



## The Github Workflow a.k.a. The GitHub Flow

Admin:

1. Creates a new repo with branches 'master' and 'dev' on Github
2. Clones the Github repo (git clone https://github.com/...)
3. works on the local copy
4. Creates a react project (or a vanilla project with just the files index.html index.js style.css)
5. add comments for sections in the files, e.g. style.css: `/* nav start */ /* nav end */ /* main start */ /* main end */`
6. Adds all files, commits and pushes to Github (git add .; git commit -m "initial"; git push)
7. adds the collaborators on Github
8. accepts the pull requests by the collaborators

### Create a new repository

A repository contains all the files for your project, including the revision history.

Owner

Repository name

Computerhope / example

Great repository names are short and memorable. Need inspiration? How about [friendly-barnacle](#).

Description (optional)

Computer Hope Git Example

☒ Public

Anyone can see this repository. You choose who can commit.

☐ Private

You choose who can see and commit to this repository.

☒ Initialize this repository with a README

This will let you immediately clone the repository to your computer. Skip this step if you're importing an existing repository.

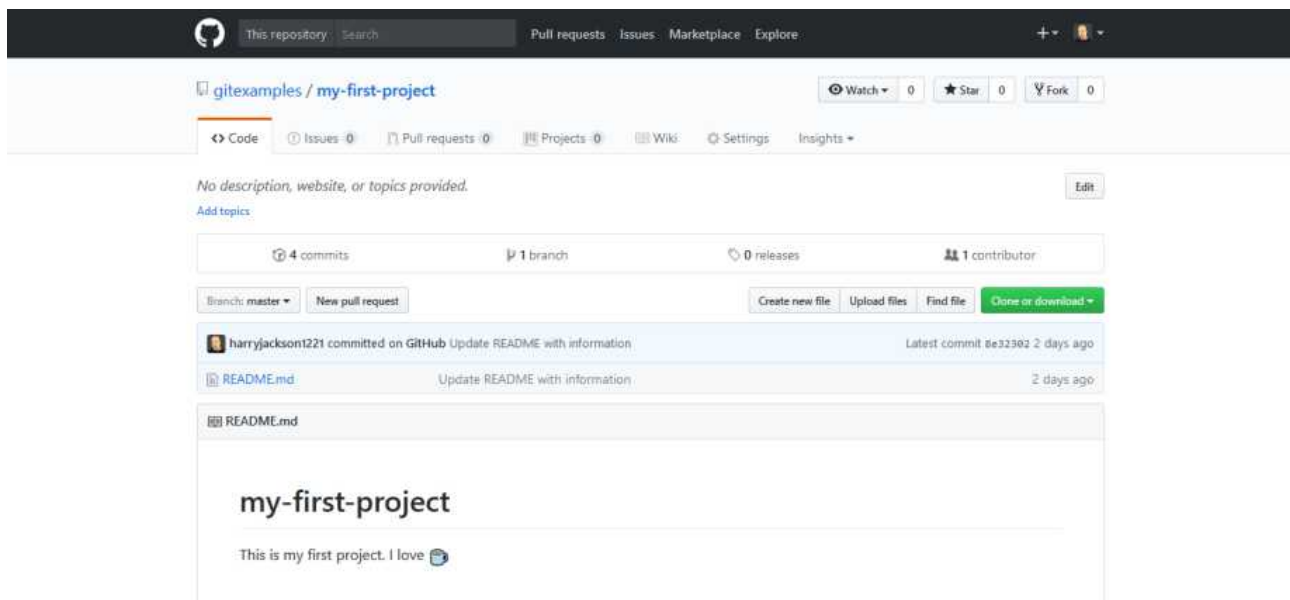
Add .gitignore: None

Add a license: None

Create repository

## Collaborators:

1. copy the repo link from Github to clone the repo - `git clone https://github.com/...`
2. `git checkout -b "nav"` (create my feature branch nav)
3. `git add .` `git commit -m "init feature branch"` `git push` (error message because branch does not exist yet on Github repo)
4. `git push --upstream ...` (push and create branch on Github)
5. pull the start working on my feature branch (nav)
6. `git add .` `git commit -m "added navbar"` `git push`
7. on Github: merge the new branch with the main branch



# Git Cheat sheet SETUP

## CONFIG

`git config --global user.name "[firstname lastname]"` set a name that is identifiable for credit when review version history

`git config --global user.email "[valid-email]"`  
set an email address that will be associated with each history marker

`git config --global color.ui auto`  
set automatic command line coloring for Git for easy reviewing

## SETUP & INIT

Configuring user information, initializing and cloning repositories

`git init`

initialize an existing directory as a Git repository

`git clone [url]`  
retrieve an entire repository from a hosted location via URL

## STAGE & SNAPSHOT

Working with snapshots and the Git staging area

`git status`

show modified files in working directory, staged for your next commit

`git add [file]`  
add a file as it looks now to your next commit (staging area)

`git add .`  
add all modified files to the staging area

`git reset [file]`

unstage a file while retaining the changes in working directory

`git diff`

diff of what is changed but not staged

`git diff --staged`  
diff of what is staged but not yet committed

`git commit -m "[descriptive message]"`  
commit your staged content as a new commit snapshot

## BRANCH & MERGE

Isolating work in branches, changing context, and integrating changes

**git branch**

list your branches. a \* will appear next to the currently active branch

**git branch [branch-name]**

create a new branch at the current commit

**git checkout -b [branch-name]** create a new branch and check it out

**git merge [branch]**

merge the specified branch's history into the current one

**git log**

show all commits in the current branch's history

## INSPECT & COMPARE

Examining logs, diffs and object information

**git log**

show the commit history for the currently active branch

**git log branchB..branchA**

show the commits on branchA that are not on branchB

**git diff branchB...branchA**

show the diff of what is in branchA that is not in branchB

**git log --follow [file]**

show the commits that changed file, even across renames

## SHARE & UPDATE

Retrieving updates from another repository and updating local repos

**git remote add [alias] [url]** add a git URL as an alias

**git fetch [alias]**

fetch down all the branches from that Git remote

**git merge [alias]/[branch]**

merge a remote branch into your current branch to bring it up to date

**git push [alias] [branch]**, e.g. **git origin main** Transmit local branch commits to the remote repository branch

**git pull**

fetch and merge any commits from the tracking remote branch

