# **GITHUB**

Ankit Gupta

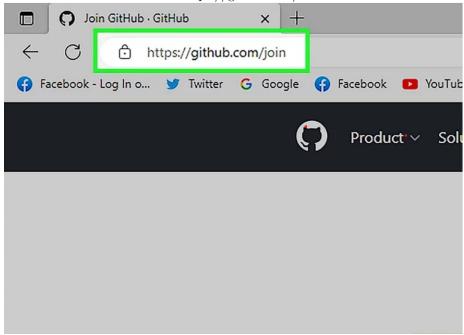
July 2023

## 1 Introduction

GitHub is a popular web-based platform for version control and collaboration that allows developers to work together on projects, share code, and manage their codebases efficiently. This guide will walk you through the process of creating a GitHub account, sharing files, and utilizing branching for effective project management.

## 2 GitHub Account Creation

1. Visit the GitHub website at https://github.com/.

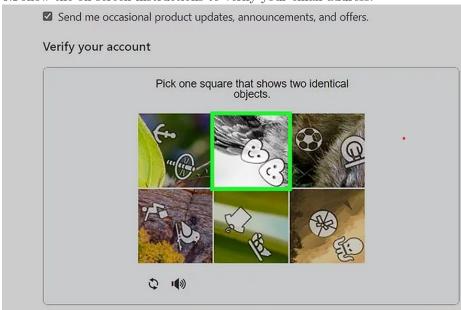


2. Click on the "Sign Up" button in the upper right corner.

3. Enter your desired username, email address, and password, then click "Create account."



- 4. Choose the appropriate plan (usually the free plan) and complete the CAPTCHA verification process.
- $5. \\ Follow the on-screen instructions to verify your email address.$



## 3 File Sharing on GitHub

## 3.1 Create a New Repository:

- 1. Click on the green "New" button on the GitHub homepage.
- 2.Enter a unique name for your repository, a brief description (optional), and choose whether it should be public or private.
- Optionally, add a README file to provide initial project information.
- 3. Click "Create repository."

### 3.2 Uploading Files:

- 1.Once your repository is created, click on the "Add file" dropdown button.
- 2. Select "Upload files" to upload files from your local computer.
- 3.Drag and drop the files into the designated area or click on "choose your files" to browse and select files manually.
- 4.Add a brief description of the changes (optional) and click on "Commit changes" to upload the files to your repository.

#### 3.3 Sharing Files:

- 1. After uploading files, they will be available in the repository's file list.
- 2. Click on the file you want to share to view its contents.
- 3. Copy the URL from your browser's address bar to share the file with others.

# 4 Branching in GitHub

Branching is a critical feature in GitHub that allows developers to work on different features or bug fixes simultaneously without affecting the main codebase. Here's how you can create and manage branches:

#### 4.1 Create a New Branch:

- 1.Go to your repository on GitHub.
- 2. Click on the dropdown menu that displays the branch name (usually "main").
- 3.Enter a unique name for your new branch and click on the "Create branch" button.

#### 4.2 Making Changes in a Branch:

1. Switch to the newly created branch by selecting it from the branch dropdown.
2. Click on a file to edit it directly on GitHub or clone the repository to your local computer, make changes using a code editor, and then commit and push the changes back to the branch.

### 4.3 Merge Changes:

- 1.Once you've made and tested the changes in the branch, you can merge them into the main branch (or any other target branch).
- 2.Go to the Pull Requests tab in your repository.
- 3. Click on "New pull request."
- 4. Select the base branch (e.g., "main") and the compare branch (the one you made changes in).
- 5. Review the changes and click on "Create pull request."
- 6. If everything looks good, click on "Merge pull request" to apply the changes to the target branch.