

Git Branch Control

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```
MINGW64:/f/gittest

user@TorAleksander MINGW64 /f
$ mkdir gittest

user@TorAleksander MINGW64 /f
$ cd gittest

user@TorAleksander MINGW64 /f/gittest
$ git init
Initialized empty Git repository in F:/gittest/.git/

user@TorAleksander MINGW64 /f/gittest (master)
$ vi index.html|
```

```
MIN
<html>
    <body>
        <h1>Hello HTML~~!!~!</h1>
    </body>
</html>
```

```
MINGW64:/f/gittest

user@TorAleksander MINGW64 /f/gittest (master)
$ git add index.html
warning: LF will be replaced by CRLF in index.html.
The file will have its original line endings in your working directory

user@TorAleksander MINGW64 /f/gittest (master)
$ git commit -am "Add Hello HTML"
[master (root-commit) 8f2b763] Add Hello HTML
1 file changed, 5 insertions(+)
create mode 100644 index.html

user@TorAleksander MINGW64 /f/gittest (master)
$ |
```

```
MINGW64
user@TorAleksander MINGW64 /f/gittest (master)
$ vi index.html |
```

```
MINGW64:/f/gittest
<html>
  <head>
    <title>Hello HTML in Git</title>
  </head>
  <body>
    <h1>Hello HTML~!!~!</h1>
  </body>
</html>
```

```
MINGW64:/f/gittest
user@TorAleksander MINGW64 /f/gittest (master)
$ vi index.html

user@TorAleksander MINGW64 /f/gittest (master)
$ git status
On branch master
Changes not staged for commit:
  (use "git add <file>..." to update what will be committed)
  (use "git restore <file>..." to discard changes in working directory)
        modified:   index.html

no changes added to commit (use "git add" and/or "git commit -a")

user@TorAleksander MINGW64 /f/gittest (master)
$ |
```

```
MINGW64:/f/gittest

user@TorAleksander MINGW64 /f/gittest (master)
$ git add index.html
warning: LF will be replaced by CRLF in index.html.
The file will have its original line endings in your working directory

user@TorAleksander MINGW64 /f/gittest (master)
$ git status
On branch master
Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
        modified:   index.html

user@TorAleksander MINGW64 /f/gittest (master)
$ git commit -am "add <head> and <title>"
[master 25cf362] add <head> and <title>
 1 file changed, 3 insertions(+)

user@TorAleksander MINGW64 /f/gittest (master)
$ |
```

```
MINGW64:/f/gittest

user@TorAleksander MINGW64 /f/gittest (master)
$ git log
commit 25cf36228acbd98c3aa2a6210b49404d80550cfa (HEAD -> master)
Author: silenc3502 <gcccompil3r@gmail.com>
Date:   Wed Dec 11 01:51:07 2019 +0900

    add <head> and <title>

commit 8f2b763b03682ac2ac16580c1f43b554d8457204
Author: silenc3502 <gcccompil3r@gmail.com>
Date:   Wed Dec 11 01:46:14 2019 +0900

    Add Hello HTML

user@TorAleksander MINGW64 /f/gittest (master)
$ |
```

```
user@TorAleksander MINGW64 /f/gittest (master)
$ git branch branchtest master

user@TorAleksander MINGW64 /f/gittest (master)
$ vi index.html|
```

```
MINGW64:/f/gittest

<html>
  <head>
    <title>Hello HTML in Git</title>
  </head>
  <body>
    <h1>Hello HTML~~!!~!</h1>
    <ul>
      <li><a href="bio.html">Biography</a></li>
    </ul>
  </body>
</html>
```

```
user@TorAleksander MINGW64 /f/gittest (master)
$ git commit -am "Add href"
warning: LF will be replaced by CRLF in index.html.
The file will have its original line endings in your working directory
[master 98026c8] Add href
1 file changed, 3 insertions(+)

user@TorAleksander MINGW64 /f/gittest (master)
$ git checkout branchtest
Switched to branch 'branchtest'

user@TorAleksander MINGW64 /f/gittest (branchtest)
$ |
```

```
MINGW64:/f/gittest

user@TorAleksander MINGW64 /f/gittest (branchtest)
$ vi index.html |
```

```
MINGW64:/f/gittest

<html>
  <head>
    <title>Hello HTML in Git</title>
    <meta name="description" content="Hello HTML in Git"/>
  </head>
  <body>
    <h1>Hello HTML~~!!~!</h1>
  </body>
</html>
```

```
MINGW64:/f/

user@TorAleksander MINGW64 /f/gittest (branchtest)
$ vi index.html

user@TorAleksander MINGW64 /f/gittest (branchtest)
$ git commit -am "Add Branch Content"
[branchtest 6cf35b1] Add Branch Content
1 file changed, 1 insertion(+)

user@TorAleksander MINGW64 /f/gittest (branchtest)
$ |
```

```
MINGW64:/f/

user@TorAleksander MINGW64 /f/gittest (branchtest)
$ git tag 1.0 branchtest

user@TorAleksander MINGW64 /f/gittest (branchtest)
$ git tag
1.0

user@TorAleksander MINGW64 /f/gittest (branchtest)
$ |
```

```
MINGW64:/f/gittest

user@TorAleksander MINGW64 /f/gittest (branchtest)
$ git checkout master
Switched to branch 'master'

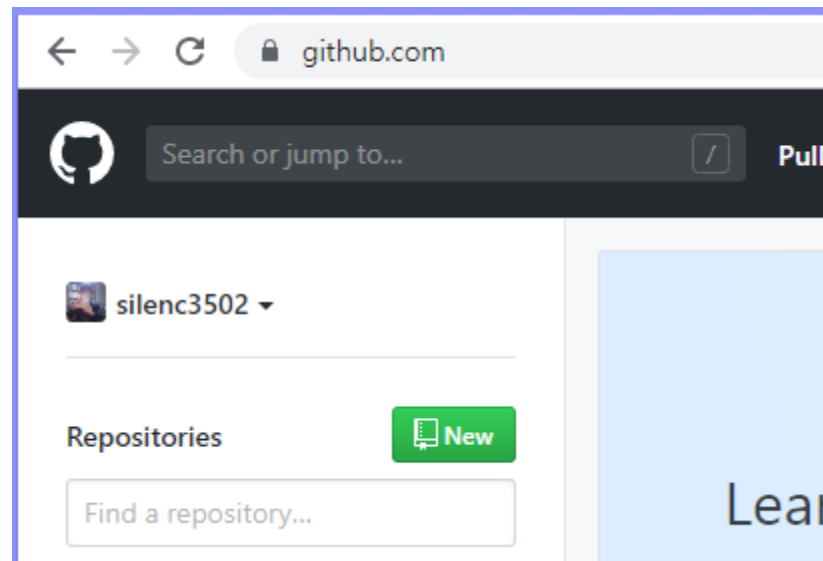
user@TorAleksander MINGW64 /f/gittest (master)
$ git rebase branchtest
First, rewinding head to replay your work on top of it...
Applying: Add href

user@TorAleksander MINGW64 /f/gittest (master)
$ |
```

```
MINGW64:/f/gittest

user@TorAleksander MINGW64 /f/gittest (master)
$ git branch -d branchtest
Deleted branch branchtest (was 6cf35b1).


user@TorAleksander MINGW64 /f/gittest (master)
$ |
```



Create a new repository

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

Owner



 silenc3502 ▾

Repository name *

/ BranchTest ✓

Great repository names are short and memorable. Need inspiration? How about **super-spoon**?

Description (optional)

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

Skip this step if you're importing an existing repository.

- ☒ **Initialize this repository with a README**
This will let you immediately clone the repository to your computer.

Add .gitignore: None ▾

Add a license: GNU General Public License v3.0 ▾



Create repository

Website for this repository (optional)

Save or [Cancel](#)

0 packages

0 releases

1 contributor

publish your packages

You can now safely publish and consume packages within your organization or with the entire world using GitHub Packages.

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Clone with HTTPS

[Use SSH](#)

Use Git or checkout with SVN using the web URL.

https://github.com/silenc3502/BranchTest


[Open in Desktop](#)[Download ZIP](#)

```
MINGW64:/f/gittest


user@TorAleksander MINGW64 /f/gittest (master)
$ git remote add origin https://github.com/silenc3502/BranchTest.git


user@TorAleksander MINGW64 /f/gittest (master)
$ git remote -v
origin  https://github.com/silenc3502/BranchTest.git (fetch)
origin  https://github.com/silenc3502/BranchTest.git (push)

user@TorAleksander MINGW64 /f/gittest (master)
$ git push origin master
```

 GitHub Login ×

GitHub Login

 Login

 Cancel

[Don't have an account? Sign up](#)
[Forgot your password?](#)

```

user@TorAleksander MINGW64 /f/gittest (master)
$ git push origin master
To https://github.com/silenc3502/BranchTest.git
 ! [rejected]        master -> master (fetch first)
error: failed to push some refs to 'https://github.com/silenc3502/BranchTest.git'
hint: Updates were rejected because the remote contains work that you do
hint: not have locally. This is usually caused by another repository pushing
hint: to the same ref. You may want to first integrate the remote changes
hint: (e.g., 'git pull ...') before pushing again.
hint: See the 'Note about fast-forwards' in 'git push --help' for details.

user@TorAleksander MINGW64 /f/gittest (master)
$ |

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MINGW64:/f/gittest

user@TorAleksander MINGW64 /f/gittest (master)
$ git pull origin master
warning: no common commits
remote: Enumerating objects: 4, done.
remote: Counting objects: 100% (4/4), done.
remote: Compressing objects: 100% (3/3), done.
remote: Total 4 (delta 0), reused 0 (delta 0), pack-reused 0
Unpacking objects: 100% (4/4), done.
From https://github.com/silenc3502/BranchTest
 * branch                master      -> FETCH_HEAD
 * [new branch]          master      -> origin/master
fatal: refusing to merge unrelated histories

user@TorAleksander MINGW64 /f/gittest (master)
$ git push origin master
To https://github.com/silenc3502/BranchTest.git
 ! [rejected]        master -> master (non-fast-forward)
error: failed to push some refs to 'https://github.com/silenc3502/BranchTest.git'
hint: Updates were rejected because the tip of your current branch is behind
hint: its remote counterpart. Integrate the remote changes (e.g.
hint: 'git pull ...') before pushing again.
hint: See the 'Note about fast-forwards' in 'git push --help' for details.

user@TorAleksander MINGW64 /f/gittest (master)
$ |

```

```

user@TorAleksander MINGW64 /f/gittest (master)
$ git push origin master
To https://github.com/silenc3502/BranchTest.git
 ! [rejected]        master -> master (non-fast-forward)
error: failed to push some refs to 'https://github.com/silenc3502/BranchTest.git'
hint: Updates were rejected because the tip of your current branch is behind
hint: its remote counterpart. Integrate the remote changes (e.g.
hint: 'git pull ...') before pushing again.
hint: See the 'Note about fast-forwards' in 'git push --help' for details.

user@TorAleksander MINGW64 /f/gittest (master)
$ git pull origin master --allow-unrelated-histories
From https://github.com/silenc3502/BranchTest
 * branch            master       -> FETCH_HEAD
Merge made by the 'recursive' strategy.
 LICENSE   | 674 ++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
 README.md |   1 +
 2 files changed, 675 insertions(+)
 create mode 100644 LICENSE
 create mode 100644 README.md

user@TorAleksander MINGW64 /f/gittest (master)
$ ls
index.html  LICENSE  README.md

user@TorAleksander MINGW64 /f/gittest (master)
$ |

```

```



user@TorAleksander MINGW64 /f/gittest (master)
$ git push --set-upstream origin master
Enumerating objects: 15, done.
Counting objects: 100% (15/15), done.
Delta compression using up to 8 threads
Compressing objects: 100% (10/10), done.
Writing objects: 100% (14/14), 1.44 KiB | 1.44 MiB/s, done.
Total 14 (delta 2), reused 0 (delta 0)
remote: Resolving deltas: 100% (2/2), done.
To https://github.com/silenc3502/BranchTest.git
    dcbe90..ddae906  master -> master
Branch 'master' set up to track remote branch 'master' from 'origin'.

user@TorAleksander MINGW64 /f/gittest (master)
$ |


```


No description, website, or topics provided.


[Manage topics](#)


 6 commits
  1 branch


Branch: master ▼
 [New pull request](#)


[silenc3502 Merge branch 'master' of https://github.com/silenc3502/BranchTest.git](#)

 [LICENSE](#)

 [README.md](#)

 [index.html](#)



Pull request
 You can
 propose
 changes
 to the
 code

```
MINGW64:/f/

user@TorAleksander MINGW64 /f/gittest (master)
$ git branch -m master proj_master

user@TorAleksander MINGW64 /f/gittest (proj_master)
$ git branch
* proj_master

user@TorAleksander MINGW64 /f/gittest (proj_master)
$ git branch -m proj_master master

user@TorAleksander MINGW64 /f/gittest (master)
$ git branch
* master

user@TorAleksander MINGW64 /f/gittest (master)
$ |
```

```
MINGW64:/f/

user@TorAleksander MINGW64 /f/gittest (master)
$ git branch new_branch

user@TorAleksander MINGW64 /f/gittest (master)
$ git branch
* master
  new_branch

user@TorAleksander MINGW64 /f/gittest (master)
$ git checkout new_branch
Switched to branch 'new_branch'

user@TorAleksander MINGW64 /f/gittest (new_branch)
$ git branch
  master
* new_branch

user@TorAleksander MINGW64 /f/gittest (new_branch)
$ |
```

```
MINGW64:/f/

user@TorAleksander MINGW64 /f/gittest (new_branch)
$ git checkout -b alternate master
Switched to a new branch 'alternate'

user@TorAleksander MINGW64 /f/gittest (alternate)
$ git branch
* alternate
  master
  new_branch

user@TorAleksander MINGW64 /f/gittest (alternate)
$ |
```

```
user@TorAleksander MINGW64 /f/gittest (alternate)
$ vi test.txt

user@TorAleksander MINGW64 /f/gittest (alternate)
$ git add test.txt
warning: LF will be replaced by CRLF in test.txt.
The file will have its original line endings in your working directory

user@TorAleksander MINGW64 /f/gittest (alternate)
$ git commit -m "Add Test Text"
[alternate 9834e8a] Add Test Text
1 file changed, 1 insertion(+)
create mode 100644 test.txt

user@TorAleksander MINGW64 /f/gittest (alternate)
$ git checkout master
Switched to branch 'master'
Your branch is up to date with 'origin/master'.

user@TorAleksander MINGW64 /f/gittest (master)
$ git merge alternate
Updating ddae906..9834e8a
Fast-forward
 test.txt | 1 +
1 file changed, 1 insertion(+)
create mode 100644 test.txt

user@TorAleksander MINGW64 /f/gittest (master)
$ |
```



```
MINGW64:/f/gittest

user@TorAleksander MINGW64 /f/gittest (master)
$ git status
On branch master
Your branch is ahead of 'origin/master' by 1 commit.
  (use "git push" to publish your local commits)

nothing to commit, working tree clean

user@TorAleksander MINGW64 /f/gittest (master)
$ git push origin master
Enumerating objects: 4, done.
Counting objects: 100% (4/4), done.
Delta compression using up to 8 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 275 bytes | 275.00 KiB/s, done.
Total 3 (delta 1), reused 0 (delta 0)
remote: Resolving deltas: 100% (1/1), completed with 1 local object.
To https://github.com/silenc3502/BranchTest.git
   ddae906..9834e8a  master -> master

user@TorAleksander MINGW64 /f/gittest (master)
$ git status
On branch master
Your branch is up to date with 'origin/master'.

nothing to commit, working tree clean

user@TorAleksander MINGW64 /f/gittest (master)
$ |
```