Getting Started with Git and GitHub on Windows

# Part 1: Installing Git on Windows

## Step 1: Download Git

* Open your browser and go to: https://git-scm.com
* Click the button that says: "Download for Windows"

## Step 2: Run the Installer

* Once the download is complete, double-click the `.exe` file.
* Go through the installation wizard. You can accept the default settings for most steps.
* - Use the default editor (recommended: Visual Studio Code)
* - Use Git from the command line and third-party software
* - Continue clicking Next until you see Install, then click it
* Wait for the installation to complete, then click Finish

## Step 3: Verify Installation

* Press `Windows + R`, type `cmd`, and hit Enter to open the Command Prompt.
* Type the following command:
* git --version
* If Git is installed correctly, you will see a version number (e.g., git version 2.43.0.windows.1)

# Part 2: Creating a GitHub Account

## Step 1: Sign Up

* Open your browser and go to: https://github.com
* Click Sign up in the top right corner
* Fill in the required fields:
* - Username
* - Email address
* - Password
* Click Create account and follow the instructions (e.g., verifying you're human)

## Step 2: Verify Your Email

* Check your inbox for a verification email from GitHub
* Click the verification link to activate your account

# Part 3: Configure Git with Your GitHub Account (REQUIRED)

* Open Command Prompt or Git Bash, then run these commands:
* git config --global user.name "Your Full Name"
* git config --global user.email [youremail@example.com](mailto:youremail@example.com)
* git config --global pull.rebase true
* This links your local Git installation to your GitHub account.
* You can confirm your configuration with:
* git config --list

# Part 4: Basic Git & GitHub Operations for Working in Pairs

## Step 1: Create a New Repository on GitHub

* Go to https://github.com
* Click the + icon in the top right > New repository
* Name your repository (e.g., project-pair1)
* Keep it public or private (your choice), and check Initialize with a README
* Click Create repository

## Step 2: Clone the Repository to Your Computer

* In Command Prompt or Git Bash:
* git clone https://github.com/yourusername/project-pair1.git
* This downloads the repository to your computer.

## Step 3: Work on the Project

* Navigate into the project folder:
* cd project-pair1
* Add your project files and changes
* Use these commands to save your work:
* git add . # Add all changed files
* git commit -m "Initial commit" # Save a snapshot with a message
* git push origin main # Upload your changes to GitHub

## Step 4: Collaborate with Your Partner

* Both of you should clone the same repository.
* One person pushes changes, the other pulls them:
* git pull origin main # Download latest changes
* Repeat the cycle: pull > work > add > commit > push

# Done!

* You're now set up to work on your project with your partner using Git and GitHub.
* Stay in sync by communicating and regularly pulling and pushing your changes.