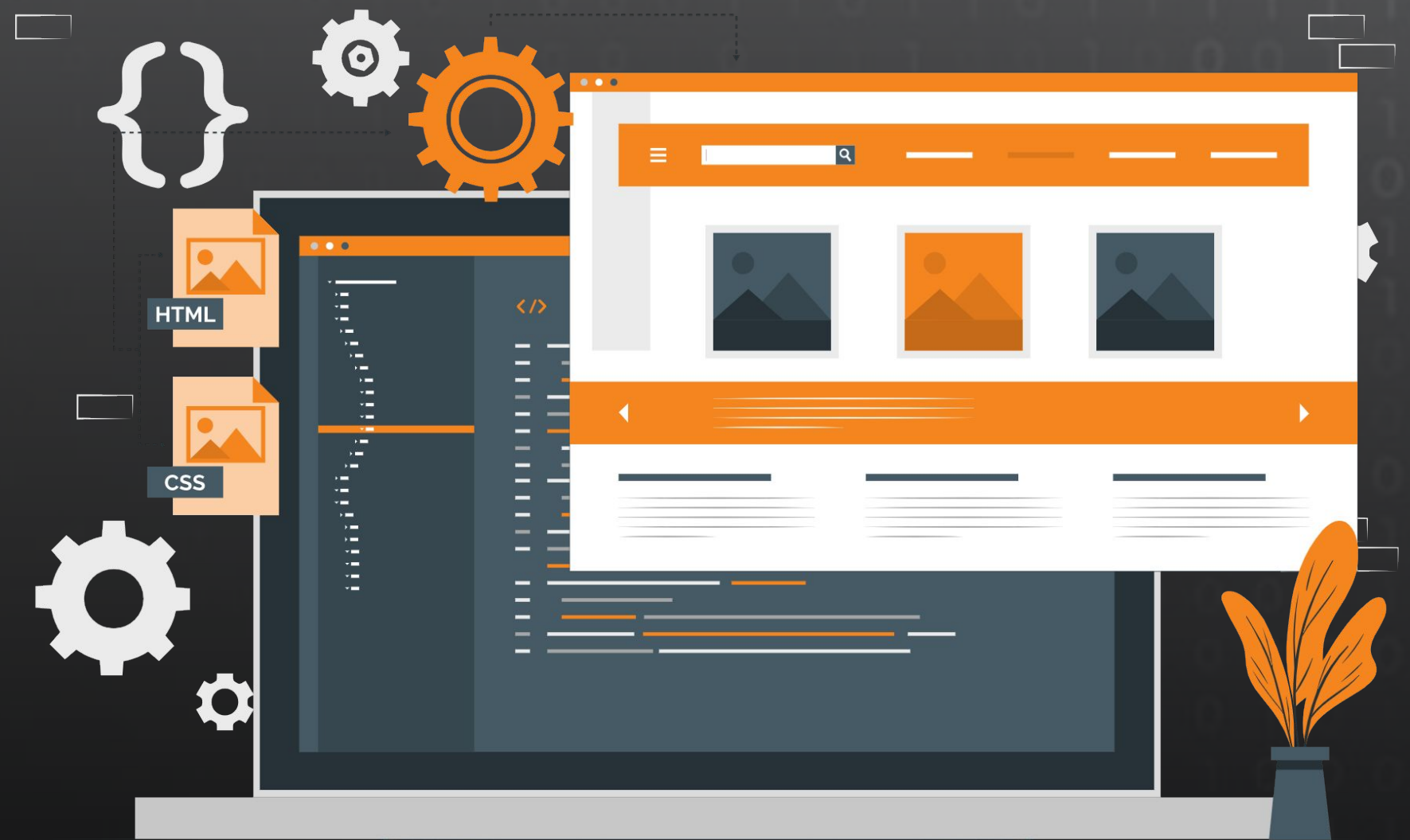


GitHub





Topics

- Introduction to GitHub
- Why to use Github?
- Setting up a GitHub account
- Linking the GitHub account VS code
- Creating the repo
- Pushing code to GitHub
- Forking an existing repo
- Generating pull requests and merge requests
- Handling merge conflict
- Hosting a website on GitHub pages
- Alternative of GitHub



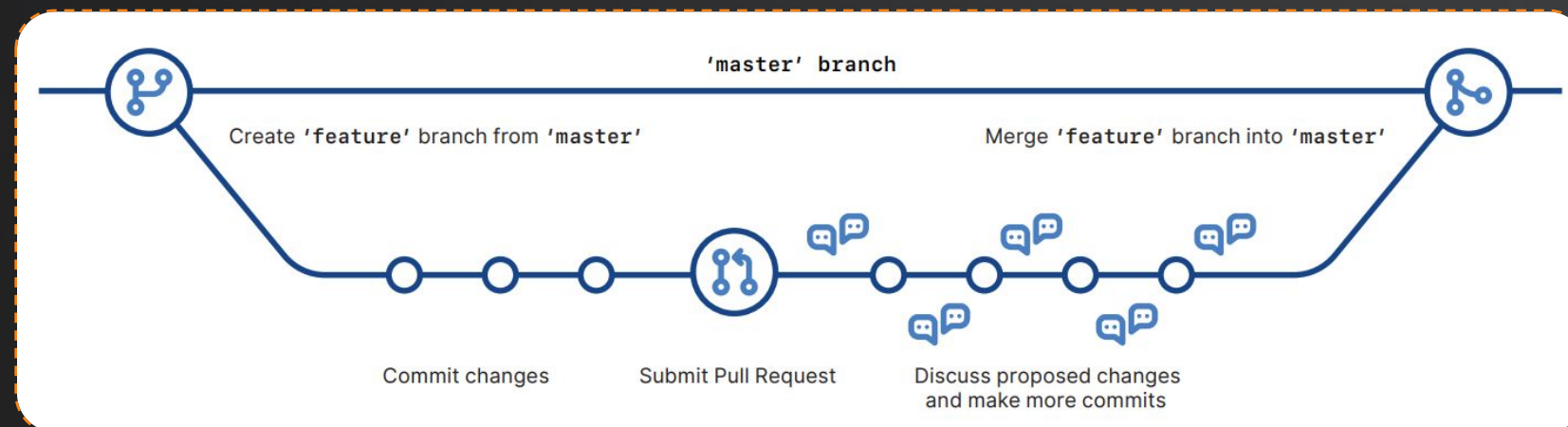
Introduction to GitHub

GitHub is a platform where you can upload a copy of your Git repository (often shortened as repo), hosted either on github.com.



contd ... introduction to GitHub

GitHub Flow





Why to use GitHub ?

- Version control
- Document requirements
- Collaborate on independent streams of history
- Review work in progress
- See team progress
- Public and Private Repositories



Setting up a GitHub account

- Visit the official GitHub website
- Click on the Signup button
- Complete the sign-up form
- Verify your email address



Linking the GitHub account VS code

1. Download and install the visual Studio code
2. Install Git
3. Enable Git in VS Code
4. Create and configure a GitHub account
5. Verify that Git is Linked to your GitHub



Visual Studio Code





Creating the Repo

Navigate to the repository section in GitHub and click on the **New repository button** and follow the steps below –

1. Choose project owner
2. Give repo name
3. Give repo description (optional)
4. Make it Private or Public Repo
5. Add README file
6. If needed add choose the .gitignore and license file

Create a new repository

A repository contains all project files, including the revision history. Already have a project repository elsewhere? [Import a repository.](#)



Required fields are marked with an asterisk (*).

Owner * Repository name *

 MTouthang /

Great repository names are short and memorable. Need inspiration? How about [curly-rotary-phone](#) ?

Description (optional)

- ☒  **Public**
Anyone on the internet can see this repository. You choose who can commit.
- ☐  **Private**
You choose who can see and commit to this repository.

Initialize this repository with:

- ☐ **Add a README file**
This is where you can write a long description for your project. [Learn more about READMEs.](#)

Add .gitignore

.gitignore template: **None** ▾

Choose which files not to track from a list of templates. [Learn more about ignoring files.](#)

Choose a license

License: **None** ▾

A license tells others what they can and can't do with your code. [Learn more about licenses.](#)

 You are creating a public repository in your personal account.

Create repository



Pushing code to GitHub

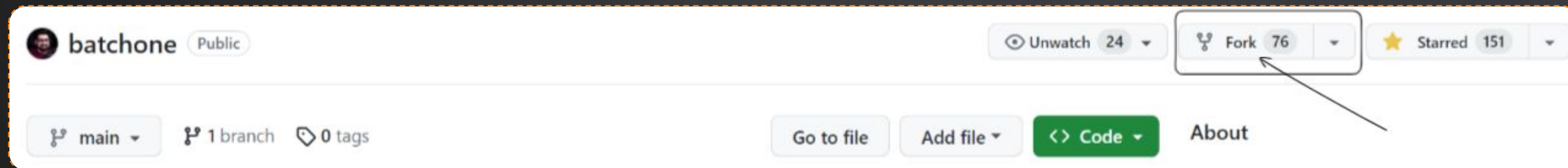
Pushing code to GitHub can be in two ways

1. Create a new project with Git and push it to GitHub(remote) repository
2. Push an existing Git project to the GitHub(remote) repository.



Forking an existing repo

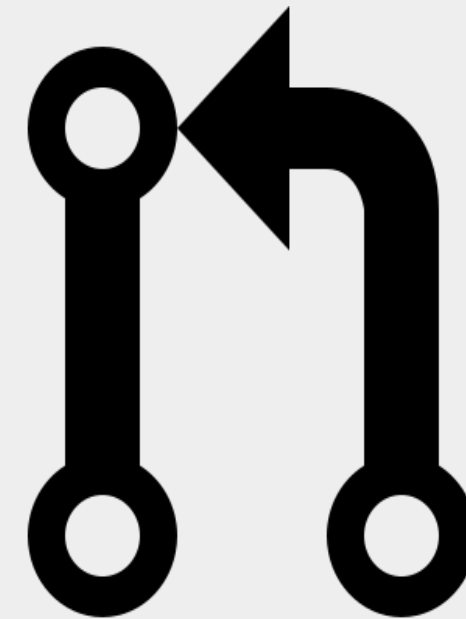
Forking on GitHub is a fundamental process that allows you to create a copy of someone else's repository (the "upstream" repository) under your own GitHub account.



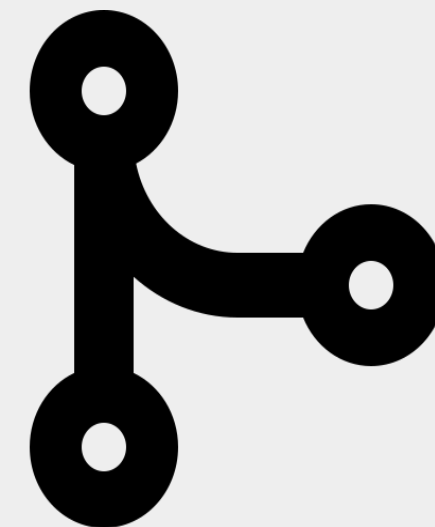


Generating pull requests and merge requests

- Fork and clone the repo
- Create a Branch
- Make changes
- Stage and commit changes
- Sync with the original repository (pull)
- Push the branch
- Open a new Pull request
- Review and Discuss
- Make necessary changes
- Merge the pull request
- Delete the branch (Optional)



pull request



merge request



Handling merge conflicts

- Identify the conflict files
- Open the conflict files
- Resolve the conflicts
- Stage and commit
- push



Hosting a website on GitHub Pages

- Create a GitHub Repository
- Push Your website files to the Repository
- Setup and enable the GitHub Pages
- Access your web page





Alternative of GitHub

- GitLab
- BitBucket
- SourceForge
- Launchpad
- Gitea





▶ **THANK YOU** ◀