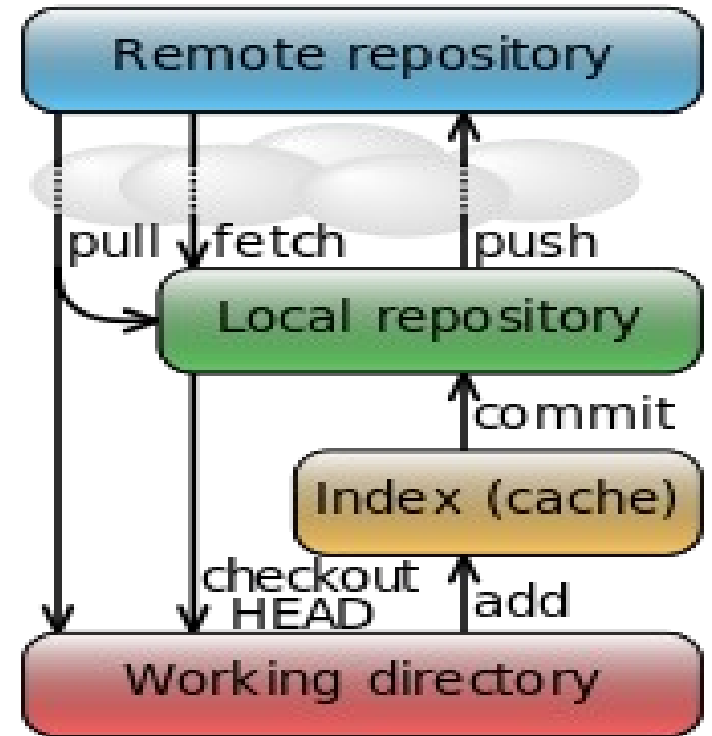


Git & GitHub

Git and GitHub allows groups of people to work on the same documents (often code) at the same time

Git is under the General Public License (GNU) version 2. Meaning its free to use. So what is important to understand is that GitHub does not own Git, they are just using the Git technology.



For Debian and their kinds like Ubuntu

- `sudo apt-get install git-all`

For Red Hat and their kinds like Fedora

- `sudo yum install git-all`

Creating git-hub

Join git-hub

- <https://github.com/join?source=header-home>

set your account's default identity for git

- `git config --global user.email "you@example.com"`
- `git config --global user.name "Your Name"`

Connecting to your git-hub with ssh

- `ssh-keygen -t rsa -C "you@example.com"`

Output is gonna be like this

```

Generating public/private rsa key pair.
Enter file in which to save the key (/home/basitharmonik/.ssh/id_rsa):
Created directory '/home/basitharmonik/.ssh'.
Enter passphrase (empty for no passphrase):
Enter same passphrase again:
Your identification has been saved in /home/basitharmonik/.ssh/id_rsa.
Your public key has been saved in /home/basitharmonik/.ssh/id_rsa.pub.
The key fingerprint is:
SHA256: 12:34:56:78:9A:BC:DE:FG:HI:JK:LM:NO:basitharmonik@gmail.com
The key's randomart image is:
+--[ RSA 2048 ]-----+
|          .           |
|          .           |
|       .+            |
|      -B            |
|    ,   .   +       |
|      .   .   o      |
|    .   o   ^       |
|    o                |
|   . . . o          |
+-----+

```



Please verify your email address

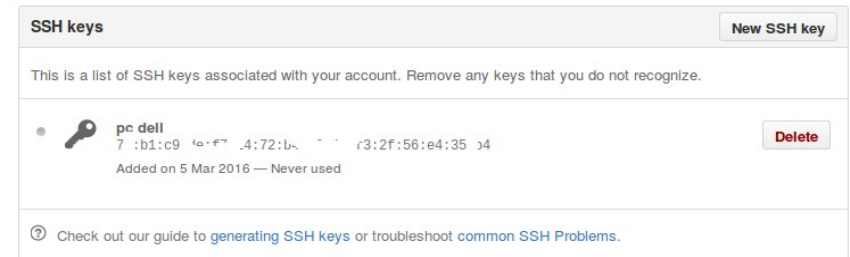
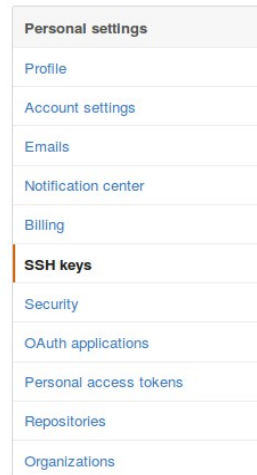
Before you can contribute on GitHub, we need you to verify your email address.
An email containing verification instructions was sent to **basitharmonik@gmail.com**.

Didn't get the email? [Resend verification email](#) or [change your email settings](#).

Creating git-hub

Copy your new public ssh key and paste it into git-hub's ssh keys section which is located in your personal setting

- `vim /home/basitharmonik/.ssh/id_rsa.pub`
- <https://github.com/settings/ssh>
- `ssh -T git@github.com`



```
vim ../../.ssh/id_rsa.pub
basitharmonik@basitharmonik:~/Desktop/Hupp$ ssh -T git@github.com
The authenticity of host 'github.com (192.30.252.129)' can't be established.
RSA key fingerprint is 16:27:ac:a5:76:28:2d:36:63:1b:56:4d:eb:df:a6:48.
Are you sure you want to continue connecting (yes/no)? yes
Warning: Permanently added 'github.com,192.30.252.129' (RSA) to the list of known hosts.
Hi basitharmonik! You've successfully authenticated, but GitHub does not provide shell access.
basitharmonik@basitharmonik:~/Desktop/Hupp$ ls
```

Repository Request

<https://github.com/>

Create a new repository

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

Owner

basitharmonik

Repository name

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

Description (optional)



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

Your repositories 1 [+ New repository](#)

Find a repository...

All Public Private Sources Forks

HUPP

Subscribe to your news feed

<https://github.com/new>

basitharmonik / HUPP

[Code](#) [Issues 0](#) [Pull requests 0](#) [Wiki](#) [Pulse](#) [Graphs](#) [Settings](#)

Quick setup — if you've done this kind of thing before

or [HTTPS](#) [SSH](#) <https://github.com/basitharmonik/HUPP.git>

We recommend every repository include a [README](#), [LICENSE](#), and [.gitignore](#).

Git Commands

- `git init` (now git tracking our file, we can see that with `ll` command)
- `git add .` (add command adding files into stage level, "." means that everything)
- `git add text1` (we've just added one file to stage level)
- `git commit -m "first commit , this part using for comment "`
- `git commit -m "first text added"` (commit adding staged files into local repo.)

If wanna learn what is the difference between committed or staged version and our version which is located in working directory , we can use these two

- `git diff` or `git diff --staged` (second one useful)

Deleting file from repo

- `git rm text2`

Deleting from your directory than updating your status

- `git commit -m (text2 deleted)`

Renaming is can manage with `mv` command just like linux

- `git mv text1 text2`

UNdo

- `git checkout` or specific one `git checkout HEAD`

if we modified file and than added staging status after that we can make undo from staging status with:

- `git reset HEAD text1`

Git Commands

- git remote add origin <https://github.com/basitharmonik/HUPP.git>
- git push origin master (uploading all files into github)

```
basitharmonik@basitharmonik:~/Desktop/Hupp$ git remote add origin https://github.com/basitharmonik/HUPP.git
basitharmonik@basitharmonik:~/Desktop/Hupp$ git push origin master
Username for 'https://github.com': basitharmonik
Password for 'https://basitharmonik@github.com':
Counting objects: 5, done.
Delta compression using up to 4 threads.
Compressing objects: 100% (2/2), done.
Writing objects: 100% (5/5), 420 bytes | 0 bytes/s, done.
Total 5 (delta 0), reused 0 (delta 0)
To https://github.com/basitharmonik/HUPP.git
 * [new branch]      master -> master
```

Lets assume that we have another study group and the want to add new methods

- mkdir Hupp2 && cd Hupp2/
- git init
- git clone <https://github.com/basitharmonik/HUPP.git>
- cd HUPP/
- git branch output : *master
- git branch hupp2
- git checkout hupp2 output :Switched to branch 'hupp2'
- git branch output : *hupp2 , master (now you are in hupp2 branch)

Git Commands

Let's assume that we are adding new codes into src and include file

- `touch src/hupp2lib.cc include/hupp2lib.hh`
- `git add .`
- `git commit -am "branch hupp2 and their codes"`
- `git push origin hupp2` (please notice that we have just changed master into hupp2)

The image displays two side-by-side screenshots of a GitHub repository named 'basitharmonik / HUPP'. Both screenshots show the repository's file tree and commit history. The left screenshot shows the 'master' branch selected, with a file tree showing 'include' and 'src' directories. The 'include' directory contains a file named 'ikinci commit, baska kutuphane ekledik' and the 'src' directory contains a file named 'usr dan src ye döndü'. The right screenshot shows the 'hupp2' branch selected, with a file tree showing 'include' and 'src' directories. The 'include' directory contains a file named 'branch hupp2 and their codes' and the 'src' directory contains a file named 'branch hupp2 and their codes'. Both screenshots show the repository has 6 commits, 1 branch, 0 releases, and 1 contributor. The 'hupp2' branch is 1 commit ahead of master.

As you can see now we have two branch and two different codes

Git Commands

Lets merge these two branch

Before merging you may want to sync all your codes with github

Please note that we are going to merge under the master branch so that we can get new classes from hupp2

- git branch
- git pull origin hupp2
- git merge hupp2

output : hupp2 , *master (now you are in master branch)
(sync command)

```
basitharmonik@basitharmonik:~/Desktop/Hupp$ git branch
hupp2
* master
basitharmonik@basitharmonik:~/Desktop/Hupp$ ls ./ include/ src/
./:
hupp.cc  include  src

include/:
hupp2lib.hh  hupplib2.hh  hupplib.hh

src/:
hupp2lib.cc  hupplib2.cc  hupplib.cc
```

As you can see now we have same codes. Now we can upload into github

- git push origin master

Git Commands

basitharmonik / HUPP

Unwatch 1 Star 0 Fork 0

Code Issues 0 Pull requests 0 Wiki Pulse Graphs Settings

hupp — Edit

7 commits 2 branches 0 releases 1 contributor

Branch: master New pull request

New file Upload files Find file HTTPS https://github.com/basit Download ZIP

basitharmonik	branch hupp2 and their codes	Latest commit 43b3c69 18 hours ago
include	branch hupp2 and their codes	18 hours ago
src	branch hupp2 and their codes	18 hours ago
hupp.cc	ilk commit , kodun genel yapısının oluşturduk bunun üzerine gideceğiz	a day ago

Help people interested in this repository understand your project by adding a README.

Add a README

