



# git

**This is just the beginning**

<https://github.com/Nolski/GitLectured>

# What is Git?

# What is Git?

*A distributed version control  
system*

**Wat?**





















`git init`





foo.txt  
bar.txt  
baz.txt

```
git add bar.txt  
git add baz.txt
```



bar.txt  
baz.txt

**Staged**



```
git commit -m "init foo & bar"
```



foo.txt

1. init foo & bar



remote name



```
git remote add origin <url_to_repo>
```

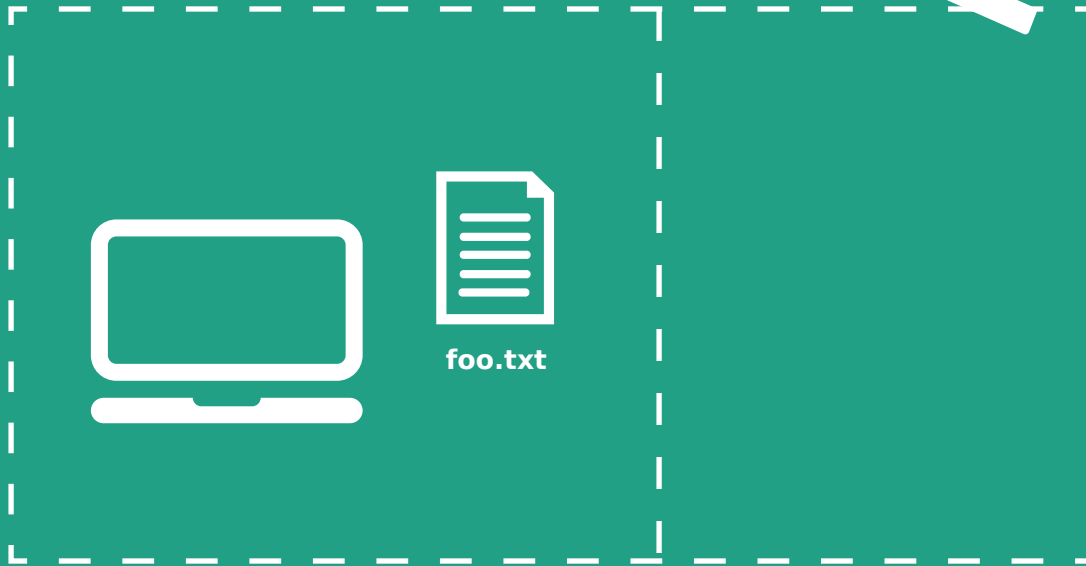


foo.txt

1. init foo & bar



`git push origin master`



| 1. init foo & bar



1. init foo & bar

remote name



**git push origin master**

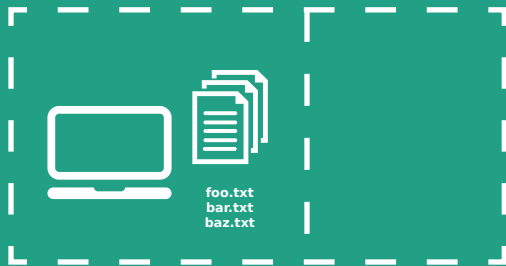


branch name

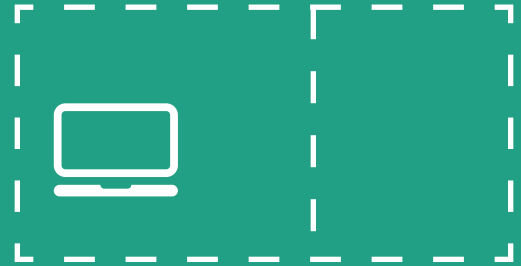
1. init foo & bar



foo.txt



**Frank**

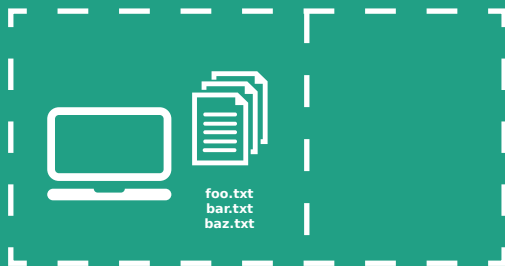


**Allen**

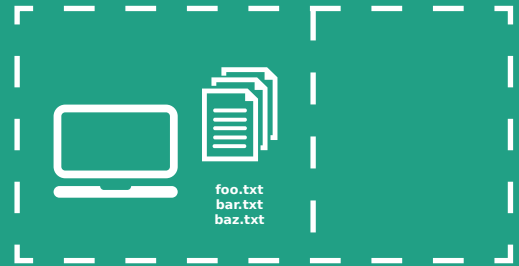


foo.txt  
bar.txt  
baz.txt

`git pull origin master`



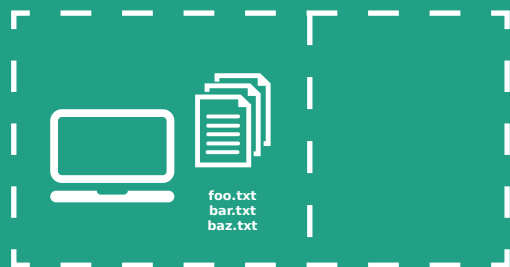
**Frank**



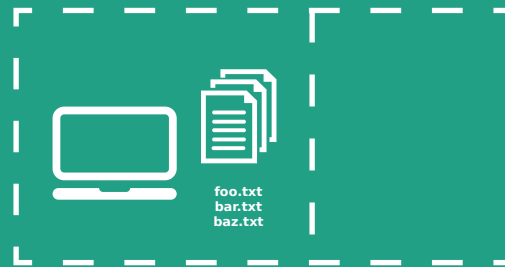
**Allen**



foo.txt  
bar.txt  
baz.txt



**Frank**



**Allen**

# Merge Conflicts





# Merge Conflicts

```
frank@fossbox $ ls  
foo.txt bar.txt baz.txt
```

# Merge Conflicts

```
frank@fossbox $ ls  
foo.txt bar.txt baz.txt
```

```
allen@fossbox $ ls  
foo.txt bar.txt baz.txt
```

# Merge Conflicts

```
frank@fossbox $ ls  
foo.txt bar.txt baz.txt
```

```
allen@fossbox $ ls  
foo.txt bar.txt baz.txt
```

# Merge Conflicts

foo.txt

```
<!DOCTYPE html>
<html>
<head>
  <title>buttz</title>
</head>
<body>
</body>
</html>
```

# Merge Conflicts

**\*frank changes foo.txt\***

```
frank@fossbox $ git add foo.txt
```

```
frank@fossbox $ git commit -m "updated  
foo.txt"
```

```
frank@fossbox $ git push origin master
```

# Merge Conflicts

foo.txt

```
<!DOCTYPE html>
<html>
<head>
  <title>buttz</title>
</head>
<body>
  <script type="text/javascript">
    window.location = "http://www.therubberduck-
is.in";
  </script>
</body>
</html>
```

# Merge Conflicts

**\*allen changes foo.txt to some different code\***

```
allen@fossbox $ git add foo.txt
```

```
allen@fossbox $ git commit -m "updated  
foo.txt"
```

```
allen@fossbox $ git push origin master
```

# Merge Conflicts

foo.txt

```
<!DOCTYPE html>
<html>
<head>
  <title>buttz</title>
</head>
<body>
  <p>Nołski is the greatest dude ever</p>
</body>
</html>
```



# Merge Conflicts

```
To git@github.com:allen/Fakez0rz.git
! [rejected]          master -> master (fetch first)
error: failed to push some refs to
'git@github.com:allen/Fakez0rz.git'
hint: Updates were rejected because the remote con-
tains work that you do
hint: not have locally. This is usually caused by an-
other repository pushing
hint: to the same ref. You may want to first inte-
grate the remote changes
hint: (e.g., 'git pull ...') before pushing again.
hint: See the 'Note about fast-forwards' in 'git push
--help' for details.
```

# Merge Conflicts

```
allen@fossbox $ git push origin master
```

# Merge Conflicts

```
allen@fossbox $ git push origin master
```

```
remote: Counting objects: 3, done.
remote: Compressing objects: 100% (2/2), done.
remote: Total 3 (delta 0), reused 3 (delta 0)
Unpacking objects: 100% (3/3), done.
From github.com:allen/Fakez0rz
 * branch                master          -> FETCH_HEAD
    ff02b9a..036e732      master          -> origin/master
Auto-merging foo.txt
CONFLICT (content): Merge conflict in foo.txt
Automatic merge failed; fix conflicts and then commit
the result.
```

# Merge Conflicts

```
<!DOCTYPE html>
<html>
<head>
  <title>buttz</title>
</head>
<body>
<<<<<< HEAD
  <p>Nołski is the greatest dude ever</p>
=====
  <script type="text/javascript">
    window.location = "http://www.therubberduck-
is.in";
  </script>
>>>>>> 036e732087324e2ab1e0fe8905b9b1f8c8122220
```

# Merge Conflicts

```
<!DOCTYPE html>
<html>
<head>
  <title>buttz</title>
</head>
<body>
<<<<<< HEAD
  <p>Nołski is the greatest dude ever</p>
=====
  <script type="text/javascript">
    window.location = "http://www.therubberduck-
is.in";
  </script>
>>>>>> 036e732087324e2ab1e0fe8905b9b1f8c8122220
```

yours



theirs



# Merge Conflicts

```
<!DOCTYPE html>
<html>
<head>
  <title>buttz</title>
</head>
<body>
  <p>Nolski is the greatest dude ever</p>
...
```

**Questions?**