

Assignment 1 : GitHub Profile Creation, Fork, Clone, Update Repository

Aim

To create a GitHub profile, fork an existing repository, clone it into the local system, update it with changes, and push the updated repository back to GitHub.

Procedure

1. Creation of GitHub Profile

I visited the official GitHub website <https://www.github.com>.

I clicked on the Sign Up button located at the top-right corner of the page.

I was directed to the account creation page, where I filled in the required details.

After entering all the details, I clicked on Continue which successfully created my GitHub profile.

2. Forking an Existing Repository

I searched for the given repository:

https://www.github.com/KiranGaikwad2020/Artificial_Intelligence_Lab

I clicked on the Fork option available at the top-right corner.

I updated the repository name as per requirement and then clicked on Create Fork.

This successfully created a forked version of the repository in my profile.

3. Cloning the Forked Repository to Local System

I copied the HTTPS repository URL of my forked repository.

On my system terminal, I ran the command:

```
git clone <https-repo-URL>
```

This command created a local copy of the repository.

To confirm, I used:

```
ls
```

and verified that the repository was present in my working directory.

4. Updating Changes in the Local Repository

I created a sample file in the cloned repository folder.

I checked the status of the repository using:

```
git status
```

Then I added the file to the staging area with:
`git add filename`

Next, I committed the changes with the message:
`git commit -m "Added sample file"`

I also configured Git with my email and username using:
`git config --global user.email "my-email@example.com"`
`git config --global user.name "My Name"`

5. Pushing the Updated Repository to GitHub

I used the command:
`git push`

I entered my GitHub credentials when prompted.
Finally, I verified the repository on GitHub and confirmed that my updates were successfully pushed.

Conclusion

Through this assignment, I learned how to:

- Create a GitHub profile.
- Fork an existing repository.
- Clone the forked repository to my local system.
- Make changes and commit them in the local repository.
- Push the updated repository back to GitHub.

This helped me understand the complete workflow of GitHub version control.