Sign in on the attendance sheet!

Lecture 8
Rebasing
## Schedule

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Last Time

- Centralized Workflow
- Integration Manager Workflow
You need to keep your fork up to date
You need to keep your fork up to date

In the private developer repo
$ git remote add upstream
  https://github.com/autolab/Autolab.git
$ git fetch upstream
$ git checkout master
$ git merge upstream/master
$ git push origin master
(Sometimes) Need to Get Changes from Master into Topic Branch
1. Ilan Makes a Bugfix
(Sometimes) Need to Get Changes from Master into Topic Branch
1. Ilan Makes a Bugfix

1. `git fetch origin`

Ilan’s Computer
(Sometimes) Need to Get Changes from Master into Topic Branch
1. Ilan Makes a Bugfix

```
1. git fetch origin
2. git merge origin/master
```
(Sometimes) Need to Get Changes from Master into Topic Branch
1. Ilan Makes a Bugfix

1. `git fetch origin`
2. `git merge origin/master`
(Sometimes) Need to Get Changes from Master into Topic Branch
1. Ilan Makes a Bugfix

1. `git fetch origin`
2. `git merge origin/master`
3. `git checkout -b bugfix`
   `git commit -m "D"`
(Sometimes) Need to Get Changes from Master into Topic Branch

1. Ilan Makes a Bugfix

1. `git fetch origin`
2. `git merge origin/master`
3. `git checkout -b bugfix`
   `git commit -m "D"`
4. `git checkout master`
   `git merge bugfix`
(Sometimes) Need to Get Changes from Master into Topic Branch

1. Ilan Makes a Bugfix

1. `git fetch origin`
2. `git merge origin/master`
3. `git checkout -b bugfix`
   `git commit -m "D"`
4. `git checkout master`
   `git merge bugfix`
5. `git push origin master`

Ilan’s Computer
(Sometimes) Need to Get Changes from Master into Topic Branch
2. Aaron is working on a feature
(Sometimes) Need to Get Changes from Master into Topic Branch

2. Aaron is working on a feature

1. `git checkout -b my-feature`
   `git commit -m "E"`
(Sometimes) Need to Get Changes from Master into Topic Branch

2. Aaron is working on a feature

1. `git checkout -b my-feature`
   `git commit -m "E"`

2. `git fetch origin`

Aaron’s Computer
(Sometimes) Need to Get Changes from Master into Topic Branch

2. Aaron is working on a feature

1. `git checkout -b my-feature`
   `git commit -m "E"`
2. `git fetch origin`
3. `git merge origin/master`

**ewww this sucks!**
(Sometimes) Need to Get Changes from Master into Topic Branch
2. Aaron is working on a feature

E' is the same as E but with a different parent

much cleaner!

E' is the same as E but with a different parent
Rebasing

- Rebasing rewrites your git history, replaying the diffs of your commits
- Useful as an alternative to merging when you want to keep history neat
(Sometimes) Need to Get Changes from Master into Topic Branch

2. Aaron is working on a feature

1. `git checkout -b my-feature`
   `git commit -m "E"

2. `git fetch origin`

Aaron's Computer
(Sometimes) Need to Get Changes from Master into Topic Branch

2. Aaron is working on a feature

1. `git checkout -b my-feature`
   `git commit -m "E"`
2. `git fetch origin`
3. `git rebase origin/master`
Activity/Homework

Rebase the changes you made a PR for last week on top of the new upstream/master and push to your branch. Your PR should update automatically.

push -f (force push)