, click your profile photo, then click Settings.
3. In the "Access" section of the sidebar, click Password and authentication.
4. In the "Two-factor authentication" section of the page, click Enable two-factor authentication.
5. Under "Scan the QR code", do one of the following:
  - a. Scan the QR code with your mobile device's app. After scanning, the app displays a six-digit code that you can enter on GitHub Enterprise Server.
  - b. If you can't scan the QR code, click the setup key to see a code, the TOTP secret, that you can manually enter in your TOTP app instead.

### Setup authenticator app

Authenticator apps and browser extensions like 1Password, Authy, Microsoft Authenticator, etc. generate one-time passwords that are used as a second factor to verify your identity when prompted during sign-in.

### Scan the QR code

Use an authenticator app or browser extension to scan. [Learn more about enabling 2FA.](#)



Unable to scan? You can use the [setup key](#) to manually configure your authenticator app.

6. The TOTP application saves your account on your GitHub Enterprise Server instance and generates a new authentication code every few seconds. On GitHub Enterprise Server, type the code into the field under "Verify the code from the app".
7. Under "Save your recovery codes", click Download to download your recovery codes to your device. Save them to a secure location because your recovery codes can help you get back into your account if you lose access.
8. After saving your two-factor recovery codes, click I have saved my recovery codes to enable two-factor authentication for your account.
9. Optionally, you can configure additional 2FA methods to reduce your risk of account lockout. For more details on how to configure each additional method, see "[Configuring two-factor authentication using a security key](#)".