--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.

```
 Prem    github-basic   →  (master  1)    16:55   git add .
 Prem    github-basic   →  (master  1)    16:55   git commit -m "testing for force with lease"
[master 8f41a57] testing for force with lease
 1 file changed, 0 insertions(+), 0 deletions(-)
 Prem    github-basic   →  (master  1)    16:57   git push origin master
To https://github.com/tenserebel/Git_assignment_1.git
 ! [rejected]          master -> master (fetch first)
error: failed to push some refs to 'https://github.com/tenserebel/Git_assignment_1.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.
 Prem    github-basic   →  (master  1)    16:58   git push origin master --force-with-lease
To https://github.com/tenserebel/Git_assignment_1.git
 ! [rejected]          master -> master (stale info)
error: failed to push some refs to 'https://github.com/tenserebel/Git_assignment_1.git'
 Prem    github-basic   →  (master  1)    16:58   git pull origin master
remote: Enumerating objects: 5, done.
remote: Counting objects: 100% (5/5), done.
remote: Compressing objects: 100% (2/2), done.
remote: Total 3 (delta 1), reused 0 (delta 0), pack-reused 0
Unpacking objects: 100% (3/3), 664 bytes | 60.00 KiB/s, done.
From https://github.com/tenserebel/Git_assignment_1
 * branch            master      -> FETCH_HEAD
   ab8f27e..06aacb8  master      -> origin/master
warning: Cannot merge binary files: file2.txt (HEAD vs. 06aacb849b5506739c3e12ce132b4f71047a864a)
Auto-merging file2.txt
CONFLICT (content): Merge conflict in file2.txt
Automatic merge failed; fix conflicts and then commit the result.
 Prem    github-basic   →  (master  1)    16:58   echo test_for_force >> file2.txt
 Prem    github-basic   →  (master  1)    16:59   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% (3/3), done.
Writing objects: 100% (3/3), 314 bytes | 314.00 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
 + 06aacb8...8f41a57 master -> master (forced update)
```

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