Bioinformatics session

A two-day workshop for bioinformaticians and molecular biologists with focus on the TSO500 pipeline in InPreD

Overview

1. Setup

2. Development & Collaboration

3. Nextflow

4. tso500_nxf_workflow

5. Python

1. Setup

Create a GitHub account

- go to https://github.com/ and click on `Sign up`

Create a GitHub account

- enter your email

Create a GitHub account

- set a password

Create a GitHub account

- choose a username

Welcome to GitHub!
Let's begin the adventure

Enter your email*

✓ coder@inpred.no

Create a password*

✓ ●●●●●●●●●●●

Enter a username*

→ inpredder   Continue

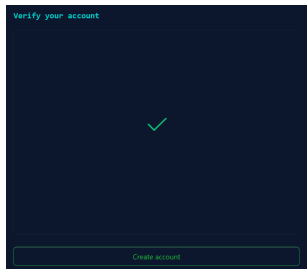# Create a GitHub account

- choose email preferences

Create a GitHub account

- solve the puzzle

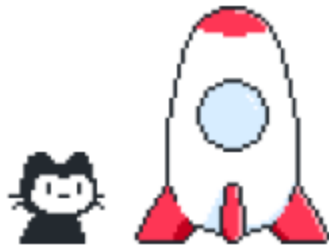# Create a GitHub account

- create your account

Create a GitHub account

- find the activation code in the email you received

Here's your GitHub launch code, @inpredder!

Continue signing up for GitHub by entering the code below:

40619601

Open GitHub

◯ 10-20	◯ 20-50	◯ 50+

Are you a student or teacher?

🔵 N/A	◯ Student	◯ Teacher

Continue

What specific features are you interested in using?

Select all that apply so we can point you to the right GitHub plan.

☑ Collaborative coding

Codespaces, Pull requests, Notifications, Code review, Code review assignments, Code owners, Draft pull requests,

Free

> Unlimited public/private repositories

> 2,000 CI/CD minutes/month
> Free for public repositories

> 500MB of Packages storage
> Free for public repositories

> 120 core-hours of Codespaces compute

> 15GB of Codespaces storage

> Community support

1. Setup

Be added to InPreD organisation at GitHub

1. Resources

- Getting started with your GitHub account

2. Development & Collaboration

- short git introduction (basic git commands, optional)

- branching system (gitflow workflow)

- github actions (linting, testing, building)

- pull requests (best practice)

- release and semantic versioning

- licensing

3. Nextflow

- general (install, best practice)
- nf-core template
- stubbing

4. `tso500_nxf_workflow`

- status

- demonstration

5. Python

- general (best practice, cli)
- unit testing (pytest)

Resources

- Gitflow
- github actions
- nf-core
- pytest unittesting
- semantic versioning