Setting up your personalized micc environment

micc was built for

University of Antwerp course on
Parallel Programming

CalcUA Course on
High Performance Python – software development for PhD students and Postdocs

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Development of Python/C++/Fortran projects with micc

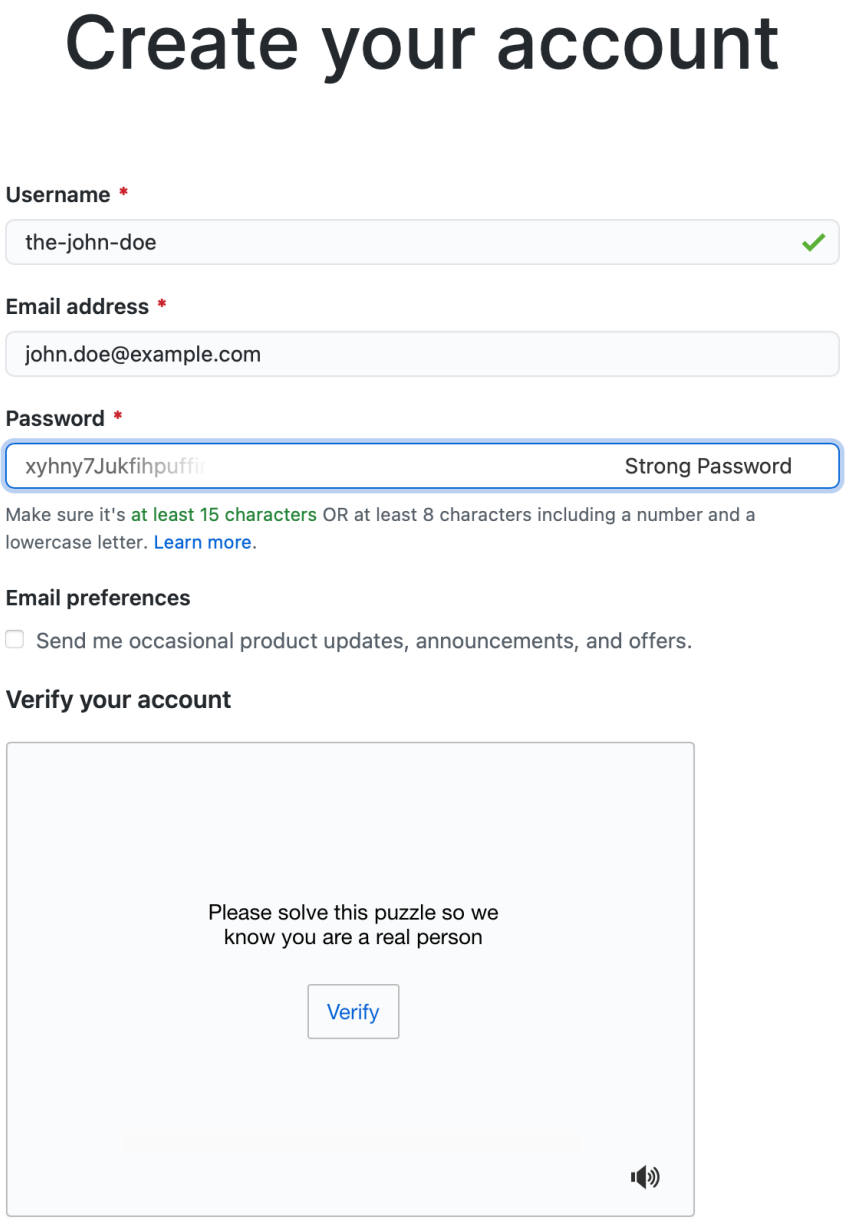
- This document assumes that all the tools of the development environment have been setup as described in https://micc.readthedocs.io/en/master/devenv.html.
- An Ubuntu 20.10 virtual machine for VirtualBox with all tools installed can be downloaded from https://calcua.uantwerpen.be/courses/parallel-programming/ubuntu-20.10.ova. It has a userid `user` with password `calcua@ua`
- This document describes how to customize the environment for so that micc is able to automatically create GitHub repos for the projects you create.

Create GitHub account (1)

- go to https://github.com, enter your e-mail address and click “Sign up for GitHub”:

Create GitHub account (2)

- Choose your Username
- Choose a password (and remember it)
- Click “Verify” and solve the puzzle
- A button “Create account” will appear, click on it
- You will receive an e-mail at the e-mail address you provided to activate your account



Create a personal access token for GitHub

- follow this guide: https://docs.github.com/en/github/authenticating-to-github/creating-a-personal-access-token
- At point 7 check at least these boxes:
  - repo
  - read:org
- After point 9 (copying the token), paste it in a text file `.pat.txt` in your home directory. Type this command in a terminal:

```
$ echo shift+ctrl+V > ~/.pat.txt
```

- Micc uses this file to automatically create a GitHub repo for your project
- Skip point 10.

Setup micc (1)

- Before micc can be used it must be set up by typing this command in a terminal. Provide your name, e-mail address and GitHub username:

```
$ micc setup
your full name [first-name last-name]: John Doe
your e-mail address [your.email@whatev.er]: john.doe@example.com
your github username (leave empty if you do not have one,
  or create one at https://github.com/join) [your-github-username]: the-john-doe
```

- After you provided your GitHub username, you may accept the default values of all further questions

Setup micc (2)

- Finally, micc will configure your git environment

```
…
Configuring git:
[ > git config --global user.name John Doe
] done.
[ > git config --global user.email john.doe@example.com
] done.
[ > git config --global credential.helper cache
] done.
…
```

- Micc is now configured and ready to be used

Setup micc (3)

- If you want to change your preferences, you can edit the default entries in file

  ```
  /Users/etijskens/.et_micc/micc.json
  ```

- Note that these changes will only affect NEW projects. Existing projects will be unaffected.
- Alternatively, you can start all over again typing

  ```
  $ micc setup --force
  ```

- The first time you push a local repo to GitHub, git will ask the password for your GitHub account. After that it will remember the password.

Things I forgot to install …

- openmpi:
  - Open terminal and execute these commands (sudo password is calcua@ua)

  > sudo install openmpi-bin libopenmpi-dev

you're good to go

- browse the `micc` tutorials
  - at https://micc.readthedocs.io/en/master/devenv.html
  - or in the course's git repository
    - `$ cd workspace`
    - `$ git clone https://github.com/etijskens/pp`
    - `$ xdg-open pp/course-material/micc-documentation/index.html`