

--force push and --force-with-lease

Difference between --force push and --force-with-lease, You have to show the use of both, also you have to show in what scenario --force-with-lease is used?

While both “--force push” and “--force-with-lease” overwrite the updates to a branch, but the --force-with-lease offers additional security. In case of force push, the branch would be replaced by the local version of the repo. This could lead to a loss in data in case of a shared repo. Therefore, --force-with-lease is used which doesn't allow you to push the code if someone else has already updated the repo.

For example, let's assume we are working on a branch x and we start working on it and making updates to it. Between our updates, if our teammate has updated the repo then the --force-with-lease would prevent us from overwriting the updates.

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Prem github-basic → (master 1) 16:31 echo hi >> file1.txt
Prem github-basic → (master 1) 16:31 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:   file1.txt

no changes added to commit (use "git add" and/or "git commit -a")
Prem github-basic → (master 1) 16:31 git add .
Prem github-basic → (master 1) 16:32 git commit -m "working on git push --force"
[master bbf33ec] working on git push --force
1 file changed, 0 insertions(+), 0 deletions(-)
Prem github-basic → (master 1) 16:32 git push origin master --force
Enumerating objects: 18, done.
Counting objects: 100% (17/17), done.
Delta compression using up to 20 threads
Compressing objects: 100% (12/12), done.
Writing objects: 100% (14/14), 2.74 KiB | 2.74 MiB/s, done.
Total 14 (delta 4), reused 0 (delta 0), pack-reused 0
remote: Resolving deltas: 100% (4/4), done.
To https://github.com/tenserebel/Git_assignment_1.git
8955431..bbf33ec master -> master
```

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Prem github-basic → (master 1) 16:32 echo hello >> file1.txt
Prem github-basic → (master 1) 16:33 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:   file1.txt

no changes added to commit (use "git add" and/or "git commit -a")
Prem github-basic → (master 1) 16:33 git add .
Prem github-basic → (master 1) 16:33 git commit -m "working on git push --force-lease"
[master 2b7646e] working on git push --force-lease
1 file changed, 0 insertions(+), 0 deletions(-) git push origin master --force-with-lease
Enumerating objects: 5, done.
Counting objects: 100% (5/5), done.
Delta compression using up to 20 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 311 bytes | 311.00 KiB/s, done.
Total 3 (delta 1), reused 0 (delta 0), pack-reused 0
remote: Resolving deltas: 100% (1/1), completed with 1 local object.
To https://github.com/tenserebel/Git_assignment_1.git
   bb33ec..2b7646e master -> master
Prem github-basic → (master 1) 16:34 S|
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