Technical University of Munich

Tutorial 2a: Recommended workflow

Informatik elective: GPU Computing

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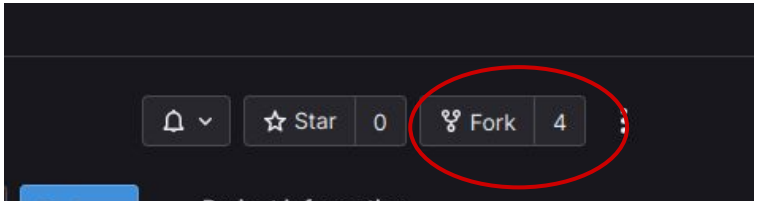
Recommended exercises workflow

- To ensure easy and smooth working on the exercises, I recommend you to:
  - Fork the main repo (https://gitlab.lrz.de/2024ws-gpu-computing/exercises)



  - This should create your own copy of the main repo with the path: https://gitlab.lrz.de/<username>/exercises
  - In that repo, go to Manage → Members → Invite Members (on the top right of the page), and invite me (@pratikvn) to the repo with Developer permissions so that I can give feedback and grade your exercises.

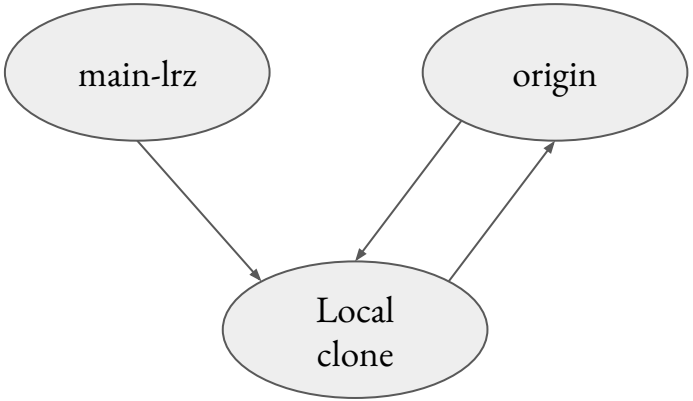
Recommended exercises workflow

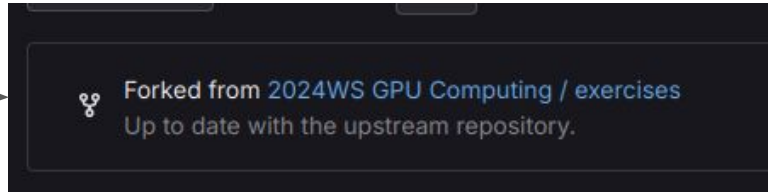
- Always clone (git clone) and work (git push) on your personal fork (https://gitlab.lrz.de/<username>/exercises)
- On your local machine (or the cluster) where you have cloned, you can then add the main repo as an additional remote with (https:// or **preferably with ssh if you have set that up**)
  - `git remote add main-lrz https://gitlab.lrz.de/2024ws-gpu-computing/exercises`
- Now running `git remote -v` on the command line should give you something like:

```
main-lrz     git@gitlab.lrz.de:2024ws-gpu-computing/exercises.git (fetch)
main-lrz     git@gitlab.lrz.de:2024ws-gpu-computing/exercises.git (push)
origin  git@gitlab.lrz.de:pratikvn/exercises.git (fetch)
origin  git@gitlab.lrz.de:pratikvn/exercises.git (push)
```

Recommended exercises workflow

- `git remote -v` shows that there are two remotes now.
- The idea is to work always work on your local clone and push to your local fork (origin).
- When there are updates in main-lrz, you pull the changes from main-lrz into your local clone, rebase with `git rebase`
- And then you can push the rebased branch into your local fork, so that it is updated. You can see if your local fork is behind main-lrz as gitlab webpage shows it as below





Some useful documentation

- Rebasing (`git rebase` command) ensures that your commit history is linear. Here is some documentation to help you better understand how rebase works:
  https://git-scm.com/book/en/v2/Git-Branching-Rebasing
- I recommend that you get familiar with git by following through with this free hands-on book:
  https://git-scm.com/book/en/v2

Feedback and grading of exercises

- Please ensure that you have given me access to your local fork (see slide 1) so that I can grade and give feedback on your exercises.
- Generally there will be one week of work time for the exercises.
- Commit to your local fork frequently. Shows us that you have not just copied the code from somewhere.
- Once you have your exercise ready to submit, create an Issue on your fork: https://gitlab.lrz.de/<username>/exercises/-/issues , and ping me by username @pratikvn.
  - You can also upload your explanations, performance plots, pdfs there directly if necessary.
- Create an Issue for each exercise. (one Issue for ex1, a new Issue for ex2 and so on)