

FULL GUIDE: What to Do When Starting a New Project (Git + GitHub Workflow)

1 Create a Project Folder (Locally on Laptop)

You always start on your laptop.

Example:

```
mkdir MyProject cd MyProject
```

This becomes your project workspace.

2 Initialize Git in This Folder

Turn your folder into a Git repository:

Meaning: This starts Git inside your folder.

```
git init
```

Now Git starts tracking changes.

3 Add Your Project Files

Create files like:

- Java files
- HTML/CSS
- Documentation
- PDFs
- Folders

Example:

```
touch index.html or open VS
```

Code and start coding.

4 Add Your Files to Git

Once you create/update files:

`git add. =.` means **add everything**.

This stages all changes.

5 Commit Your Work

Save the changes permanently to Git:

Meaning of remote:

“Remote” means a **place on the internet** (GitHub) where your code will be stored.

Meaning of origin:

`origin` is just a **nickname** for your GitHub URL.

Instead of writing the long URL every time, we write `origin`.

Simple Example:

```
git commit -m "Initial project setup"
```

This is like taking a snapshot of your project.

6 Create a GitHub Repository (Online)

Now go to GitHub → **New Repository**

- Give a name
 - Don't add README (optional)
 - Create repo
-

7 Connect Local Project to GitHub

Copy the GitHub repo link and run:

```
git remote add origin https://github.com/username/repo.git
```

This connects your local folder to GitHub.

8 Push Your Local Code to GitHub

First push:

```
git push -u origin main
```

`origin` = which remote (GitHub URL you added)

`main` = which branch (like a chapter of your project)

After this, only run:

```
git push
```

9 Continue Working on Project

Every time you do more work:

```
git add . git commit -m "Describe the change" git push
```

Flow:

Write code → Add → Commit → Push

If You Make Changes on GitHub (Online)

Before pushing new changes from laptop:

Because **your laptop copy** and **your GitHub online copy** must always match.

If someone (or you) changes something on **GitHub website**, your laptop does **not** know those changes until you run:

```
git pull
```

This updates your local folder with changes from GitHub.