Version Control (using Git)

CSC207 Fall 2016
Distributed Version Control Systems: Paul joins the team

- Justin's computer
  - Local repo
    - project

- Lindsey's computer
  - Local repo
    - project

- Paul's computer
  - Local repo
    - project

Remote repo

```
git init
git remote add origin URL

git pull origin master
```
Distributed Version Control Systems: Justin works on his current feature

Justin works on his current feature on his computer. Lindsey works on the same feature on her computer as well.

Both projects are stored in local repos.

The Remote "origin" repo is shared among all team members.

- Justin pushes his changes to the origin repo using `git push origin master`.
- Lindsey pulls the latest changes from the origin repo using `git pull origin master`.
- Paul pulls the latest changes from the origin repo using `git pull origin master`.

Each team member can add files to their projects using `git add FILENAME` and commit their changes with `git commit -m "message"`.

The team collaborates by sharing and updating their local repos with the origin repo.
Distributed Version Control Systems: Paul has a conflict

Remote “origin” repo

Git push origin master

Justin’s computer

Local repo

project

Lindsey’s computer

Local repo

project

Paul’s computer

Local repo

project

git add FILENAME

Conflicted in a file!

git commit

–m “message”

git push origin master
Server

Remote repo 1 [url]

Remote repo 2 [url]

Local Computer

Project Dir

Local Repo

fetch
remote
push
pull
clone
reset
merge
checkout
branch
init

Branch
Branch
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Branch

Repo: Just a collection of files and folders

Revision/Branch/Files