

Tutorial “Code Colaboration” menggunakan Github

By: Bernard Very (bernardvery@live.com)

Persiapan

Langkah:

1. Download “Git for Windows”

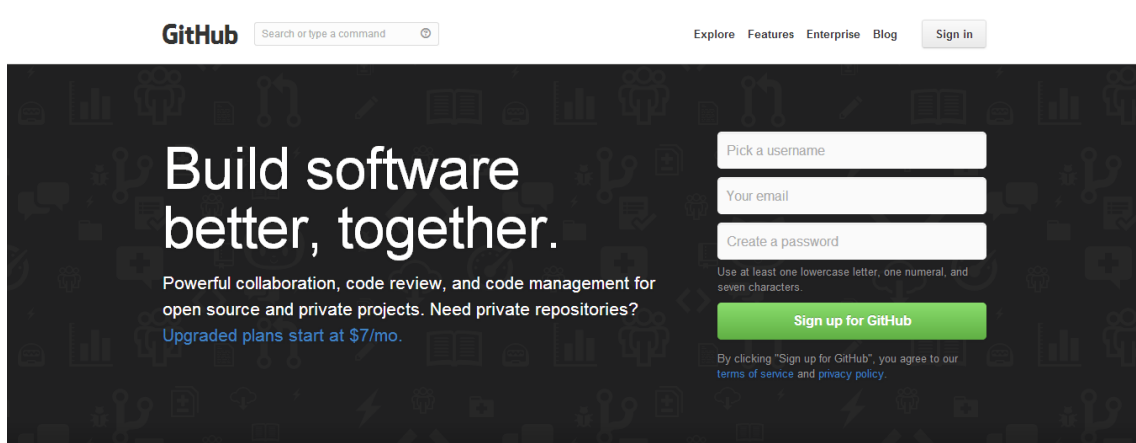
url: <http://git-scm.com/download/win>



2. Install “Git for Windows”
3. Daftar akun di Github

url: <https://github.com>


- a) Isi Username, email dan password → klik tombol “Sign up for GitHub”





- b) Pilih paket yang **Free**, kemudian klik tombol “Finish Sign up”

Welcome to GitHub

You've taken your first step into a larger world, @bernardvery.

 **Completed**
Set up a personal account

 **Step 2:**
Choose your plan

 **Step 3:**
Go to your dashboard

Choose your personal plan

Plan	Cost	Private repos	
Large	\$50/month	50	<button>Choose</button>
Medium	\$22/month	20	<button>Choose</button>
Small	\$12/month	10	<button>Choose</button>
Micro	\$7/month	5	<button>Choose</button>
Free	\$0/month	0	<button>Choose</button>

Each plan includes:

Unlimited collaborators
Unlimited public repositories


- ✓ Free setup
- ✓ SSL Protection
- ✓ Email support
- ✓ Wikis, Issues, Pages, & more


Don't worry, you can cancel or upgrade at any time.

- ☐ **Help me set up an organization next**
Organizations are separate from personal accounts and are best suited for businesses who need to manage permissions for many employees.
[Learn more about organizations.](#)

Finish sign up


- c) Setelah klik tombol Finish, kita akan dibawa ke halaman Dashboard → Account Setting → Emails untuk melakukan proses “verify” email yang kita gunakan.
- d) Klik tombol “Verify”

 Search or type a command Explore Gist Blog Help

 **bernardvery**
Profile
Account Settings
Emails
Notification Center
Billing

Email

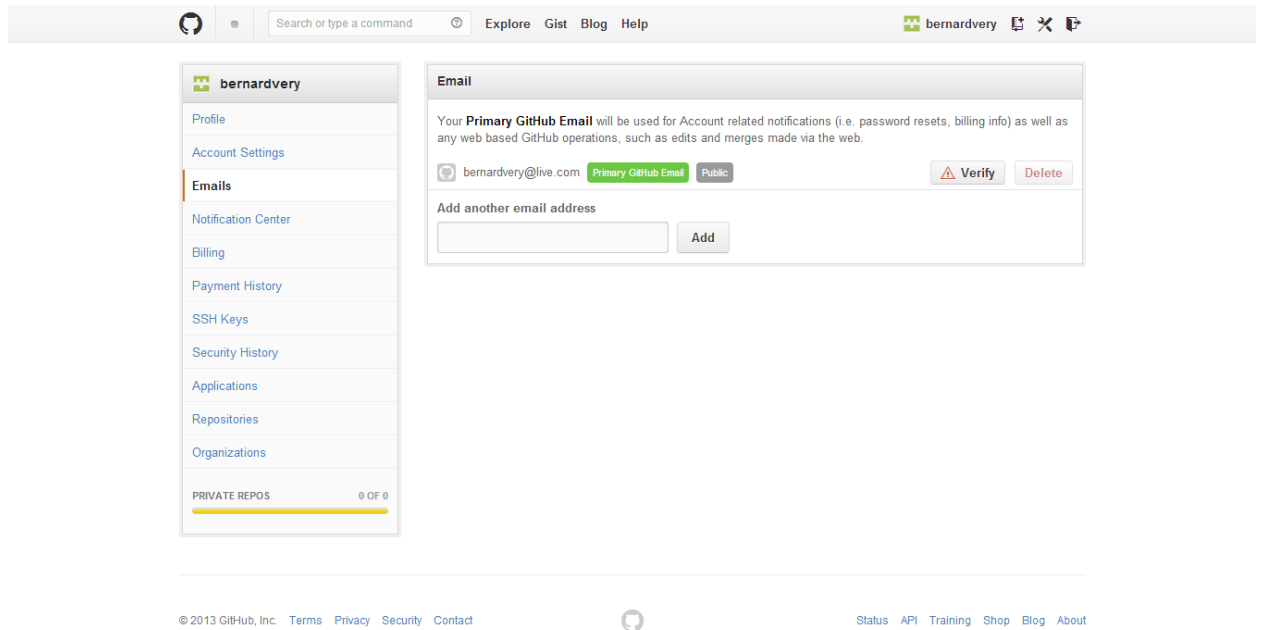
Your **Primary GitHub Email** will be used for Account related notifications (i.e. password resets, billing info) as well as any web based GitHub operations, such as edits and merges made via the web.

 bernardvery@live.com **Primary GitHub Email** Public Verify Delete

Add another email address

Add

- e) Cek inbox email Anda lalu lakukan konfirmasi.



- a) Sign in ke GitHub dengan akun yang baru saja dibuat.
- b) Pada halaman

Sebagai Pemilik Proyek (Owner)

Langkah:

1. Sign in ke Github
2. Lakukan setting SSH:

Laptop → Github
(Lokal/Master) (Repository/Origin)

- a) Buka GitBash di Windows



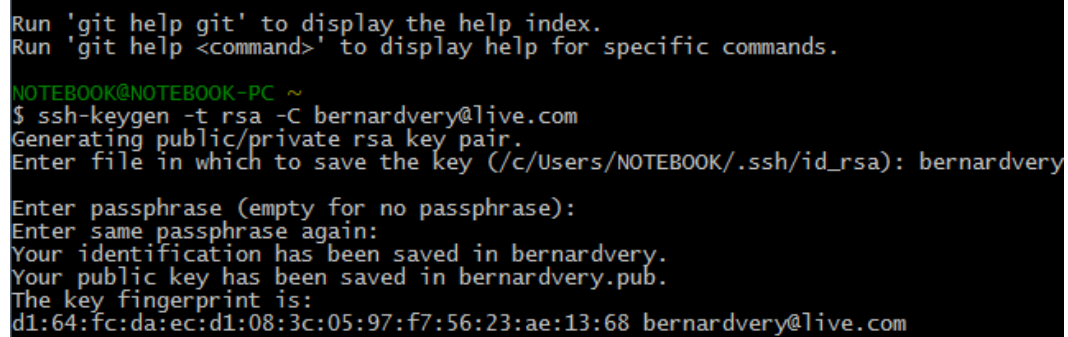
```
MINGW32/c/Users/NOTEBOOK
Welcome to Git (version 1.8.4-preview20130916)

Run 'git help git' to display the help index.
Run 'git help <command>' to display help for specific commands.

NOTEBOOK@NOTEBOOK-PC ~$
```

b) Ketik:

`ssh-keygen -t rsa -C [email_daftar]`



```
Run 'git help git' to display the help index.
Run 'git help <command>' to display help for specific commands.

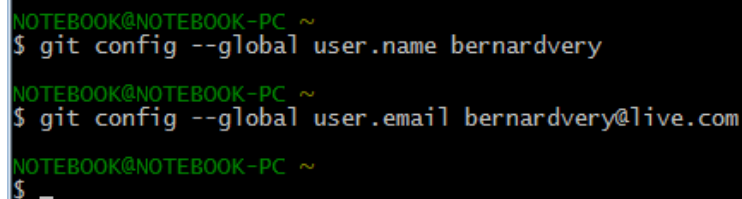
NOTEBOOK@NOTEBOOK-PC ~$ ssh-keygen -t rsa -C bernardvery@live.com
Generating public/private rsa key pair.
Enter file in which to save the key (/c/Users/NOTEBOOK/.ssh/id_rsa): bernardvery

Enter passphrase (empty for no passphrase):
Enter same passphrase again:
Your identification has been saved in bernardvery.
Your public key has been saved in bernardvery.pub.
The key fingerprint is:
d1:64:fc:da:ec:d1:08:3c:05:97:f7:56:23:ae:13:68 bernardvery@live.com
```

c) Untuk set profil global ketik:

`git config --global user.name [nama_user]`

`git config --global user.email [email_daftar]`



```
NOTEBOOK@NOTEBOOK-PC ~$ git config --global user.name bernardvery

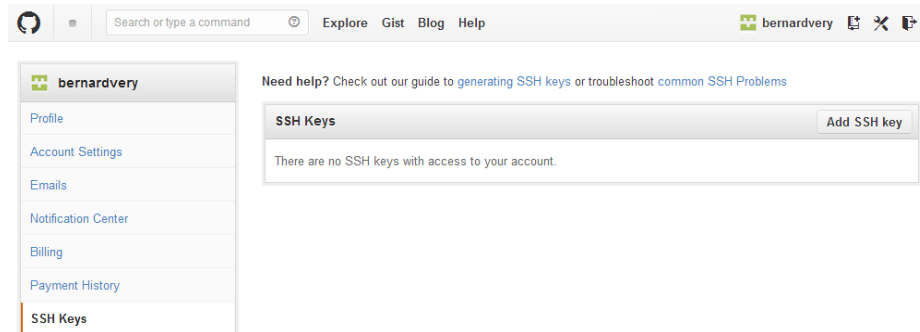
NOTEBOOK@NOTEBOOK-PC ~$ git config --global user.email bernardvery@live.com

NOTEBOOK@NOTEBOOK-PC ~$
```

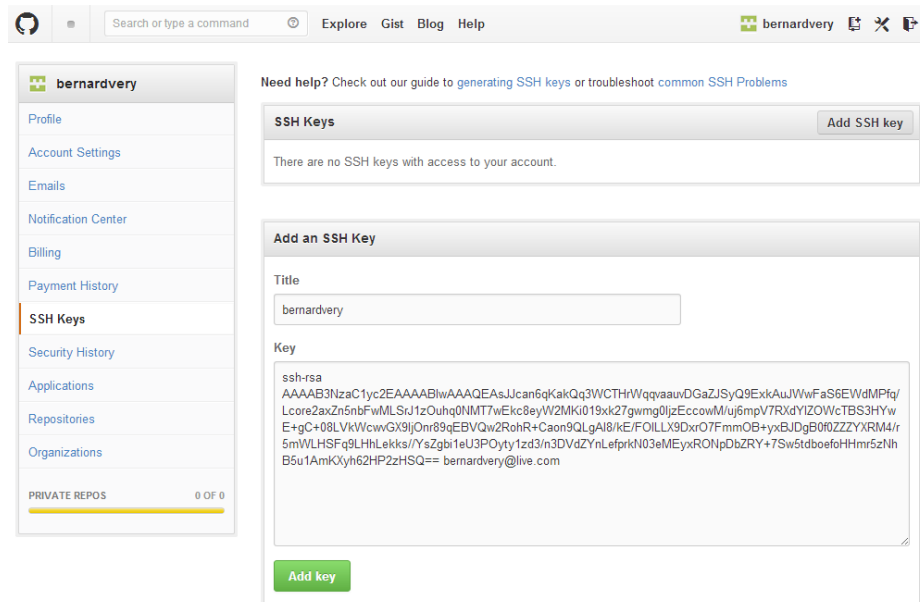
d) Daftarkan SSH ke Github

Langkah:

- Buka file SSH hasil generate pada langkah sebelumnya (Notepad++), Copy semua isi file.
Lokasi: C:\User\Very\.ssh\id_rsa.pub
- Buka Github → Account Settings → SSH Keys



- Klik tombol “Add SSH Keys”
- Masukkan nama pada field “Title” dan paste isi file SSH ke field “Key”



- Klik tombol “Add key”
- e) Lakukan cek Akses SSH ke Github
- Langkah:

- Buka GitBash
- Ketik:

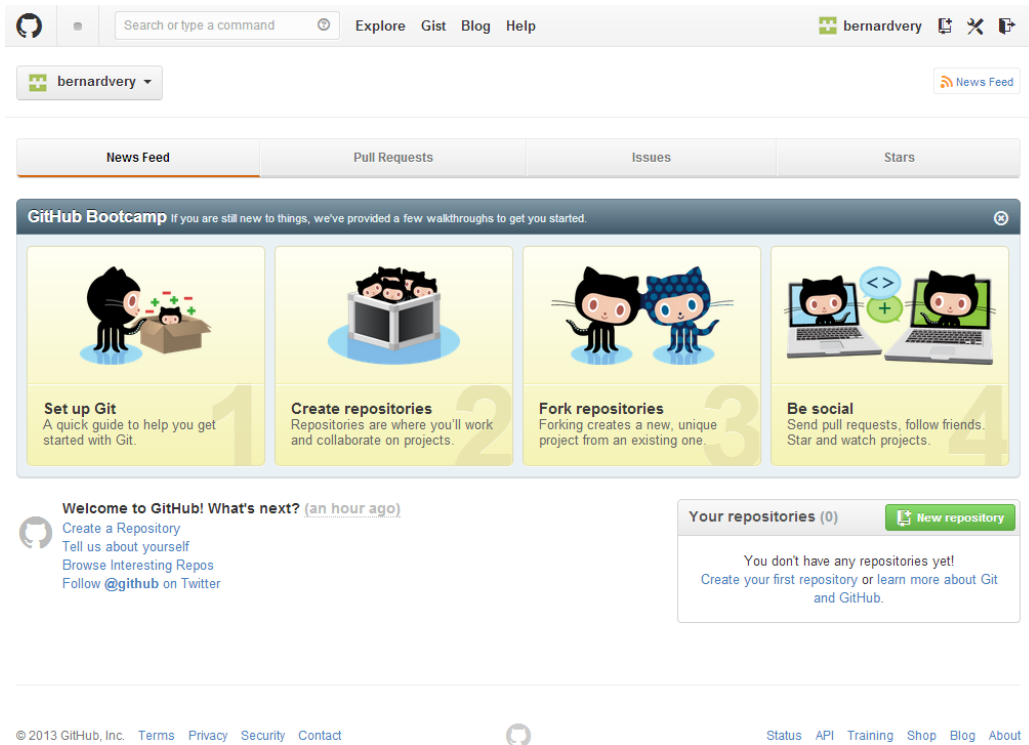
ssh -vT git@github.com

```
Hi bernardvery! You've successfully authenticated, but GitHub does not provide shell access.
debug1: channel 0: free: client-session, nchannels 1
debug1: Transferred: stdin 0, stdout 0, stderr 0 bytes in 0.7 seconds
debug1: Bytes per second: stdin 0.0, stdout 0.0, stderr 0.0
debug1: Exit status 1

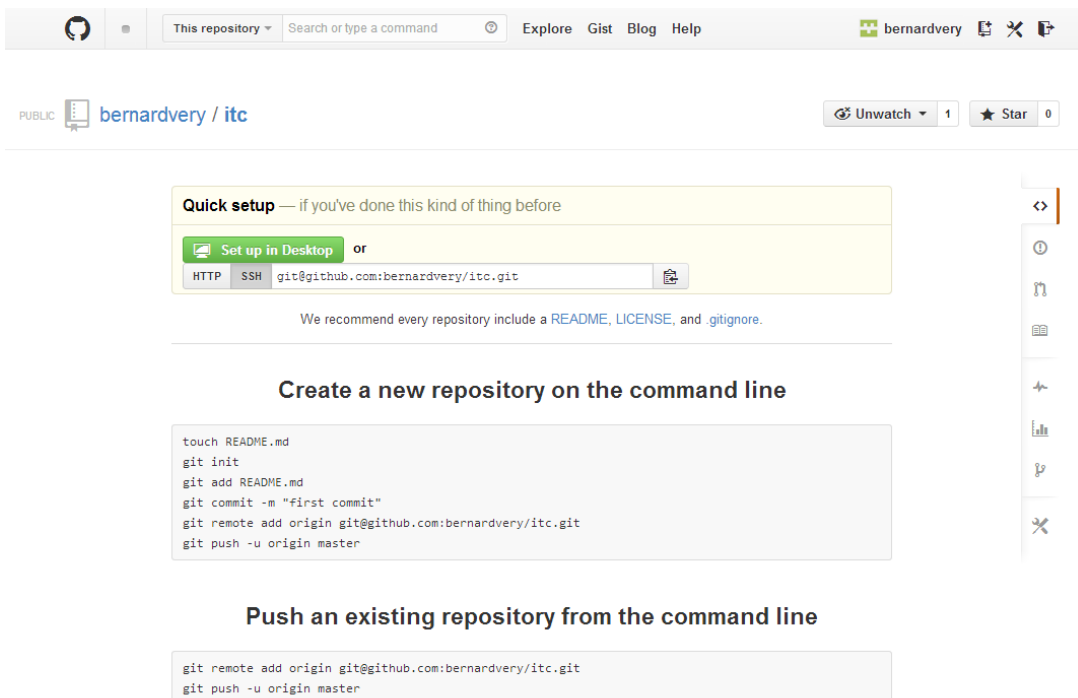
NOTEBOOK@NOTEBOOK-PC ~
$
```

3. Membuat Repository

- a) Klik tombol “New Repository” pada halaman home Github atau klik icon “Create a new Repo”



- b) Isikan Nama repository dan Deskripsi, lalu klik tombol “Create Repository”
- c) Setelah sukses Anda akan dibawa ke halaman berikut:



4. Menambah file pada Repository

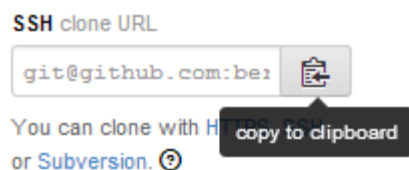
Langkah

- a) Buka GitBash
- b) Buat directory sesuai dengan nama proyek (Contoh : itc) dengan perintah:
mkdir itc
- c) Masuk ke direktori diatas, lalu jadikan direktori tersebut menjadi direktori git, dengan perintah:
git init

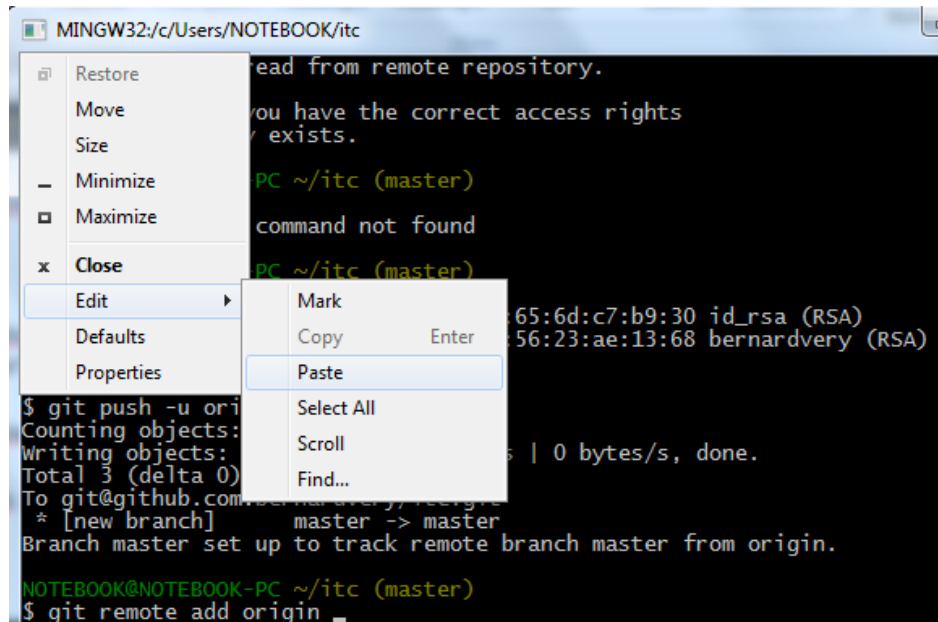
```
NOTEBOOK@NOTEBOOK-PC ~  
$ mkdir itc  
  
NOTEBOOK@NOTEBOOK-PC ~  
$ cd itc  
  
NOTEBOOK@NOTEBOOK-PC ~/itc  
$ git init  
Initialized empty Git repository in c:/Users/NOTEBOOK/itc/.git/  
  
NOTEBOOK@NOTEBOOK-PC ~/itc (master)  
$
```

- d) Buat file baru di direktori tersebut (misalkan: README.txt), lalu simpan dan daftarkan ke git, dengan perintah:
git add README.txt
- e) Buat pesan commit untuk penambahan file baru tersebut diatas, dengan perintah:
git commit -m "commit pertama kali"
- f) Tambah alamat repository sesuai alamat proyek di Github
Langkah:

- Buka repository melalui Github, lalu copy alamat SSH :



- Ketik pada GitBash perintah berikut, lalu paste alamat SSH ke dalam shell:
git remote add origin [git@github.com:bernardvery/itc.git](https://github.com/bernardvery/itc.git)

A screenshot of a terminal window titled 'MINGW32/c/Users/NOTEBOOK/itc'. A context menu is open over the terminal text, showing options like 'Restore', 'Move', 'Size', 'Minimize', 'Maximize', 'Close', 'Edit', 'Defaults', and 'Properties'. The 'Edit' submenu is also open, showing 'Mark', 'Copy', 'Paste', 'Select All', 'Scroll', and 'Find...'. The terminal text in the background shows the output of a 'git push' command, including 'Counting objects', 'Writing objects', and 'To git@github.com:bernardvery/itc.git'.

```
NOTEBOOK@NOTEBOOK-PC ~/itc (master)
$ ls
README.txt

NOTEBOOK@NOTEBOOK-PC ~/itc (master)
$ cat README.txt
Hello World!
Selamat Datang bernardery

NOTEBOOK@NOTEBOOK-PC ~/itc (master)
$ git add README.txt
warning: LF will be replaced by CRLF in README.txt.
The file will have its original line endings in your working directory.

NOTEBOOK@NOTEBOOK-PC ~/itc (master)
$ git commit -m "commit pertama kali"
[master (root-commit) 0f7e609] commit pertama kali
warning: LF will be replaced by CRLF in README.txt.
The file will have its original line endings in your working directory.
1 file changed, 2 insertions(+)
create mode 100644 README.txt

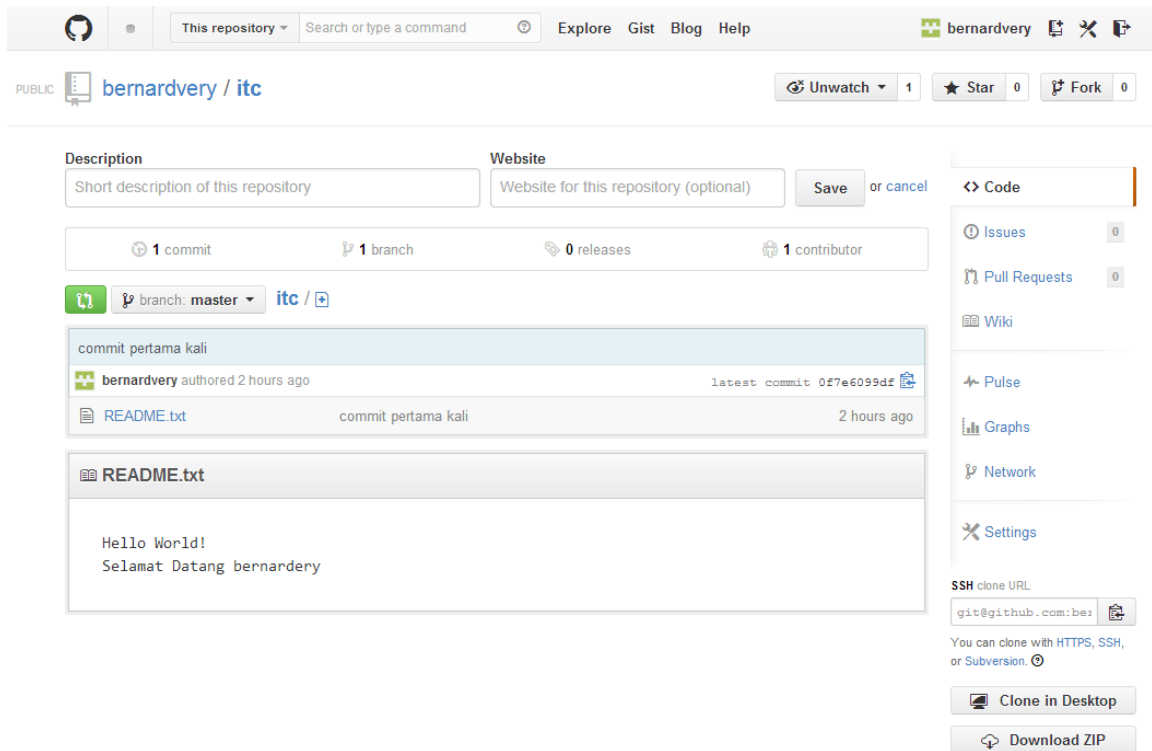
NOTEBOOK@NOTEBOOK-PC ~/itc (master)
$ git remote add origin git@github.com:bernardvery/itc.git
```

- g) Lakukan push perubahan isi proyek ke server remote/repository dengan perintah:
git push -u origin master

```
NOTEBOOK@NOTEBOOK-PC ~/itc (master)
$ git push -u origin master
Counting objects: 3, done.
Writing objects: 100% (3/3), 251 bytes | 0 bytes/s, done.
Total 3 (delta 0), reused 0 (delta 0)
To git@github.com:bernardvery/itc.git
 * [new branch]      master -> master
Branch master set up to track remote branch master from origin.

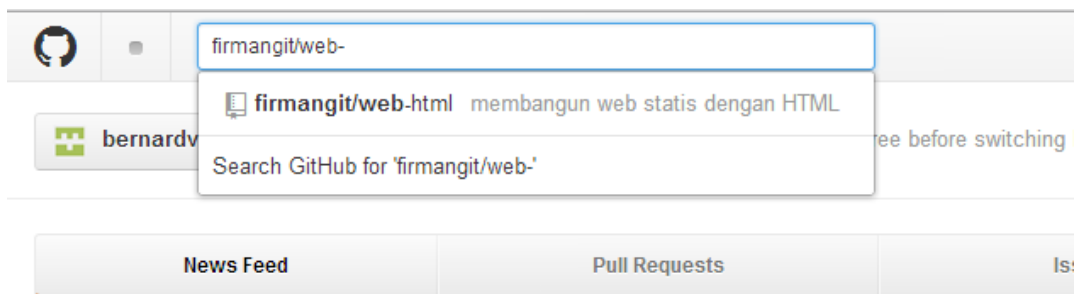
NOTEBOOK@NOTEBOOK-PC ~/itc (master)
$
```

- h) Cek perubahan pada halaman proyek di Github.

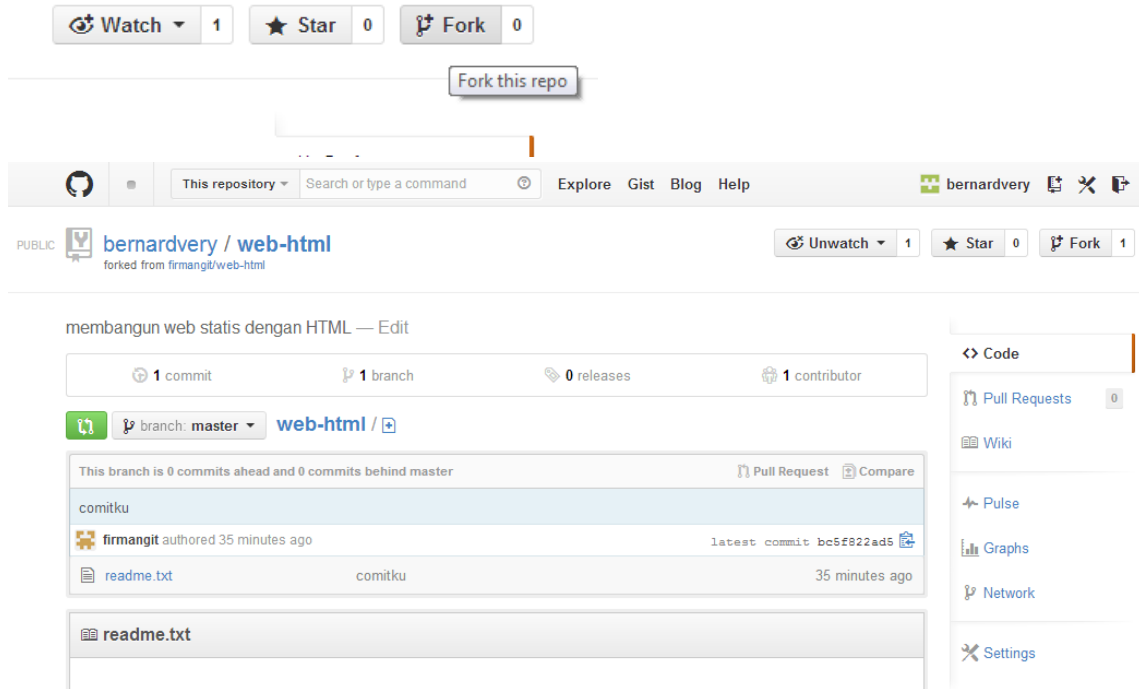


Sebagai Kolaborator Proyek

1. Berkolaborasi dengan proyek lain
 - a) Klik logo Github pada kiri atas untuk menuju halaman home
 - b) Ketik nama proyek pada textbox yang sudah disediakan



- c) Klik proyek tersebut, maka Anda akan dibawa ke halaman proyek yang dicari.
 - d) Klik tombol "Fork" pada menu kanan atas untuk melakukan proses Forking ke repository Github kita. Maka secara otomatis proyek tersebut akan di cabang ke dalam repository Anda.



- e) Cek pada halaman Repository Anda, apakah nama proyek tersebut sudah terdaftar.
 f) Untuk dapat ikut berkolaborasi dengan proyek tersebut, maka kita perlu melakukan Clone.

Berikut langkahnya:

- Buka Github
- Ketik perintah:
cd ~
- Lakukan clone sesuai dengan alamat url SSH Proyek tsb, dengan perintah
git clone [git@github.com:bernardvery/web-html.git](https://github.com/bernardvery/web-html.git)

```
NOTEBOOK@NOTEBOOK-PC ~/itc (master)
$ cd ~

NOTEBOOK@NOTEBOOK-PC ~
$ git clone git@github.com:bernardvery/web-html.git
Cloning into 'web-html'...
remote: Counting objects: 3, done.
remote: Total 3 (delta 0), reused 3 (delta 0)
Receiving objects: 100% (3/3), done.
Checking connectivity... done
```

- Apabila proses cloning sukses, maka seluruh isi proyek akan di copy ke laptop local Anda dengan nama folder sesuai nama proyek. (Lokasi: c:\Users\Very\web-html)
- g) Lakukan perubahan pada isi folder tersebut dengan menambah atau mengurangi isi.
 h) Daftarkan perubahan yang kita lakukan ke dalam git, dengan langkah:
- Masuk ke GitBash
 - Masuk ke folder Proyek, ketik perintah:

```
cd web-html
git add .
git commit -m "Perubahan terbaru"
git push -m origin master
```

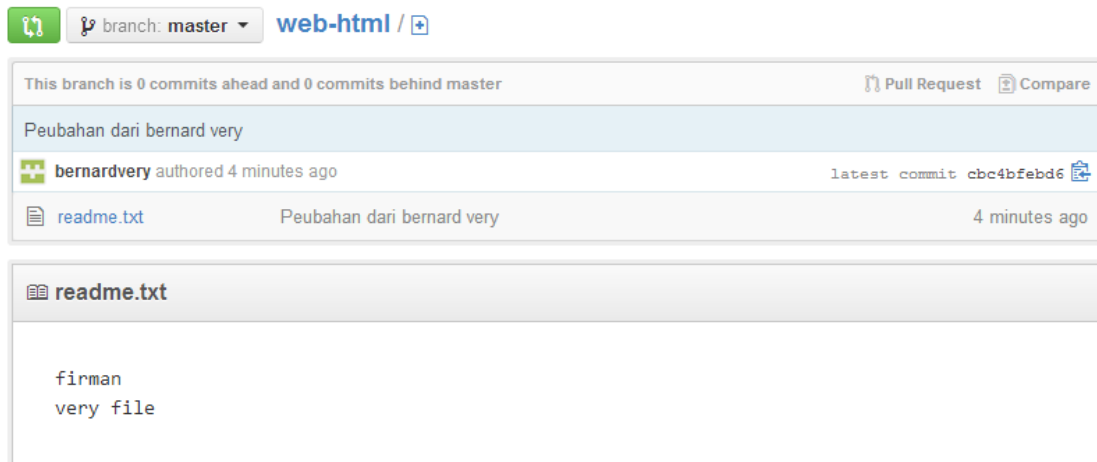
```
NOTEBOOK@NOTEBOOK-PC ~
$ cd web-html/

NOTEBOOK@NOTEBOOK-PC ~/web-html (master)
$ git add .

NOTEBOOK@NOTEBOOK-PC ~/web-html (master)
$ git commit -m "Peubahan dari bernard very"
[master cbc4bfe] Peubahan dari bernard very
1 file changed, 2 insertions(+), 1 deletion(-)

NOTEBOOK@NOTEBOOK-PC ~/web-html (master)
$ git push -u origin master
Counting objects: 5, done.
Writing objects: 100% (3/3), 265 bytes | 0 bytes/s, done.
Total 3 (delta 0), reused 0 (delta 0)
To git@github.com:bernardvery/web-html.git
bc5f822..cbc4bfe master -> master
Branch master set up to track remote branch master from origin.
```

- i) Setelah melakukan perubahan di local dan push ke server, silahkan cek di halaman repository pada Github.



- j) Pada halaman repository tersebut, klik link "Pull Request" untuk melakukan permintaan perubahan pada file proyek di repository pusat.

Click to create a pull request for this comparison

1 commit 1 file changed 0 comments 1 contributor

Nov 01, 2013
bernardvery Peubahan dari bernard very cbc4bfe

Showing 1 changed file with 2 additions and 1 deletion. Show Diff Stats

readme.txt

```
@@ -1 +1,2 @@
1 -firman file
2 +very file
```

No commit comments for this range

- k) Klik pada tombol “Click to create a pull request for this comparison”.
- l) Pada halaman berikutnya, klik tombol “Send pull request”.

Peubahan dari bernard very

Write Preview Comments are parsed with GitHub Flavored Markdown

Leave a comment

Attach images by dragging & dropping, selecting them, or pasting from the clipboard.

Able to merge
These branches can be automatically merged

Send pull request

1 commit 1 file changed 0 comments 1 contributor

Nov 01, 2013
bernardvery Peubahan dari bernard very cbc4bfe

Showing 1 changed file with 2 additions and 1 deletion. Show Diff Stats

readme.txt

```
@@ -1 +1,2 @@
1 -firman file
2 +very file
```

- m) Maka secara otomatis pada halaman proyek asli akan muncul permintaan yang baru saja Anda lakukan.



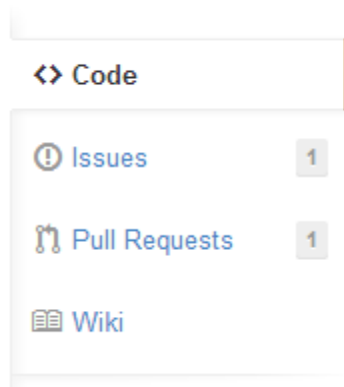
2. Menggabungkan perubahan yang di-request oleh para kolaborator.

Langkah:

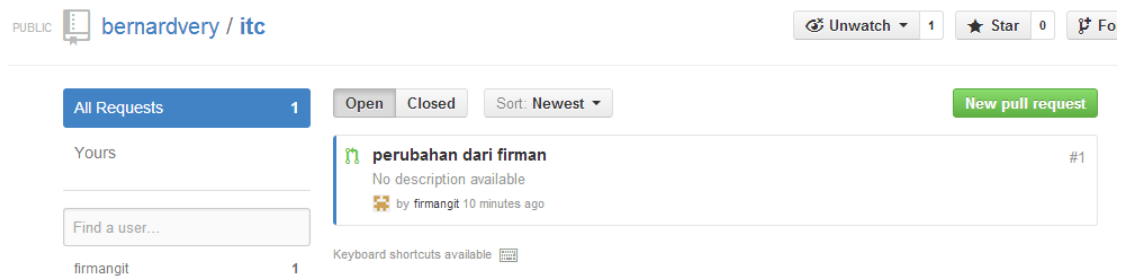
- a) Buka halaman proyek di Github (klik logo Github di kiri atas)



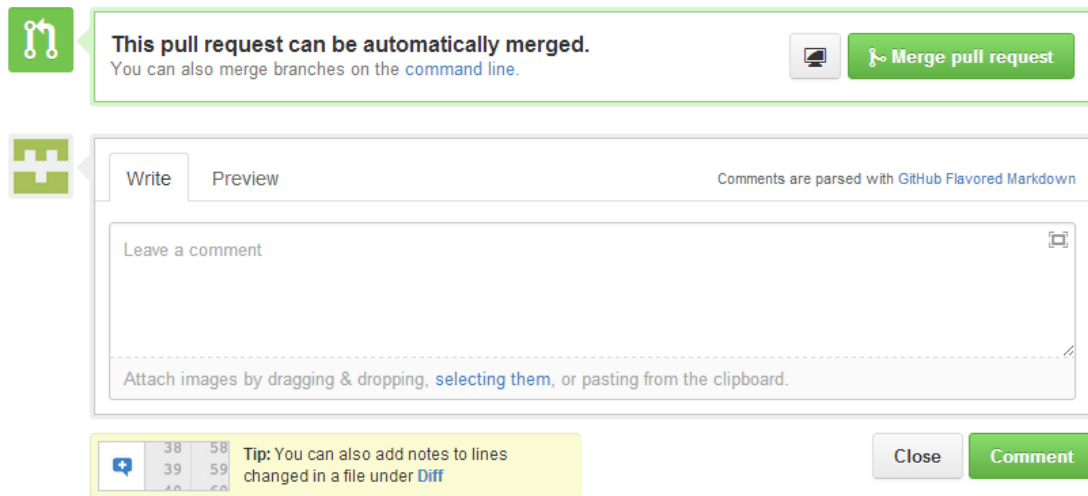
- b) Pada halaman proyek, cek notifikasi pada menu "Pull Request" sebelah kanan.



c) Klik menu “Pull Request” tersebut untuk melihat request dari para kolaborator.



d) Klik request yang akan ditanggapi oleh pemilik proyek.



e) Pada halaman request tersebut, klik tombol “Merge pull request” untuk menerima perubahan yang dilakukan oleh kolaborator tersebut, lalu klik tombol “Confirm merge”.

f) Secara otomatis Anda akan dibawa ke halaman informasi merge yang baru saja dilakukan.

Public **bernardvery / itc** Unwatch 1 Star 0 Fork 1

Merged bernardvery merged 1 commit into `bernardvery:master` from `firmangit:master` less than a minute ago 6 #1

Discussion Commits 1 Files Changed 1

firmangit opened this pull request 22 minutes ago
perubahan dari firman
 No one is assigned No milestone
 No description given.
 2 participants

firmangit added a commit 34 minutes ago
firmangit perubahan dari firman 3cdd3fd

bernardvery referenced this pull request from a commit 8 minutes ago
bernardvery Merge pull request #1 from firmangit/master 70d0e3e

Merged bernardvery merged commit 70d0e3e into `bernardvery:master` from `firmangit:master` 8 minutes ago

Closed bernardvery closed the pull request 8 minutes ago

Write Preview Comments are parsed with GitHub Flavored Markdown
 Leave a comment
 Attach images by dragging & dropping, selecting them, or pasting from the clipboard.
 Tip: You can also add notes to lines changed in a file under [Diff](#) **Comment**

- g) Cek pada halaman utama proyek untuk melihat secara keseluruhan history perubahan/commit (dengan cara klik link commit) yang terjadi.

Public **bernardvery / itc** Unwatch 1 Star 0 Fork 1

branch: **master** **itc** / Commits

Nov 01, 2013

Merge pull request #1 from firmangit/master 70d0e3e520
 bernardvery authored 9 minutes ago [Browse code](#)

perubahan dari firman 3cdd3fd312
 firmangit authored 35 minutes ago [Browse code](#)

Oct 31, 2013

commit pertama kali 0f7e6099df
 bernardvery authored 4 hours ago [Browse code](#)

--- Selamat Mencoba ---