Experiment 02

Aim: To study and implement making a GIT account.

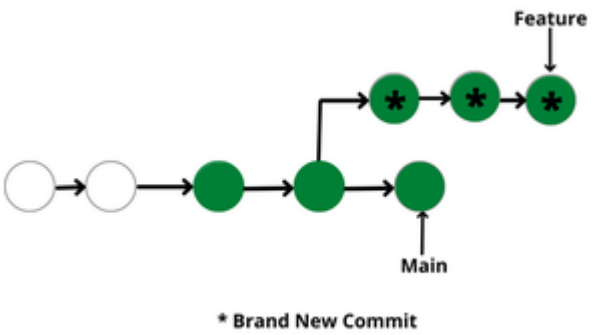
Theory:

Version control allows you to keep track of your work and helps you to easily explore the changes you have made, be it data, coding scripts, notes, etc. Version control systems are also called as revision control systems. Revision control systems work as independent standalone applications.

Applications like spreadsheets and word processors have control mechanisms. The unique features of version control system/ revision control system are as follows: Up to date history is available for the document and file types. It does not require any other repository systems. The repositories can be cloned as per the need and availability. This is extremely helpful in case of failure and accidental deletions. VCS includes tag system which helps in differentiating between alpha, beta or various release versions for different documents.

Use of Version Control System:

1. A repository: It can be thought of as a database of changes. It contains all the edits and historical versions (snapshots) of the project.
2. Copy of Work (sometimes called as checkout): It is the personal copy of all the files in a project. You can edit to this copy, without affecting the work of others and you can finally commit your changes to a repository when you are done making your changes.
3. Working in a group: Consider yourself working in a company where you are asked to work on some live project. You can't change the main code as it is in production, and any change may cause inconvenience to the user, also you are working in a team so you need to collaborate with your team to and adapt their changes. Version control helps you with the, merging different requests to main repository without making any undesirable changes. You may test the functionalities without putting it live, and you don't need to download and set up each time, just pull the changes and do the changes, test it and merge it back. It may be visualized as.



The various types of the version control systems are:

1. Local Version Control System

2. Centralized Version Control System

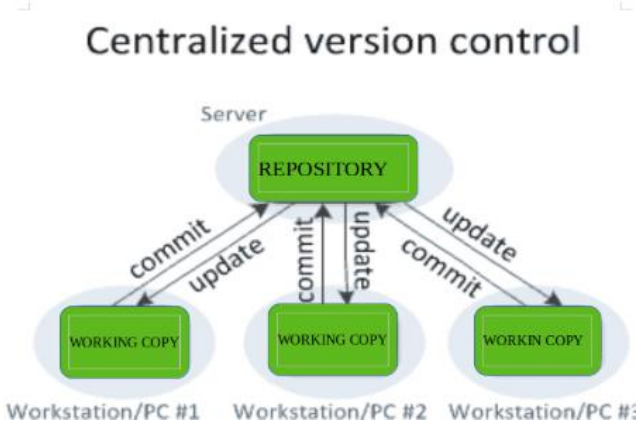
3. Distributed Version Control System

1. Local version control system: Local version control system maintains track of files within the local system. This approach is very common and simple. This type is also error prone which means the chances of accidentally writing to the wrong file is higher

2. Centralized Version Control System: In this approach, all the changes in the files are tracked under the centralized server. The centralized server includes all the information of versioned files, and list of clients that check out files from that central place.

Two things are required to make your changes visible to others which are:

- You commit
- They update



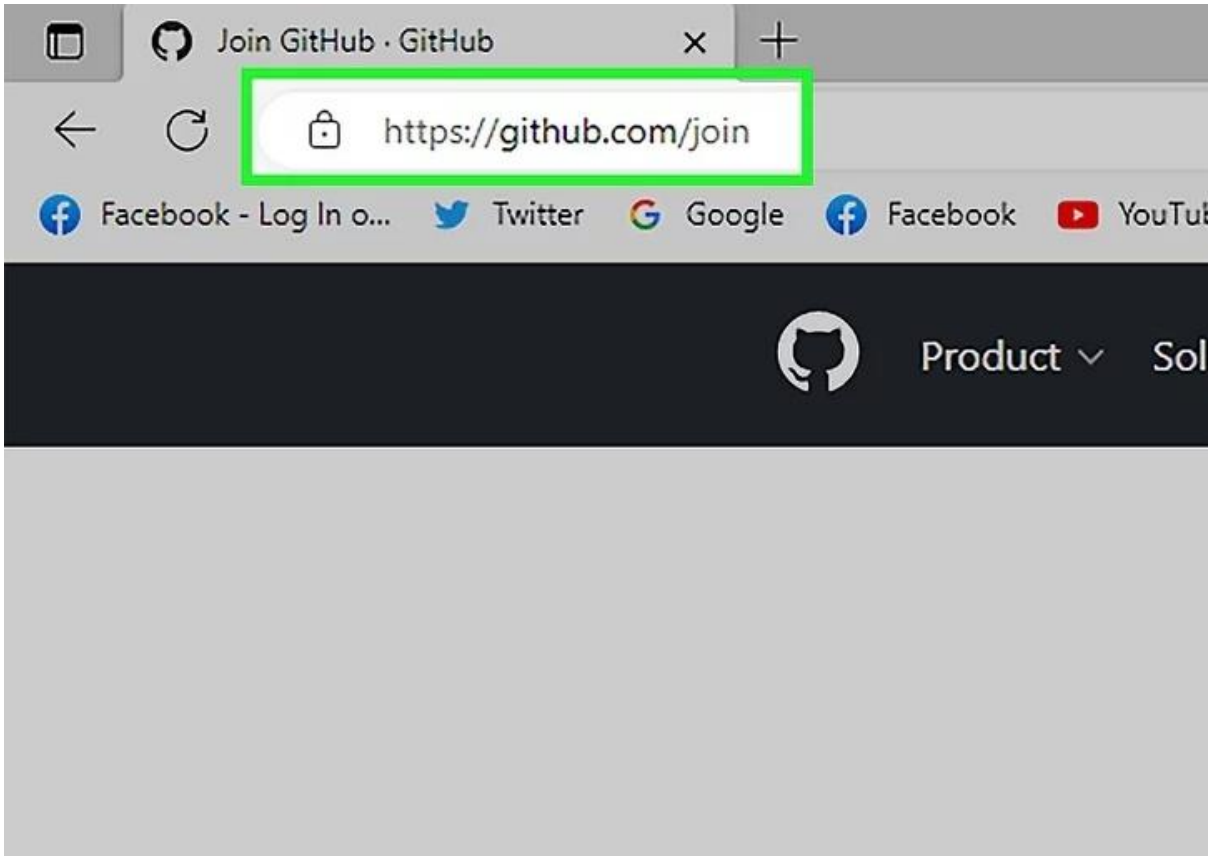
Signing up for a new personal account

1. Navigate to https://github.com/.
2. Click Sign up.
3. Follow the prompts to create your personal account.

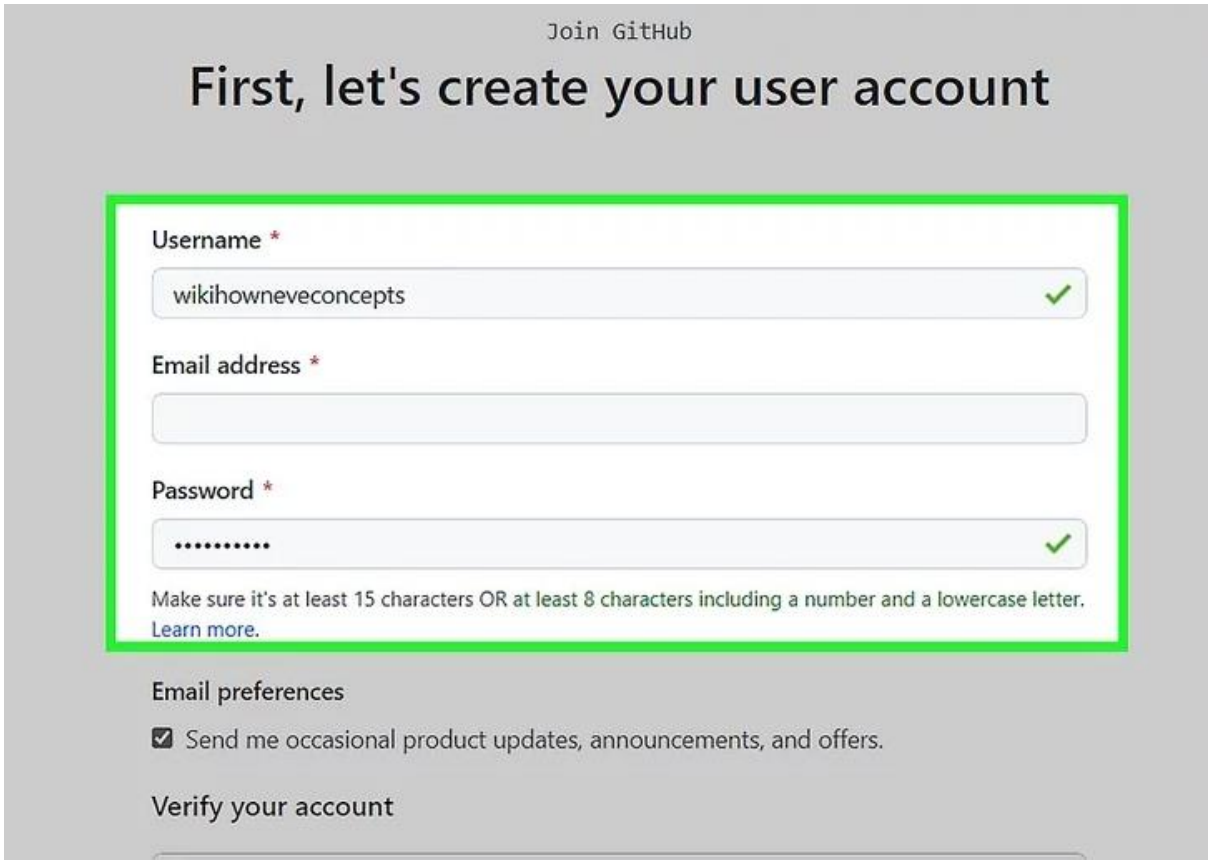
During sign up, you'll be asked to verify your email address. Without a verified email address, you won't be able to complete some basic GitHub tasks, such as creating a repository.

Some enterprises create managed user accounts for their users. You can't sign up for a personal account with an email address that's already verified for a managed user account.

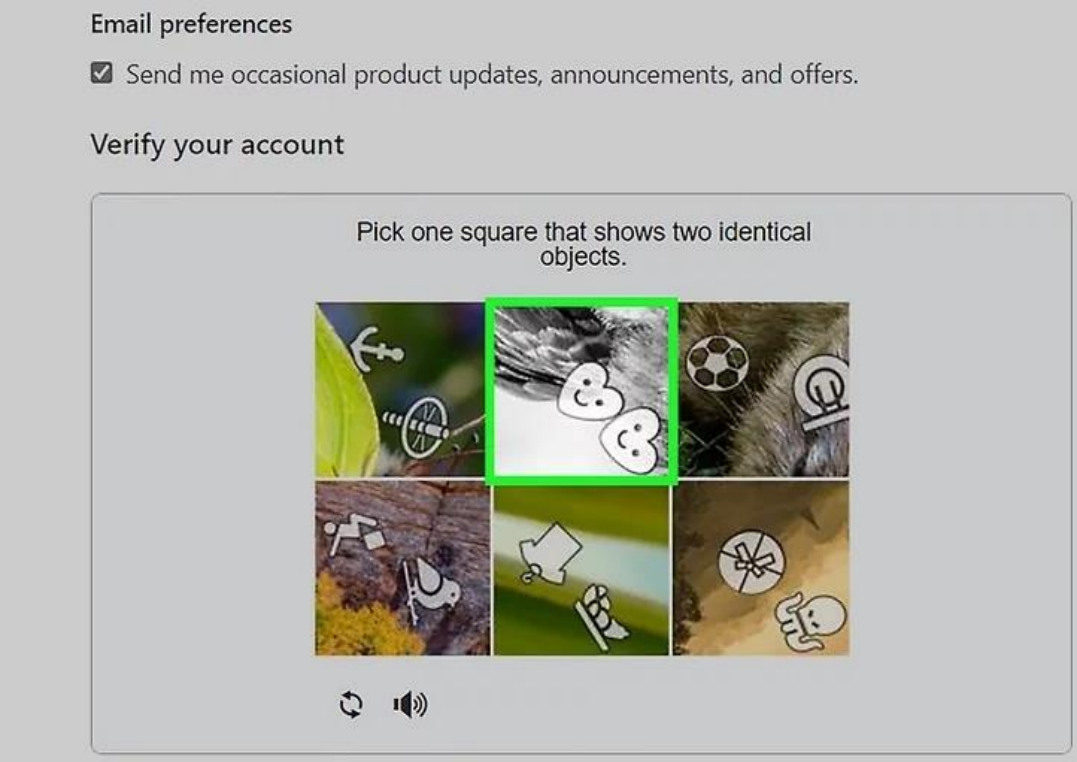
Step 01: Go to https://github.com/join in a web browser. You can use any web browser on your computer, phone, or tablet to join. Before you can create branches or make any pull requests, you'll need an account.



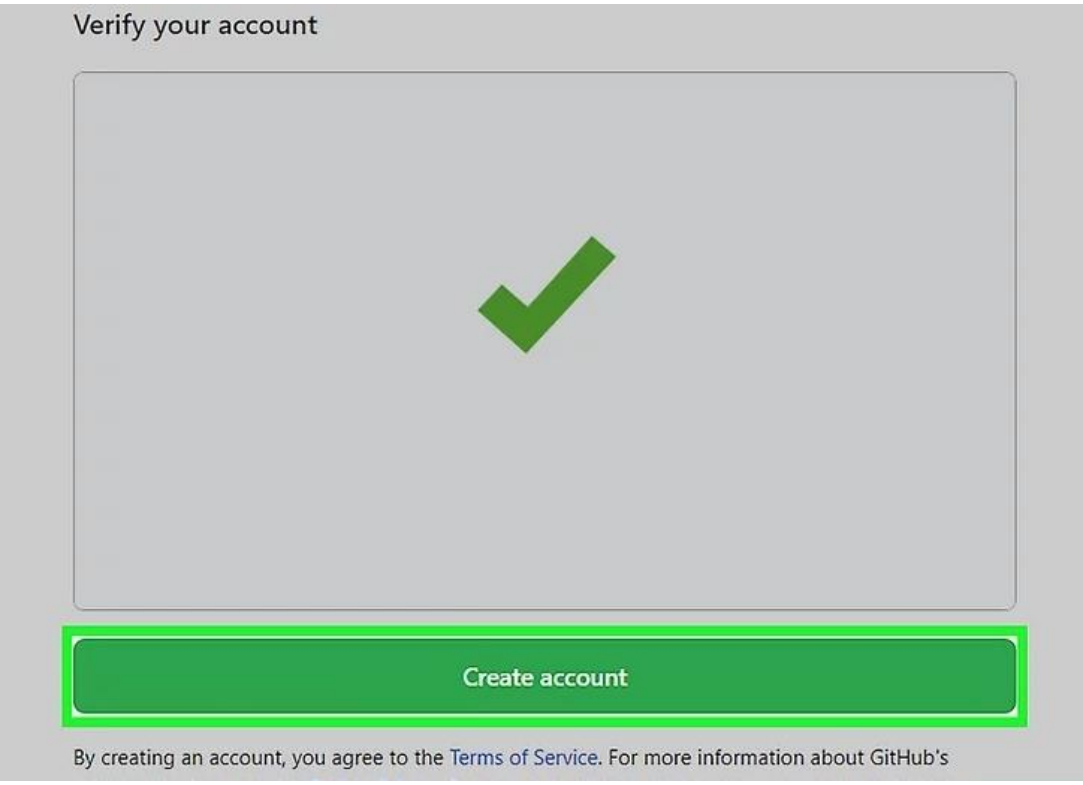
Step 02: Enter your personal details. In addition to creating a username and entering an email address, you'll also have to create a password.



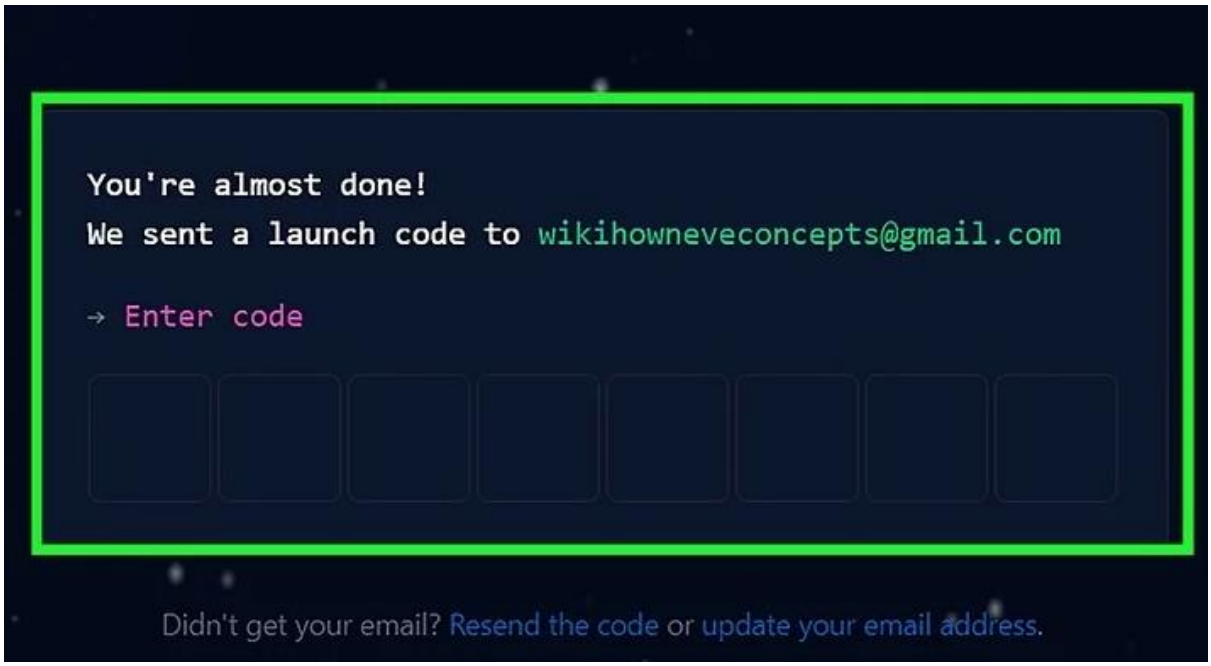
Step 03: Click Verify to start the verification puzzle. The instructions vary by puzzle, so just follow the on-screen instructions to confirm that you are a human. A green checkmark will appear after completing the puzzle.

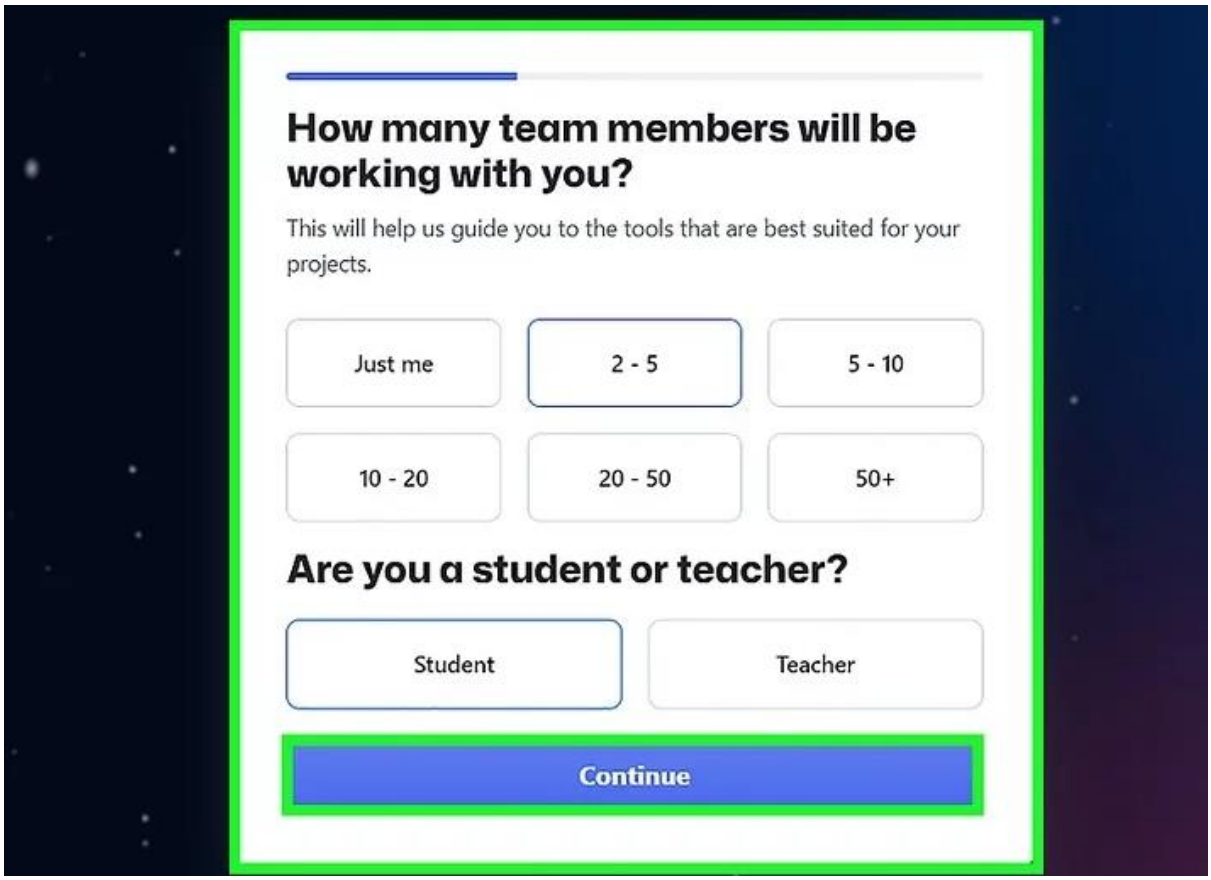


Step 04: Click the green Create account button. It's below the form, at the bottom of the page. This will take you to an email verification page.

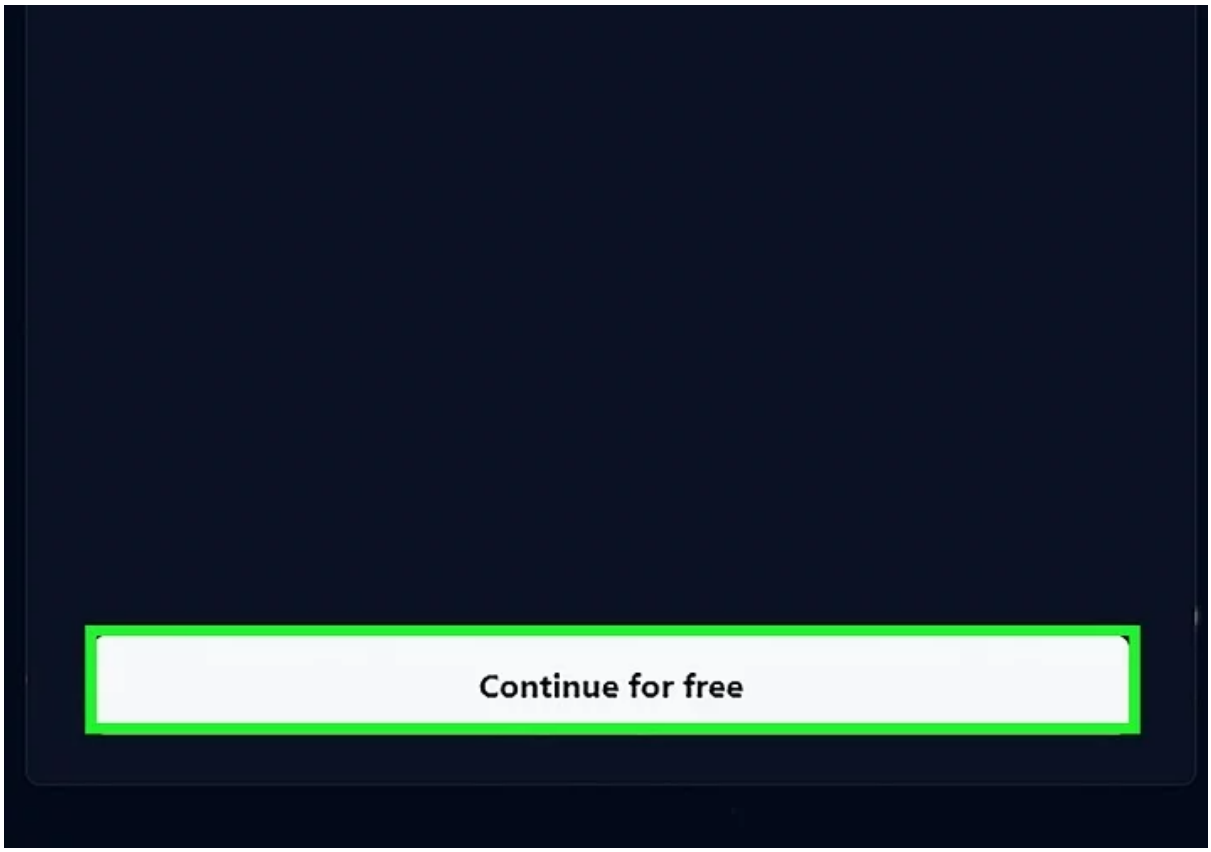


Step 05: Verify your email by entering the code. After clicking Create account, you'll receive an email with a code.





Step 06: Select the free plan. On the plan selection page, scroll down to click the button for choosing a free plan. This will immediately take you to your GitHub dashboard



Conclusion: Hence we studied and implemented creating a Github account.