

Project Git & Github

04 November 2020 08:04 PM

The screenshot shows a terminal window with a dark theme. At the top, there is a navigation bar with icons for File, Edit, Selection, View, Go, Debug, Terminal, and Help. Below the navigation bar, there are three tabs: Problems, Output, and Terminal 0. The Terminal 0 tab is active, showing the following command-line session:

```
labsuser@ubuntu1804:~$ mkdir Project-pnайду
labsuser@ubuntu1804:~$ cd Project-pnайду/
labsuser@ubuntu1804:~/Project-pnайду$ git init
Initialized empty Git repository in /home/labsuser/Project-pnайду/.git/
labsuser@ubuntu1804:~/Project-pnайду$ git config -l
user.name=pawwann112
user.email=pawannd112@gmail.com
core.excludesfile=.gitignore
core.editor=vim
alias.st=status
alias.br=branch
core.repositoryformatversion=0
core.filemode=true
core.bare=false
core.logallrefupdates=true
labsuser@ubuntu1804:~/Project-pnайду$ vi firstfile.txt
labsuser@ubuntu1804:~/Project-pнайду$ git add .
labsuser@ubuntu1804:~/Project-pнайду$ git commit -m "first commit from master branch"
[master (root-commit) 86f7922] first commit from master branch
 1 file changed, 1 insertion(+)
 create mode 100644 firstfile.txt
labsuser@ubuntu1804:~/Project-pнайду$ git status
On branch master
nothing to commit, working tree clean
labsuser@ubuntu1804:~/Project-pнайду$ git branch HotFix
labsuser@ubuntu1804:~/Project-pнайду$ git branch Integration
labsuser@ubuntu1804:~/Project-pнайду$ git branch
  HotFix
  Integration
* master
labsuser@ubuntu1804:~/Project-pнайду$ 
```

The screenshot shows a dark-themed terminal window within a code editor application. The menu bar at the top includes File, Edit, Selection, View, Go, Debug, Terminal, and Help. Below the menu is a toolbar with icons for file operations like Open, Save, Find, and Cut/Paste. The main area has tabs for Problems, Output, and Terminal 0, with Terminal 0 currently active. The terminal output shows a user's session on an Ubuntu 18.04 system:

```
Automatic merge failed; fix conflicts and then commit the result.
labsuser@ubuntu1804:~/pnaidu$ cat firstfile.txt
This is the first file for the project
<<<<< HEAD
this is the change performed in Feature1 branch
labsuser@ubuntu1804:~/Project-pnaidu$ git checkout Integration
Switched to branch 'Integration'
labsuser@ubuntu1804:~/Project-pnaidu$ git branch
  HotFix
* Integration
  master
labsuser@ubuntu1804:~/Project-pnaidu$ git branch Feature1
labsuser@ubuntu1804:~/Project-pnaidu$ git branch Feature2
labsuser@ubuntu1804:~/Project-pnaidu$ git checkout Feature2
Switched to branch 'Feature2'
labsuser@ubuntu1804:~/Project-pnaidu$ vi firstfile.txt
labsuser@ubuntu1804:~/Project-pnaidu$ git add .
labsuser@ubuntu1804:~/Project-pnaidu$ git commit -m "changes performed in Feature2 branch"
[Feature2 d899ae7] changes performed in Feature2 branch
 1 file changed, 1 insertion(+)
labsuser@ubuntu1804:~/Project-pnaidu$ git status
On branch Feature2
nothing to commit, working tree clean
labsuser@ubuntu1804:~/Project-pnaidu$ git checkout Integration
Switched to branch 'Integration'
labsuser@ubuntu1804:~/Project-pnaidu$ git branch
  Feature1
  Feature2
  HotFix
* Integration
  master
```

The screenshot shows a terminal window with a dark theme. The terminal title is "Terminal 0". The user is working on a project named "Project-pnайду" located at the root directory (~). The user has checked out the "Integration" branch and merged the "Feature2" branch into it. The merge was fast-forward, changing one file ("firstfile.txt"). After the merge, the user committed the changes with a message: "[Feature1 2c7c3b1] changes performed in Feature1 branch". Finally, the user switched back to the "Integration" branch.

```
File Edit Selection View Go Debug Terminal Help
Problems Output Terminal 0 ×
labsuser@ubuntu1804:~/Project-pnайду$ git checkout Integration
Switched to branch 'Integration'
labsuser@ubuntu1804:~/Project-pnайду$ git branch
  Feature1
  Feature2
  HotFix
* Integration
  master
labsuser@ubuntu1804:~/Project-pnайду$ git merge Feature2
Updating 86f7922..d899ae7
Fast-forward
  firstfile.txt | 1 +
  1 file changed, 1 insertion(+)
labsuser@ubuntu1804:~/Project-pnайду$ git status
On branch Integration
nothing to commit, working tree clean
labsuser@ubuntu1804:~/Project-pnайду$ git branch -d Feature2
Deleted branch Feature2 (was d899ae7).
labsuser@ubuntu1804:~/Project-pnайду$ git status
On branch Integration
nothing to commit, working tree clean
labsuser@ubuntu1804:~/Project-pnайду$ git checkout Feature1
Switched to branch 'Feature1'
labsuser@ubuntu1804:~/Project-pnайду$ vi firstfile.txt
labsuser@ubuntu1804:~/Project-pnайду$ git add .
labsuser@ubuntu1804:~/Project-pnайду$ git commit -m "changes performed in Feature1 branch"
[Feature1 2c7c3b1] changes performed in Feature1 branch
  1 file changed, 1 insertion(+)
labsuser@ubuntu1804:~/Project-pnайду$ git status
On branch Feature1
nothing to commit, working tree clean
labsuser@ubuntu1804:~/Project-pnайду$ git checkout Integration
Switched to branch 'Integration'.
labsuser@ubuntu1804:~/Project-pnайду$
```

The screenshot shows a terminal window with the following content:

```
File Edit Selection View Go Debug Terminal Help

Problems Output Terminal 0 ×

labsuser@ubuntu1804:~/Project-pnaidu$ git branch
  Feature1
  HotFix
* Integration
  master

labsuser@ubuntu1804:~/Project-pnaidu$ git rebase Feature1
First, rewinding head to replay your work on top of it...
Applying: changes performed in Feature2 branch
Using index info to reconstruct a base tree...
M      firstfile.txt
Falling back to patching base and 3-way merge...
Auto-merging firstfile.txt
CONFLICT (content): Merge conflict in firstfile.txt
error: Failed to merge in the changes.
Patch failed at 0001 changes performed in Feature2 branch
Use 'git am --show-current-patch' to see the failed patch

Resolve all conflicts manually, mark them as resolved with
"git add/rm <conflicted_files>", then run "git rebase --continue".
You can instead skip this commit: run "git rebase --skip".
To abort and get back to the state before "git rebase", run "git rebase --abort".

labsuser@ubuntu1804:~/Project-pnaidu$ gittool
bash: gittool: command not found
labsuser@ubuntu1804:~/Project-pnaidu$ mergetool
bash: mergetool: command not found
labsuser@ubuntu1804:~/Project-pnaidu$ git mergetool

This message is displayed because 'merge.tool' is not configured.
See 'git mergetool --tool-help' or 'git help config' for more details.
'git mergetool' will now attempt to use one of the following tools:
tortoisesmerge emerge vimdiff
Merging:
firstfile.txt
```



① Problems └ Output >_ Terminal 0 ×

```
Normal merge conflict for 'firstfile.txt':
{local}: modified file
{remote}: modified file
Hit return to start merge resolution tool (vimdiff):
4 files to edit
labsuser@ubuntu1804:~/Project-pnайду$ cat firstfile.txt
This is the first commit in the master branch
This is the change performed in Feature1 branch
This is the commit performed from Feature2 branch
labsuser@ubuntu1804:~/Project-pnайду$ git rebase --continue
Applying: changes performed in Feature2 branch
labsuser@ubuntu1804:~/Project-pnайду$ git status
On branch Integration
Untracked files:
  (use "git add <file>..." to include in what will be committed)

    firstfile.txt.orig

nothing added to commit but untracked files present (use "git add" to track)
labsuser@ubuntu1804:~/Project-pnайду$ git add .
labsuser@ubuntu1804:~/Project-pnайду$ git rebase --continue
No rebase in progress?
labsuser@ubuntu1804:~/Project-pnайду$ git commit -m "git rebase from feature1 branch to integration branch"
[Integration 4638484] git rebase from feature1 branch to integration branch
 1 file changed, 6 insertions(+)
  create mode 100644 firstfile.txt.orig
labsuser@ubuntu1804:~/Project-pnайду$ cat firstfile.txt
This is the first commit in the master branch
This is the change performed in Feature1 branch
This is the commit performed from Feature2 branch
labsuser@ubuntu1804:~/Project-pnайду$ git status
On branch Integration
nothing to commit, working tree clean
labsuser@ubuntu1804:~/Project-pnайду$
```



Problems Output Terminal 0

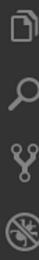
```
labsuser@ubuntu1804:~/Project-pnaidu$ git branch
  Feature1
  HotFix
* Integration
  master

labsuser@ubuntu1804:~/Project-pnaidu$ git checkout HotFix
Switched to branch 'HotFix'
labsuser@ubuntu1804:~/Project-pnaidu$ git merge Integration
Updating 86f7922..4638484
Fast-forward
  firstfile.txt      | 2 ++
  firstfile.txt.orig | 6 ++++++
  2 files changed, 8 insertions(+)
  create mode 100644 firstfile.txt.orig
labsuser@ubuntu1804:~/Project-pnaidu$ git status
On branch HotFix
nothing to commit, working tree clean
labsuser@ubuntu1804:~/Project-pnaidu$ git checkout master
Switched to branch 'master'
labsuser@ubuntu1804:~/Project-pnaidu$ git branch
  Feature1
  HotFix
  Integration
* master

labsuser@ubuntu1804:~/Project-pnaidu$ git merge Integration
Updating 86f7922..4638484
Fast-forward
  firstfile.txt      | 2 ++
  firstfile.txt.orig | 6 ++++++
  2 files changed, 8 insertions(+)
  create mode 100644 firstfile.txt.orig
labsuser@ubuntu1804:~/Project-pnaidu$ 
```

The screenshot shows a dark-themed code editor interface. At the top, there is a menu bar with options: File, Edit, Selection, View, Go, Debug, Terminal, and Help. Below the menu bar, there are several icons: a file icon, a search icon, a problems icon (highlighted with a red dot), an output icon, and a terminal icon. The terminal tab is active, showing the following command-line session:

```
Merging:  
firstfile.txt  
labsuser@ubuntu1804:~/Project-pnaidu$ git branch  
  Feature1  
  HotFix  
  Integration  
* master  
labsuser@ubuntu1804:~/Project-pnaidu$ git checkout Feature1  
Switched to branch 'Feature1'  
labsuser@ubuntu1804:~/Project-pnaidu$ vi firstfile.txt  
labsuser@ubuntu1804:~/Project-pnaidu$ git add .  
labsuser@ubuntu1804:~/Project-pnaidu$ git commit -m "some more changes in Feature1 branch"  
[Feature1 e3d61e5] some more changes in Feature1 branch  
 1 file changed, 1 insertion(+)  
labsuser@ubuntu1804:~/Project-pnaidu$ git status  
On branch Feature1  
nothing to commit, working tree clean  
labsuser@ubuntu1804:~/Project-pnaidu$ git branch  
* Feature1  
  HotFix  
  Integration  
  master  
labsuser@ubuntu1804:~/Project-pnaidu$ git chekcout Integration  
git: 'chekcout' is not a git command. See 'git --help'.  
  
The most similar command is  
  checkout  
labsuser@ubuntu1804:~/Project-pnaidu$ git checkout Integration  
Switched to branch 'Integration'  
labsuser@ubuntu1804:~/Project-pnaidu$ git merge Feature1  
Auto-merging firstfile.txt  
CONFLICT (content): Merge conflict in firstfile.txt  
Automatic merge failed; fix conflicts and then commit the result.
```



● Problems ┌ Output >_ Terminal 0 ×

```
Switched to branch 'Integration'
labsuser@ubuntu1804:~/Project-pnaidu$ git merge Feature1
Auto-merging firstfile.txt
CONFLICT (content): Merge conflict in firstfile.txt
Automatic merge failed; fix conflicts and then commit the result.
labsuser@ubuntu1804:~/Project-pnaidu$ git mergetool

This message is displayed because 'merge.tool' is not configured.
See 'git mergetool --tool-help' or 'git help config' for more details.
'git mergetool' will now attempt to use one of the following tools:
tortoisemerge emerge vimdiff
Merging:
firstfile.txt

Normal merge conflict for 'firstfile.txt':
{local}: modified file
{remote}: modified file
Hit return to start merge resolution tool (vimdiff):
4 files to edit
labsuser@ubuntu1804:~/Project-pnaidu$ git merge --continue
[Integration 1b66ad3] Merge branch 'Feature1' into Integration
labsuser@ubuntu1804:~/Project-pnaidu$ git status
On branch Integration
Changes not staged for commit:
  (use "git add <file>..." to update what will be committed)
  (use "git checkout -- <file>..." to discard changes in working directory)

    modified:   firstfile.txt.orig

no changes added to commit (use "git add" and/or "git commit -a")
labsuser@ubuntu1804:~/Project-pnaidu$ git commit -a "Merged further changes from Feature1 branch"
fatal: Paths with -a does not make sense.
labsuser@ubuntu1804:~/Project-pnaidu$ git add .
labsuser@ubuntu1804:~/Project-pnaidu$ git commit -m "Merged furher changes from Feature1 branch"
```

File Edit Selection View Go Debug Terminal Help



Problems Output Terminal 0

```
This message is displayed because 'merge.tool' is not configured.
See 'git mergetool --tool-help' or 'git help config' for more details.
'git mergetool' will now attempt to use one of the following tools:
tortoisemerge emerge vimdiff
Merging:
firstfile.txt

Normal merge conflict for 'firstfile.txt':
{local}: modified file
{remote}: modified file
Hit return to start merge resolution tool (vimdiff):
4 files to edit
labsuser@ubuntu1804:~/Project-pnайду$ git merge --continue
[Integration 1b66ad3] Merge branch 'Feature1' into Integration
labsuser@ubuntu1804:~/Project-pнайду$ git status
On branch Integration
Changes not staged for commit:
  (use "git add <file>..." to update what will be committed)
  (use "git checkout -- <file>..." to discard changes in working directory)

    modified:   firstfile.txt.orig

no changes added to commit (use "git add" and/or "git commit -a")
labsuser@ubuntu1804:~/Project-pнайду$ git commit -a "Merged further changes from Feature1 branch"
fatal: Paths with -a does not make sense.
labsuser@ubuntu1804:~/Project-pнайду$ git add .
labsuser@ubuntu1804:~/Project-pнайду$ git commit -m "Merged furher changes from Feature1 branch"
[Integration e7bb11e] Merged furher changes from Feature1 branch
 1 file changed, 4 insertions(+), 3 deletions(-)
labsuser@ubuntu1804:~/Project-pнайду$ git status
On branch Integration
nothing to commit, working tree clean
labsuser@ubuntu1804:~/Project-pнайду$ []
```

The screenshot shows a terminal window with the following command history:

```
File Edit Selection View Go Debug Terminal Help  
Problems Output Terminal 0 ×  
labsuser@ubuntu1804:~/Project-pnайду$ git merge Feature1  
Auto-merging firstfile.txt  
CONFLICT (content): Merge conflict in firstfile.txt  
Automatic merge failed; fix conflicts and then commit the result.  
labsuser@ubuntu1804:~/Project-pnайду$ git mergetool  
labsuser@ubuntu1804:~/Project-pnайду$ git branch  
  Feature1  
  HotFix  
* Integration  
  master  
labsuser@ubuntu1804:~/Project-pnайду$ git checkout HotFix  
Switched to branch 'HotFix'  
labsuser@ubuntu1804:~/Project-pnайду$ git merge Feature1  
Auto-merging firstfile.txt  
CONFLICT (content): Merge conflict in firstfile.txt  
Automatic merge failed; fix conflicts and then commit the result.  
labsuser@ubuntu1804:~/Project-pnайду$ git mergetool  
  
This message is displayed because 'merge.tool' is not configured.  
See 'git mergetool --tool-help' or 'git help config' for more details.  
'git mergetool' will now attempt to use one of the following tools:  
tortoisemerge emerge vimdiff  
Merging:  
firstfile.txt  
  
Normal merge conflict for 'firstfile.txt':  
  {local}: modified file  
  {remote}: modified file  
Hit return to start merge resolution tool (vimdiff):  
4 files to edit  
labsuser@ubuntu1804:~/Project-pnайду$ git merge --continue  
[HotFix 59e4c6d] Merge branch 'Feature1' into HotFix  
labsuser@ubuntu1804:~/Project-pнайду$ git add .  
labsuser@ubuntu1804:~/Project-pнайду$ git commit -m "committing changes from Feature1 branch"
```

File Edit Selection View Go Debug Terminal Help



① Problems 🗑 Output ➔ Terminal 0 ×

```
Feature1
HotFix
* Integration
  master
labsuser@ubuntu1804:~/Project-pnaidu$ git checkout HotFix
Switched to branch 'HotFix'
labsuser@ubuntu1804:~/Project-pnaidu$ git merge Feature1
Auto-merging firstfile.txt
CONFLICT (content): Merge conflict in firstfile.txt
Automatic merge failed; fix conflicts and then commit the result.
labsuser@ubuntu1804:~/Project-pnaidu$ git mergetool

This message is displayed because 'merge.tool' is not configured.
See 'git mergetool --tool-help' or 'git help config' for more details.
'git mergetool' will now attempt to use one of the following tools:
tortoisemerge emerge vimdiff
Merging:
firstfile.txt

Normal merge conflict for 'firstfile.txt':
{local}: modified file
{remote}: modified file
Hit return to start merge resolution tool (vimdiff):
4 files to edit
labsuser@ubuntu1804:~/Project-pnaidu$ git merge --continue
[HotFix 59e4c6d] Merge branch 'Feature1' into HotFix
labsuser@ubuntu1804:~/Project-pnaidu$ git add .
labsuser@ubuntu1804:~/Project-pnaidu$ git commit -m "commiting changes from Feature1 branch"
[HotFix 2581e27] commiting changes from Feature1 branch
 1 file changed, 4 insertions(+), 3 deletions(-)
labsuser@ubuntu1804:~/Project-pnaidu$ git status
On branch Hotfix
nothing to commit, working tree clean
labsuser@ubuntu1804:~/Project-pnaidu$ 
```

File Edit Selection View Go Debug Terminal Help



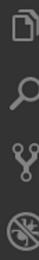
Problems Output Terminal 0

```
labsuser@ubuntu1804:~/Project-pnaidu$ git branch
  Feature1
  HotFix
  Integration
* master

labsuser@ubuntu1804:~/Project-pnaidu$ git merge Feature1
Auto-merging firstfile.txt
CONFLICT (content): Merge conflict in firstfile.txt
Automatic merge failed; fix conflicts and then commit the result.
labsuser@ubuntu1804:~/Project-pnaidu$ git mergetool

This message is displayed because 'merge.tool' is not configured.
See 'git mergetool --tool-help' or 'git help config' for more details.
'git mergetool' will now attempt to use one of the following tools:
tortoisesmerge emerge vimdiff
Merging:
firstfile.txt

Normal merge conflict for 'firstfile.txt':
{local}: modified file
{remote}: modified file
Hit return to start merge resolution tool (vimdiff):
4 files to edit
labsuser@ubuntu1804:~/Project-pnaidu$ git merge --continue
[master dc6a69b] Merge branch 'Feature1'
labsuser@ubuntu1804:~/Project-pnaidu$ git add .
labsuser@ubuntu1804:~/Project-pnaidu$ git commit -m "commiting changes from Feature1 branch"
[master d488b50] commiting changes from Feature1 branch
 1 file changed, 4 insertions(+), 3 deletions(-)
labsuser@ubuntu1804:~/Project-pnaidu$ git st
On branch master
nothing to commit, working tree clean
labsuser@ubuntu1804:~/Project-pnaidu$
```



Problems Output Terminal 0

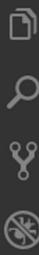
```
labsuser@ubuntu1804:~/Project-pnайду$ git branch
  Feature1
  HotFix
  Integration
* master

labsuser@ubuntu1804:~/Project-pnайду$ git branch -d Feature1
Deleted branch Feature1 (was e3d61e5).

labsuser@ubuntu1804:~/Project-pnайду$ git branch
  HotFix
  Integration
* master

labsuser@ubuntu1804:~/Project-pnайду$ git chekcout HotFix
git: 'chekcout' is not a git command. See 'git --help'.

The most similar command is
  checkout
labsuser@ubuntu1804:~/Project-pnайду$ git checkout HotFix
Switched to branch 'HotFix'
labsuser@ubuntu1804:~/Project-pnайду$ vi firstfile.txt
labsuser@ubuntu1804:~/Project-pнайду$ git add .
labsuser@ubuntu1804:~/Project-pнайду$ git commit -m "Fixing bug in Hotfix branch"
[HotFix 649472b] Fixing bug in Hotfix branch
 1 file changed, 1 insertion(+)
labsuser@ubuntu1804:~/Project-pнайду$ git status
On branch HotFix
nothing to commit, working tree clean
labsuser@ubuntu1804:~/Project-pнайду$ git checkout master
Switched to branch 'master'
labsuser@ubuntu1804:~/Project-pнайду$ git merge HotFix
Auto-merging firstfile.txt
CONFLICT (content): Merge conflict in firstfile.txt
Automatic merge failed; fix conflicts and then commit the result.
labsuser@ubuntu1804:~/Project-pнайду$
```



Problems Output Terminal 0

```
labsuser@ubuntu1804:~/Project-pnaidu$ git mergetool
This message is displayed because 'merge.tool' is not configured.
See 'git mergetool --tool-help' or 'git help config' for more details.
'git mergetool' will now attempt to use one of the following tools:
tortoisemerge emerge vimdiff
Merging:
firstfile.txt

Normal merge conflict for 'firstfile.txt':
{local}: modified file
{remote}: modified file
Hit return to start merge resolution tool (vimdiff):
4 files to edit
labsuser@ubuntu1804:~/Project-pnaidu$ git merge --continue
[master 05a8d0e] Merge branch 'HotFix'
labsuser@ubuntu1804:~/Project-pnaidu$ git add .
labsuser@ubuntu1804:~/Project-pnaidu$ git commit -m "bug fix from HotFix branch"
[master 07e19ae] bug fix from HotFix branch
 1 file changed, 4 insertions(+), 3 deletions(-)
labsuser@ubuntu1804:~/Project-pnaidu$ git status
On branch master
nothing to commit, working tree clean
labsuser@ubuntu1804:~/Project-pnaidu$ cat firstfile.txt
This is the first commit in the master branch
This is the change performed in Feature1 branch
This is the commit performed from Feature2 branch
Some more changes commited in Feature1 branch
Making changes for bugfix
labsuser@ubuntu1804:~/Project-pnaidu$ 
```



Problems Output Terminal 0

```
Integration
* master
labsuser@ubuntu1804:~/Project-pnaidu$ git Integration
git: 'Integration' is not a git command. See 'git --help'.
labsuser@ubuntu1804:~/Project-pnaidu$ git checkout Integration
Switched to branch 'Integration'
labsuser@ubuntu1804:~/Project-pnaidu$ git merge HotFix
Auto-merging firstfile.txt
CONFLICT (content): Merge conflict in firstfile.txt
Automatic merge failed; fix conflicts and then commit the result.
labsuser@ubuntu1804:~/Project-pnaidu$ git mergetool

This message is displayed because 'merge.tool' is not configured.
See 'git mergetool --tool-help' or 'git help config' for more details.
'git mergetool' will now attempt to use one of the following tools:
tortoisemerge emerge vimdiff
Merging:
firstfile.txt

Normal merge conflict for 'firstfile.txt':
{local}: modified file
{remote}: modified file
Hit return to start merge resolution tool (vimdiff):
4 files to edit
labsuser@ubuntu1804:~/Project-pnaidu$ git merge --continue
[Integration eebd0d7] Merge branch 'HotFix' into Integration
labsuser@ubuntu1804:~/Project-pnaidu$ git add .
labsuser@ubuntu1804:~/Project-pnaidu$ git commit -m "commit from HotFix branch"
[Integration 5172d33] commit from HotFix branch
 1 file changed, 4 insertions(+), 3 deletions(-)
labsuser@ubuntu1804:~/Project-pnaidu$ git st
On branch Integration
nothing to commit, working tree clean
labsuser@ubuntu1804:~/Project-pnaidu$ bit br
```