**Git Setup**

### ****1. Generate SSH Key (Linux & Windows)****

You'll need an SSH key for secure authentication with GitHub.

#### ****On Linux (Ubuntu / WSL)****

1. Open the terminal and run:

ssh-keygen -t rsa -b 4096 -C "your\_email@example.com"

* + Press **Enter** to accept the default location (~/.ssh/id\_rsa).
  + Set a **strong passphrase** (optional).

1. Start the SSH agent and add your key:

eval "$(ssh-agent -s)"

ssh-add ~/.ssh/id\_rsa

1. Get the SSH public key to add to GitHub:

cat ~/.ssh/id\_rsa.pub

* + Copy the output.

#### ****On Windows (PowerShell)****

1. Open **PowerShell** and run:

powershell

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ssh-keygen -t rsa -b 4096 -C "your\_email@example.com"

* + Press **Enter** to accept the default location (C:\Users\YourUser\.ssh\id\_rsa).

1. Start the SSH agent:

powershell

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Start-Service ssh-agent

* + Add your private key:

powershell

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ssh-add $env:USERPROFILE\.ssh\id\_rsa

1. Get the public key:

powershell

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Get-Content $env:USERPROFILE\.ssh\id\_rsa.pub

* + Copy the output.

### ****2. Add SSH Key to GitHub****

1. Go to [GitHub SSH Settings](https://github.com/settings/keys).
2. Click **"New SSH Key"** → **Paste** the public key → **Save**.
3. Test the connection:

bash

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ssh -T git@github.com

If successful, it will say:

php-template

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Hi <your-username>! You've successfully authenticated.

### ****3. Clone Repository Using SSH****

Instead of HTTPS, use SSH for Git commands:

bash

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git clone git@github.com:Kamal6495/Disaster\_Mangement.git

Move into the repo:

bash

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cd Disaster\_Mangement

### ****4. Git Pull, Commit, and Push Using SSH****

#### ****Pull Latest Changes****

bash

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git pull origin main

#### ****Make Changes and Commit****

bash

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git add .

git commit -m "Your commit message"

#### ****Push to GitHub (Using SSH)****

bash

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git push origin main

### ****5. Collaborators Setup****

Since you have **two collaborators**, they should:

1. Generate their **own SSH keys** (using the above steps).
2. Add their **SSH public key** to their GitHub account.
3. You (the repo owner) must **invite them** to the repo:
   * Go to your repo on GitHub → **Settings** → **Manage Access** → **Invite Collaborators**.
   * They will receive an **email invitation** to accept.
4. After accepting, they can **clone the repo** and use SSH for pull, commit, and push.

### ****6. (Optional) Set SSH Remote for Existing Repos****

If you already cloned using HTTPS, change the remote URL to SSH:

bash

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git remote set-url origin git@github.com:Kamal6495/Disaster\_Mangement.git

Now, git push and git pull will use SSH authentication.

### ****Done! 🚀****

Now you and your collaborators can securely work on the repo using SSH. Let me know if you need further clarification!