Getting Started with GitHub: Account and Repository Setup

Contents

About GitHub

GitHub is a cloud-based collaborative platform allowing developers to build, store, and manage projects. Developers can store code and documentation files, control access, manage change requests and tasks, and set up continuous integration workflows. GitHub uses Git to keep track of changes providing version control and change history.

To begin with GitHub, you must create an account and set up repositories. Repositories store the projects, providing you space to organize and work on the projects in collaboration with others.

This guide walks you through how to set up GitHub account, install GitHub Desktop, create and clone repositories.

GitHub Account

Create an account on GitHub to access to the platform and host projects. The account details can be configured to be private or public. Steps involved in creating a GitHub account are mentioned below:

- Sign up with GitHub
- Verify account by solving a puzzle
- Confirm email.

The steps are explained in the following sections.

Signing up with GitHub

You must provide identification information to sign up with GitHub. GitHub uses this information to create credentials on the platform. You can use these credentials to sign in to the account and access the platform.

1. Go to https://github.com/.
2. Click the **Sign up** button on the right-hand side top corner.
3. Fill in the fields as described in the table.

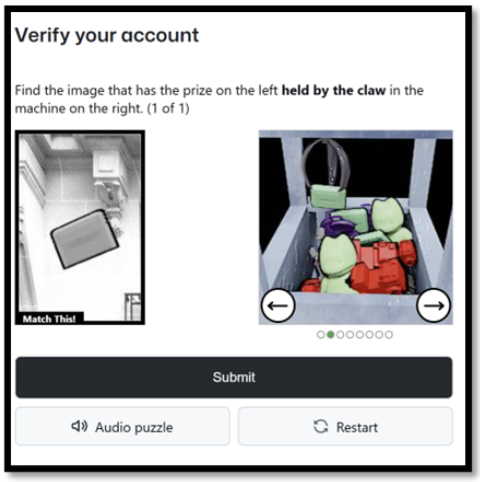
Field	Description
Email	Enter a valid email address. This email address is used by GitHub to confirm your account.
Password	Enter a password that adheres to one of the following conditions: • 11 characters in length or • 8 characters in length containing a number and a lowercase letter.
Username	Enter a username. The username used as a display name for your profile. A username can contain alphanumeric characters and a single hyphen. Hyphen must not be the first or the last character.
Your Country/Region	Select a relevant country or region from the dropdown.

4. Click **Continue**. A page to verify your account opens.

Verifying your account

Verify your account by solving a puzzle presented at random by GitHub to rule out that the account is fraudulent. There are two types of puzzles presented to you; visual puzzle and audio puzzle. You must solve one to complete the verification of your account.

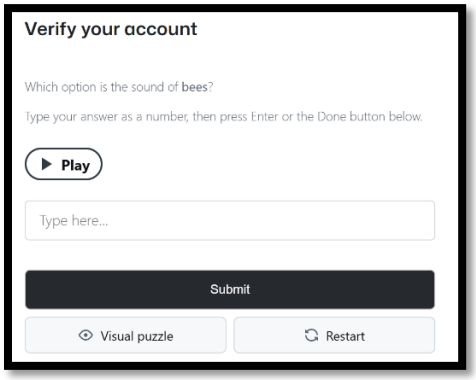
1. Click either **Visual puzzle** or **Audio puzzle**.
2. Follow the next step based on the puzzle you selected.
   For Visual Puzzle: You must match images to solve the puzzle. For example, finding a particular image from the set of images displayed on right that contains the image displayed on the left.
   a. Click arrow icons displayed on the images on the right to navigate between them, as shown in the image below.



   b. Optionally, click **Restart** to reset or change the image or click **Audio puzzle** if you want to change the puzzle method.

   or

   For Audio Puzzle: You must match the audio to the sound of the object mentioned in the question displayed. For example, you are presented with several audios and you must find which audio sounds like bees.
   a. Click **Play** to listen to audio.



b. Optionally, click **Restart** to reset or change the image or click **Visual puzzle** if you want to change the puzzle method.
c. Enter the option number of correct audio in the text field.

3. Click **Submit** when you find the correct image or have entered the correct audio number.

Once account is verified, a page to confirm your email opens.

Confirming your email address

Confirm your email address by entering the code sent to the same email address. This confirms that the email is functional and GitHub is able communicate with you.

1. Retrieve the 8-digit code sent to your email sent by *noreply@github.com*.

   Note: Check Spam folder or click **Resend the code** on the **Confirm your email address** page, if you have not received an email containing the code.

   or

   Click the link provided in the email to confirm the email.
2. Enter the 8-digit code on the **Confirm your email address** page.

   Note: At this point, you can still change the identification information by clicking **Update your email address**. Upon clicking, you are redirected to the **Sign up to GitHub** page where you can start the account creation process again.
3. Click **Continue**. Your GitHub account is created and you can access the platform.

GitHub Repository

A GitHub Repository (repo) is equivalent to a folder where GitHub stores the project's files, code, and version history. GitHub repos can be configured to be public or private depending on the usage. Public repos are accessible to anyone on internet. Private repos are accessible to only individuals who are granted permission. You can upload files with extensions like HTML, .pdf, .md, .yaml, and, .json.

Creating a new GitHub Repo

Sign in to the GitHub account and follow the steps below:

1. Click the **New** button on the left-hand side of the page next to the **Top repositories** list.
2. Fill in the fields as described below to complete creating the repo.

Fields	Description
Repository Name	Enter a name for the repo. For example, P*ayment API repo*.
Description	Enter a description for the repo. You can add information about what this repo hosts or the purpose of the repo.

3. Select **Public** or **Private** depending on what accessibility you want to set for the repo.
   - Public: This type of repo is accessible any one on the internet. However, you control who can request changes to the repo.

- Private: This type of repo can only be accessed by individual with viewing or editing permissions. Editing access allows the individual to request changes which you can accept or reject.

4. Check the **Add a README file** checkbox to enable GitHub to auto-create a readme file for the repo.
5. Click **Create repository**. The repo is created.

GitHub Desktop

You can manage GitHub repo through the web browser, command line using Git, or the GitHub Desktop application. GitHub Desktop and web browser enables you to manage GitHub repositories through user interface without having to write syntactical commands in a terminal.

Info: This guide will follow the GitHub Desktop for Windows as the tool to manage GitHub repos.

Installing GitHub Desktop

Follow the steps below:

1. Go to https://desktop.github.com/download/.
2. Click **Download for Windows(64bit)**. *GitHubDesktopSetup-x64.exe* file is downloaded.
3. Launch *GitHubDesktopSetup-x64.exe*. Welcome page of GitHub Desktop opens.
4. Click **Sign in to GitHub.com**. Your online GitHub account on browser opens.
5. Select a GitHub account or sign in to the GitHub account if your account is not listed.
6. Click **Continue**.
7. Click **Authorize desktop** to grant GitHub Desktop authorization to access the existing repositories, personal user data, and workflows in your account. A popup is displayed.
8. Click **Open GitHub Desktop** on the popup.

   Note: On the GitHub Desktop, the account details are already populated. You can use the same username and email address as your online account or provide new ones.
9. Click **Finish**.

Cloning a GitHub Repository

Cloning a repo involves creating a copy of the online repo or main branch. GitHub Desktop enables you to clone repos and store a copy on the local machine. This allows you to use authoring tools like Visual Studio Code to update the files in the local repo copy without disturbing the main branch directly. Once complete, push the changes to the main branch to sync all the copies.

Follow the steps below to clone a repo.

1. Find and select the repo to clone on the **Let's get started!** page.
2. Click the **Clone <name of repo>** button at the bottom of the page. A popup listing the online repo URL and local path to the desktop repo opens.
3. Click **Clone**. Your repo is cloned.

This completes the setup of your GitHub account and gets you started with a repository.