





### Disclaimer

This session will be recorded

# Introduction Version Control

COMPASS NUM-APP 25.03.2021



### **Objectives**

After this session, you should be able to:

- Understand Git and GitHub
- Participate in NUM Compass project



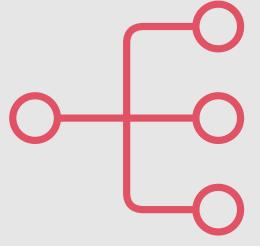


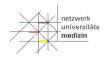




## **Agenda**

- What is Git
- GitHub Overview
- Contribution Patterns
- Code of Conduct
- Links
- Q&A















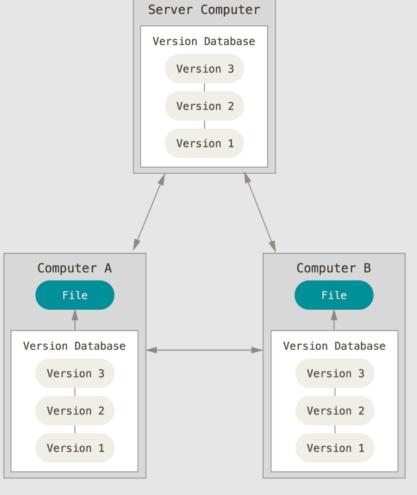
# Git Basics

### Git - Basics



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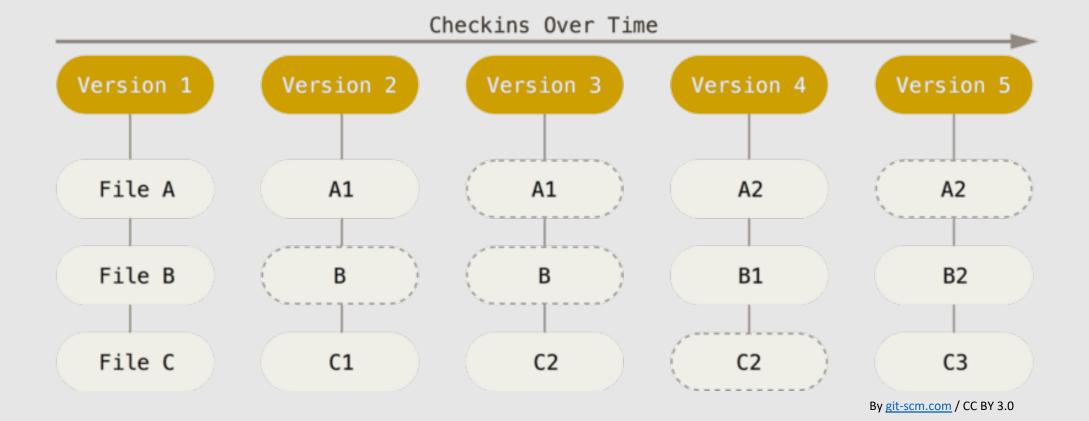
By git-scm.com / CC BY 3.0



### Git - Basics



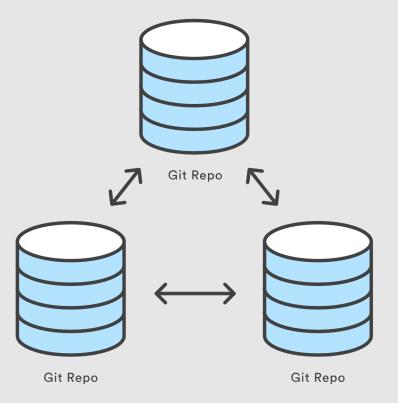






## Git - Cloning

Repo-To-Repo Collaboration





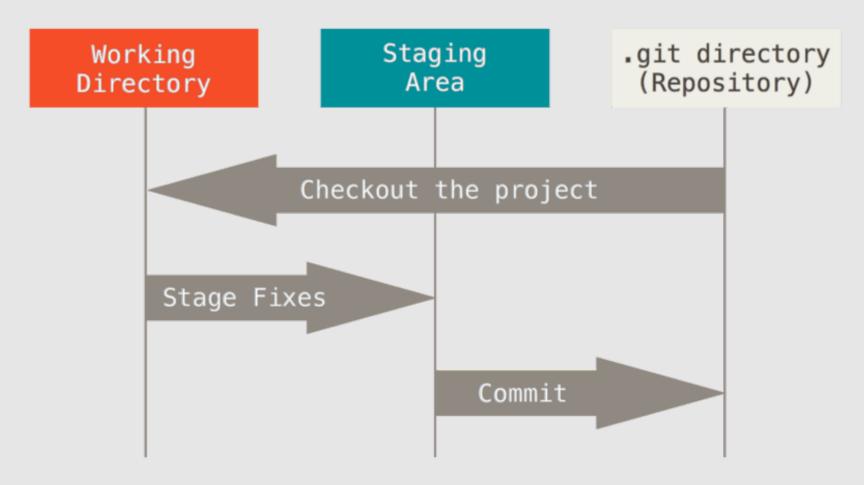




### Git - Workflow

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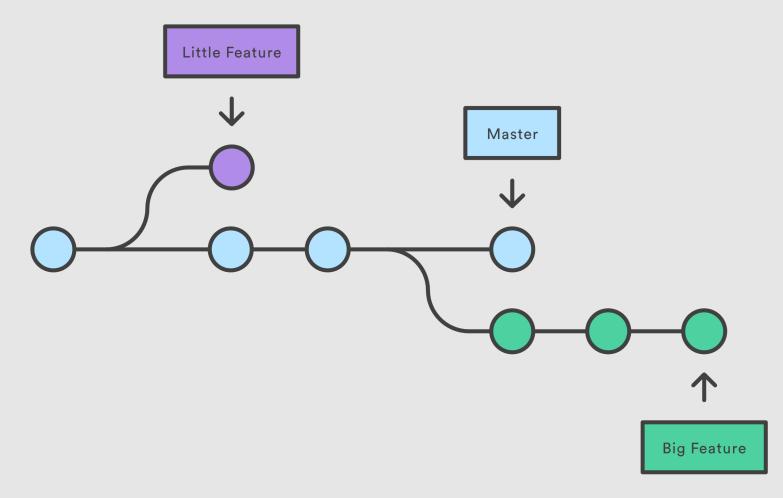


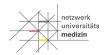


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## Git - Branching and Merging

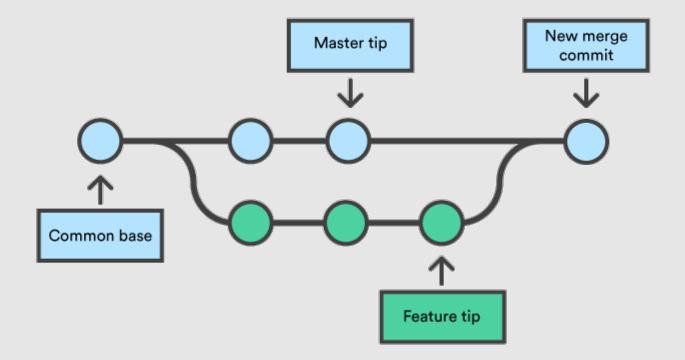


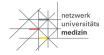






## Git - Branching and Merging









### Git - Forking

Forking is no special git operation

Create a "server-side" clone of a repo

• Performed by a Git service like GitHub







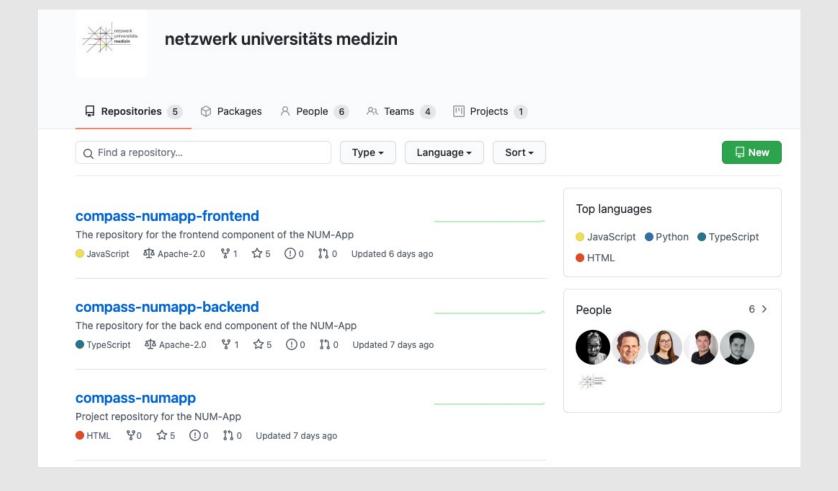






# GitHub

### GitHub - Organization

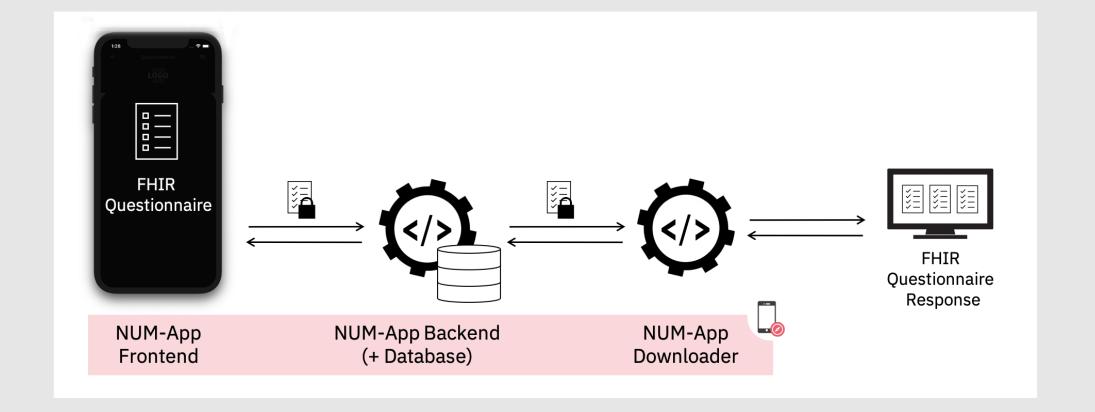


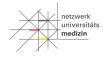






## GitHub - NUM-App Components

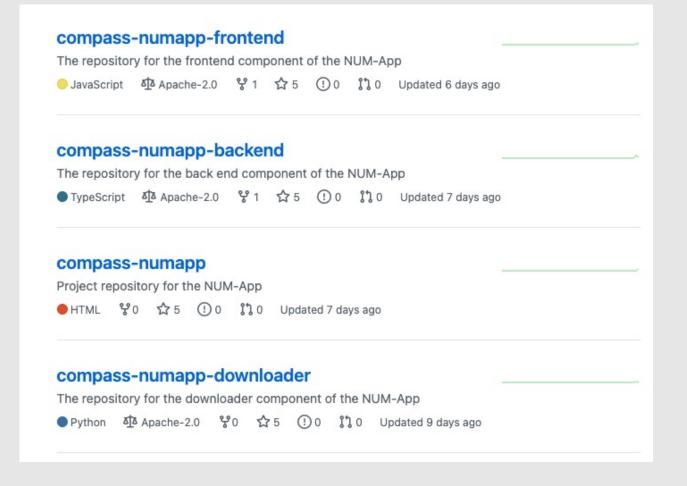








### GitHub - Repositories

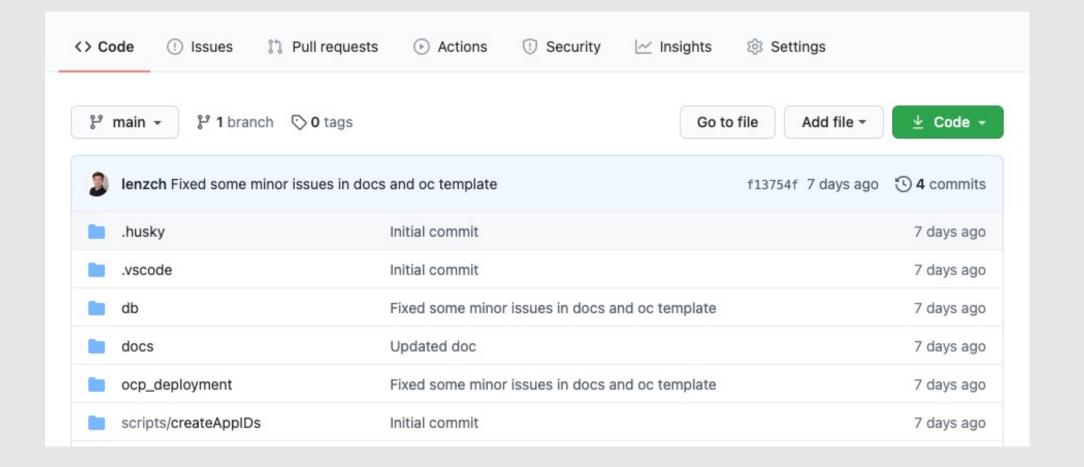


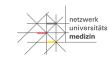






### GitHub - Issues and Code















# Contribution Pattern

### **Contribution - Personas**



### **Patrick**

Medical informatics student in the 6th semester, research assistant at the UK

**Objective:** prototype the mobile NUM app for a demo at his chair in the Universitätsklinikum to develop a feature for the app and later contribute to the open source project.



### Yasmin, Arne, Fin, Irene

Employees of the InnovationHub in the Universitätsklinikum

**Objective:** adapt the mobile NUM app to a specific use case, adapt the app to the look and feel of their UK and publish the modified app in the app stores.







### Forking Workflow





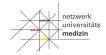
- 1. A developer 'forks' the 'main' server-side repositories. This creates their own server-side copy.
- 2. The new server-side copy is cloned to their local system.
- 3. A Git remote path for the 'official' repository is added to the local clone.
- 4. A new local feature branch is created.
- 5. The developer makes changes on the new branch.
- 6. New commits are created for the changes.
- 7. The branch gets pushed to the developer's own server-side copy.
- 8. The developer opens a pull request from the new branch to the 'official' repository.
- 9. The pull request gets approved for merge and is merged into the original server-side repository







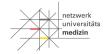
- Exactly as described in the Forking Workflow
  - Fork the main repo
  - Create feature or improvement branch
  - Create Pull/Merge Request against main repo
  - Wait for feedback from maintainers









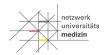




- Create an organization in GitHub and add users (optional)
- Fork the main repositories into your organization
- Change components to your needs
- Follow customization guides (<u>Front End Guide</u>)
- Fetch & merge changes from main repositories regularly to benefit from latest improvements



### Live Demo



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https://github.com/NUMde



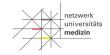






## Code of Conduct

### Code of Conduct



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Bundesministerium
für Bildung
und Forschung
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https://www.contributorcovenant.org/version/2/0/code\_of\_conduct/





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# Links

### Links



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#### Git

- https://git-scm.com/
- https://docs.github.com/en/github/getting-started-with-github/set-up-git
- https://training.github.com/

#### GitHub

https://docs.github.com/en/github

### Forking Workflow

• https://www.atlassian.com/git/tutorials/comparing-workflows/forking-workflow





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A&Q



# What questions do you have?



