

# Git/GitHub Hands-On

We'll work in pairs: **User A** and **User B**

## 1. User A

- Go to your GitHub account (let's assume it's <https://github.com/userA>) and create a new repository (let's call it "TestRepo")
- In the project you've been working so far, connect your local repository to GitHub. In shell, run:

```
git remote add origin https://github.com/userA/TestRepo
```

- Push your local repository to GitHub

```
git push -u origin master
```

## 2. User B

- Log into your GitHub account (let's assume it's <https://github.com/userB>)
- Fork user A's repository on GitHub: go to <https://github.com/userA/TestRepo> and click the "Fork" button.
- Clone *your* version of that repository locally:
  1. in RStudio, "create a project" and choose "version control"
  2. choose "Git: clone a project from a Git repository"
  3. enter repository URL: <https://github.com/userB/TestRepo>
- Change a file, and another file
- Add and commit your changes
- Push the changes to GitHub: click on "up arrow" in the Git tab
- Make a pull request:
  - Go to *your* version of the repository on GitHub (<https://github.com/userB/TestRepo>)
  - Click "Pull requests"
  - Click "New pull request"
  - Click "Create pull request"
  - Optionally add a comment
  - Click "Create pull request"

### 3. User A

- Connect to User B's repository:

```
git remote add userBrepo https://github.com/userB/TestRepo
```

- Fetch the changes from User B:

```
git fetch userBrepo
```

- Create their version of the repository as a local branch:

```
git branch userB userBrepo/master
```

- In RStudio, switch to branch “userB” and check that you like the changes
- Switch back to your master branch
- Note that the files are in the state that *you* left them.
- Merge their work into your master branch:

```
git merge userB
```

- Push the work to GitHub.
- Make another change to the file; then add, commit, and push.