

Introduction to Software Systems

Lab 1: Understanding Git and Github

Date: March 29, 2022

[Official docs](#)

[GitHub Cheatsheet](#)

Repository creation

- Config your local machine, add `user.name`, `user.email`, `github.user`, `github.token` (generate access token from github), with `git config user.name "Jon Doe" ..etc.` Use `--global` for personal PCs.
- Make a directory named `ISS_Lab-1`
- Init the directory with `git init .`

Creating and adding files

- Make a file named `name.txt` with your name and roll number in it like the format below:

```
Kshitijaa Jaglan  
2019115005
```

- `git add` your file
- Commit the file with a meaningful message
- `git push` the changes to the main repository
- Check online if your changes have been pushed. You should see the file `name.txt` with the details entered

Pull and updation

- Open the Github repo in your browser and add a second file called `name2.txt` with the same content
- Do `git pull` and check if the changes have been pulled to your local machine

Branching

- Use `git branch` to create a new branch called `other_details`
- Create a file called `other_details.txt` with content in the following format (Add your details instead) (in your main/master branch only):

```
Roll: 2019115005  
Branch: CHD
```

- Follow the general process to `add`, `commit` and `push` the file *Verify online if your changes have been pushed*
- checkout to the branch `other_details` created earlier and create a file with the same name `other_details.txt` and add content in the following format (please not that this is in an order different from that in the main/master branch):

```
Branch: CHD  
Roll: 2019115005
```

- Follow the general process to `add`, `commit` and `push` the file *Verify online if your changes have been pushed*