

Summary and Next Steps



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Thinking in Git

- Characteristics of Git
- The stages of a file
- The 3 main directories of Git

Set Up Your Local Git Environment

- Installing Git
- Basic command line navigation
- Git configurations and text editor

Working in a Local Repository

- Initialize Git and add, modify, and commit files
- View commits with git log
- View files states with git diff

Working with Others in a Shared Repository

- Set up a centralized git repository
- Remote branches
- git clone, git push, git fetch, and git pull
- Merge strategies “fast-forward, 3-way merge, rebase

Merge Conflicts

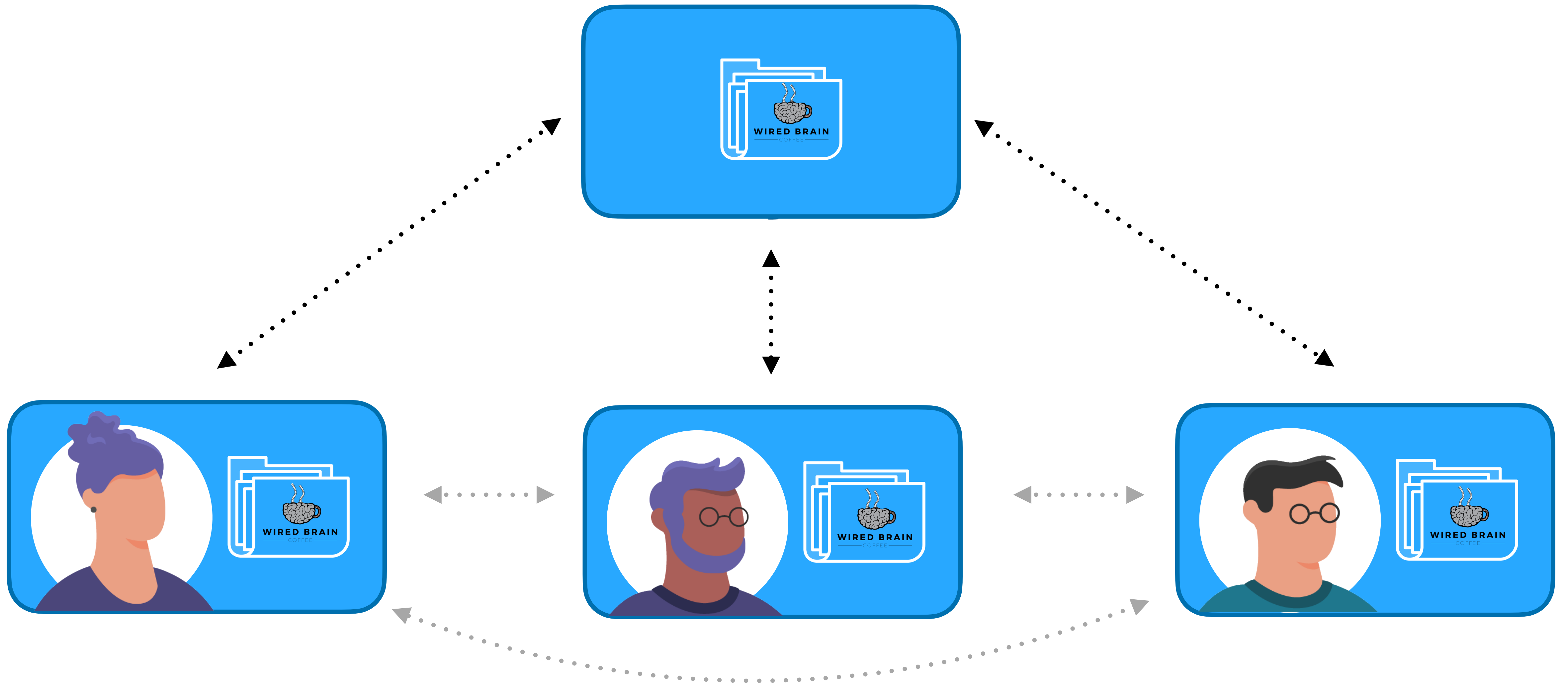
- What they are
- How to resolve them
- How to prevent merge conflicts

How to Modify and Fix Your Commits

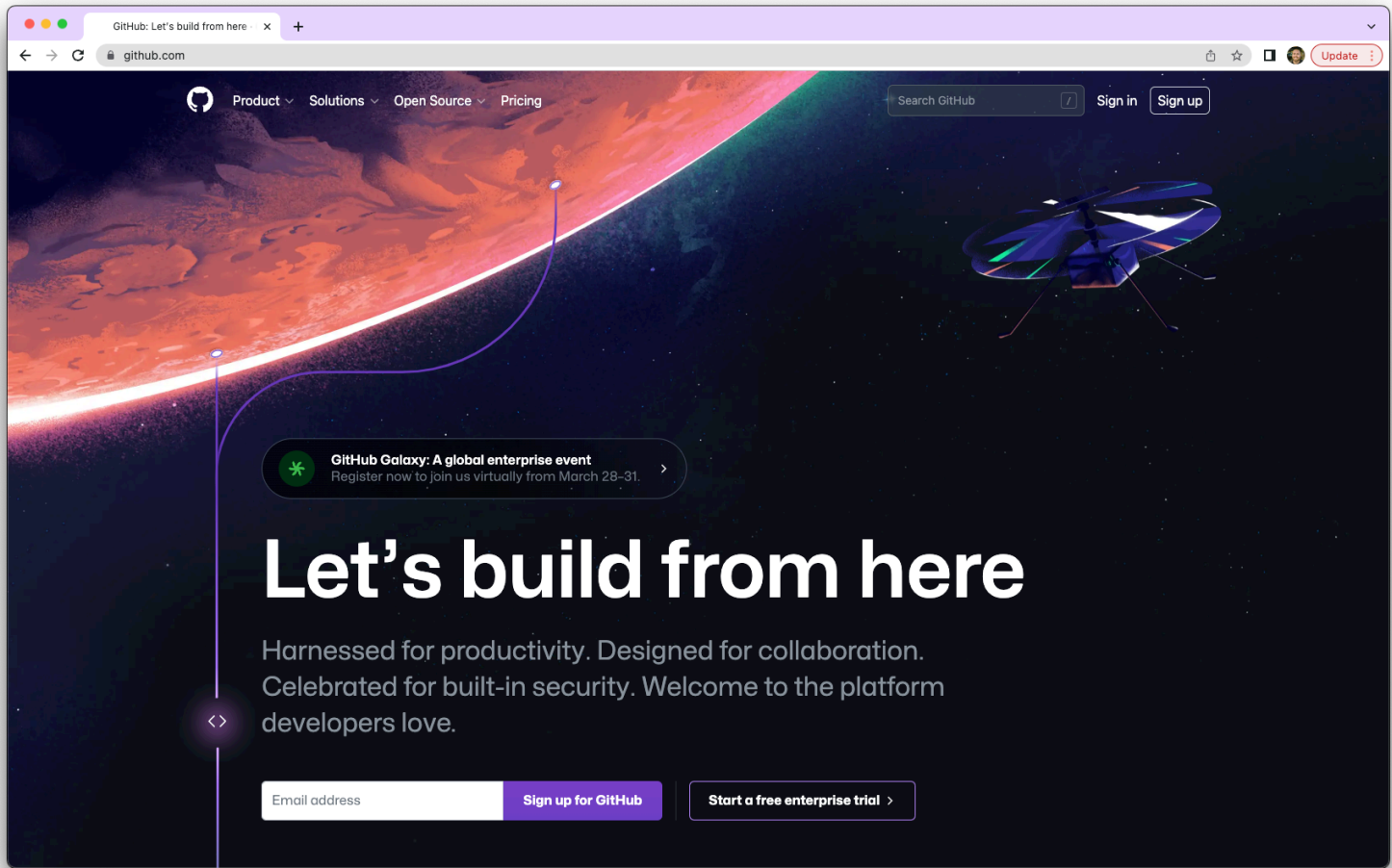
- The git amend command
- 3 uses of git reset
- The reflog and git cherry-pick

Popular Team Workflows

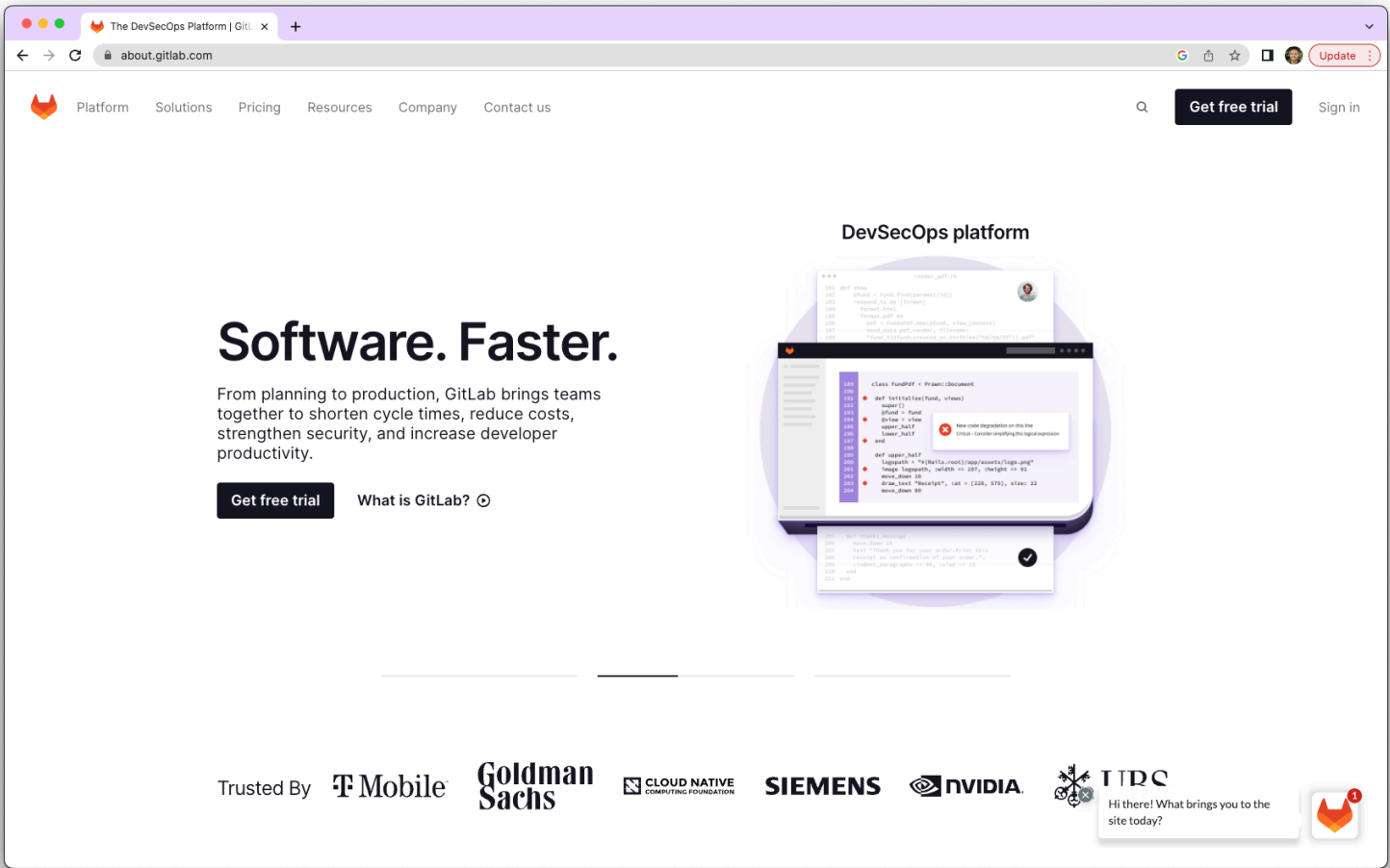
- Basic workflow
- Feature branch workflow
- Git flow



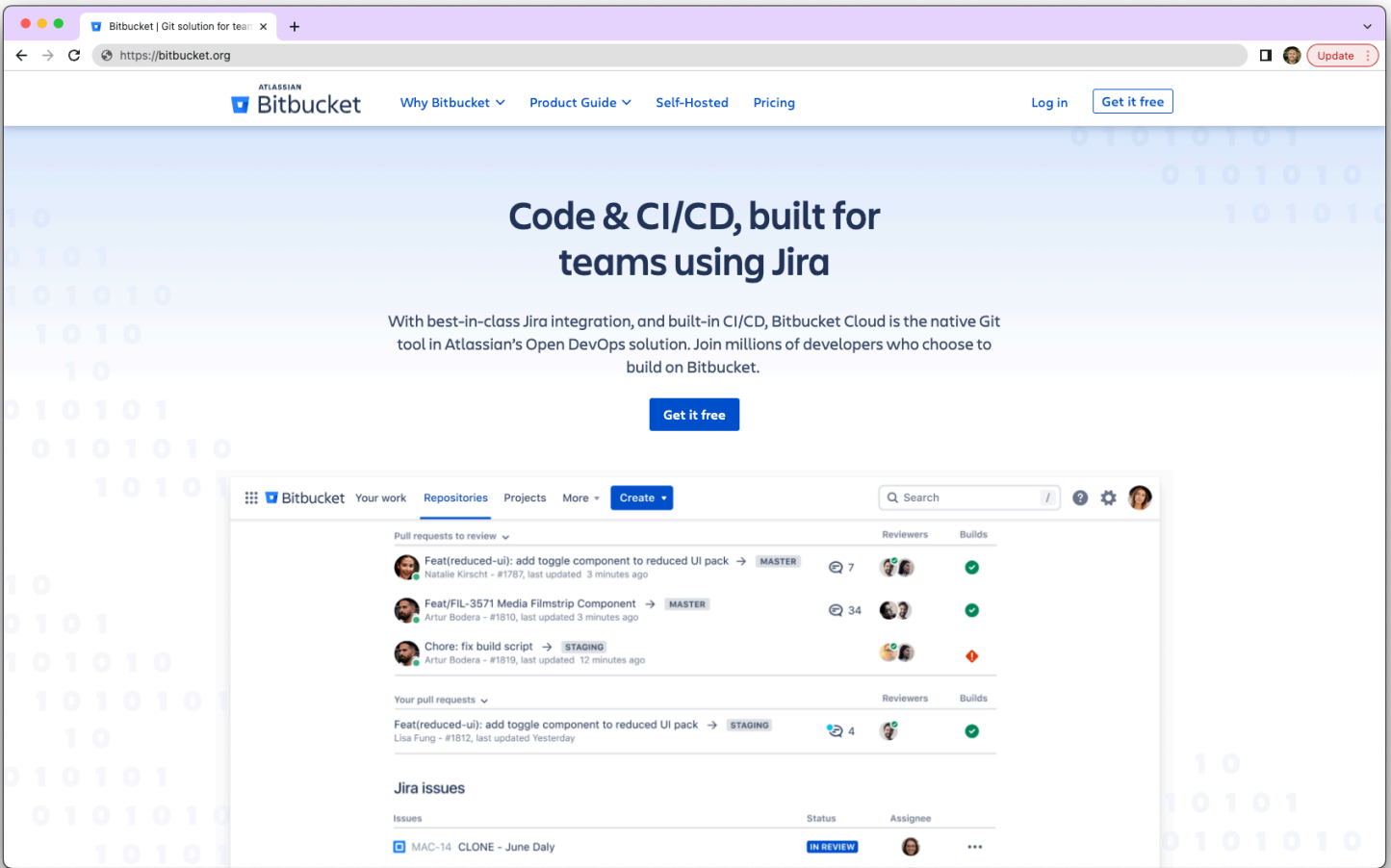
Popular Code Hosting Platforms



GitHub



GitLab



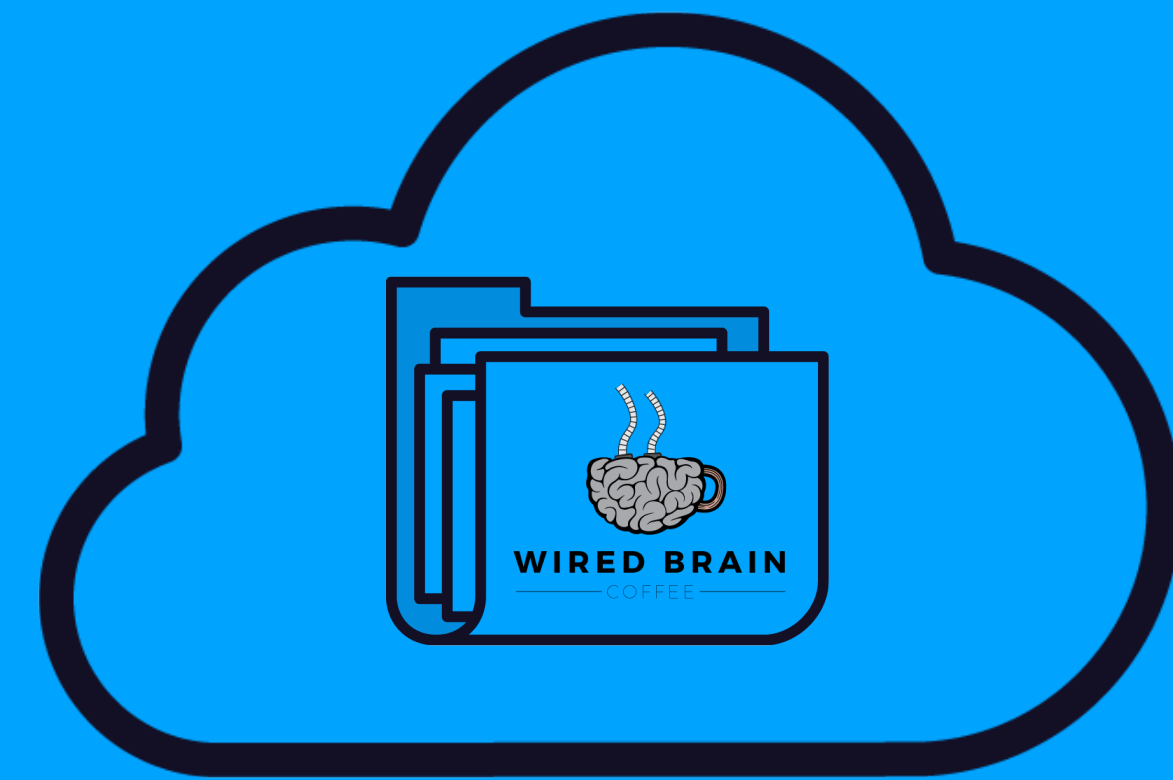
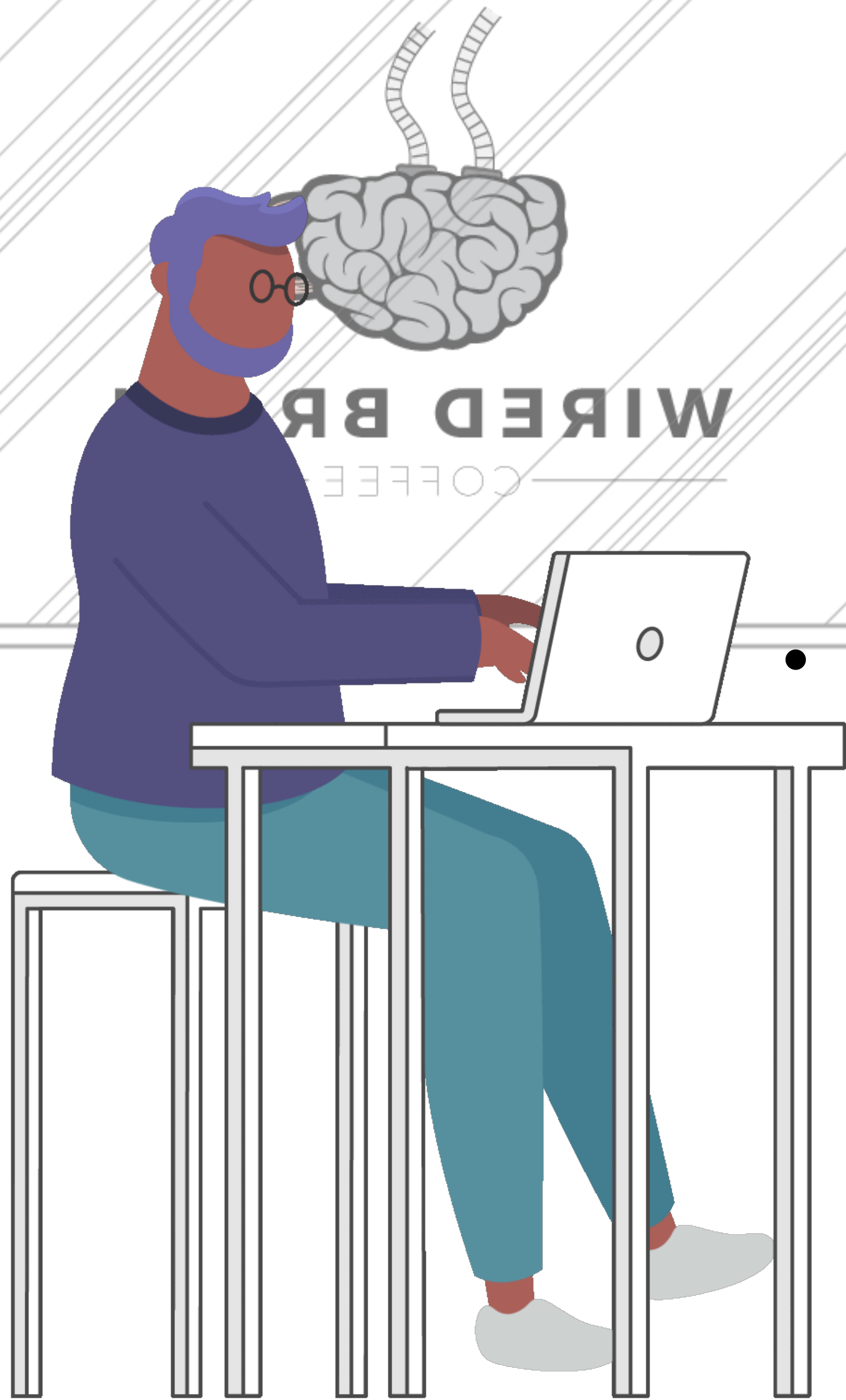
Bitbucket

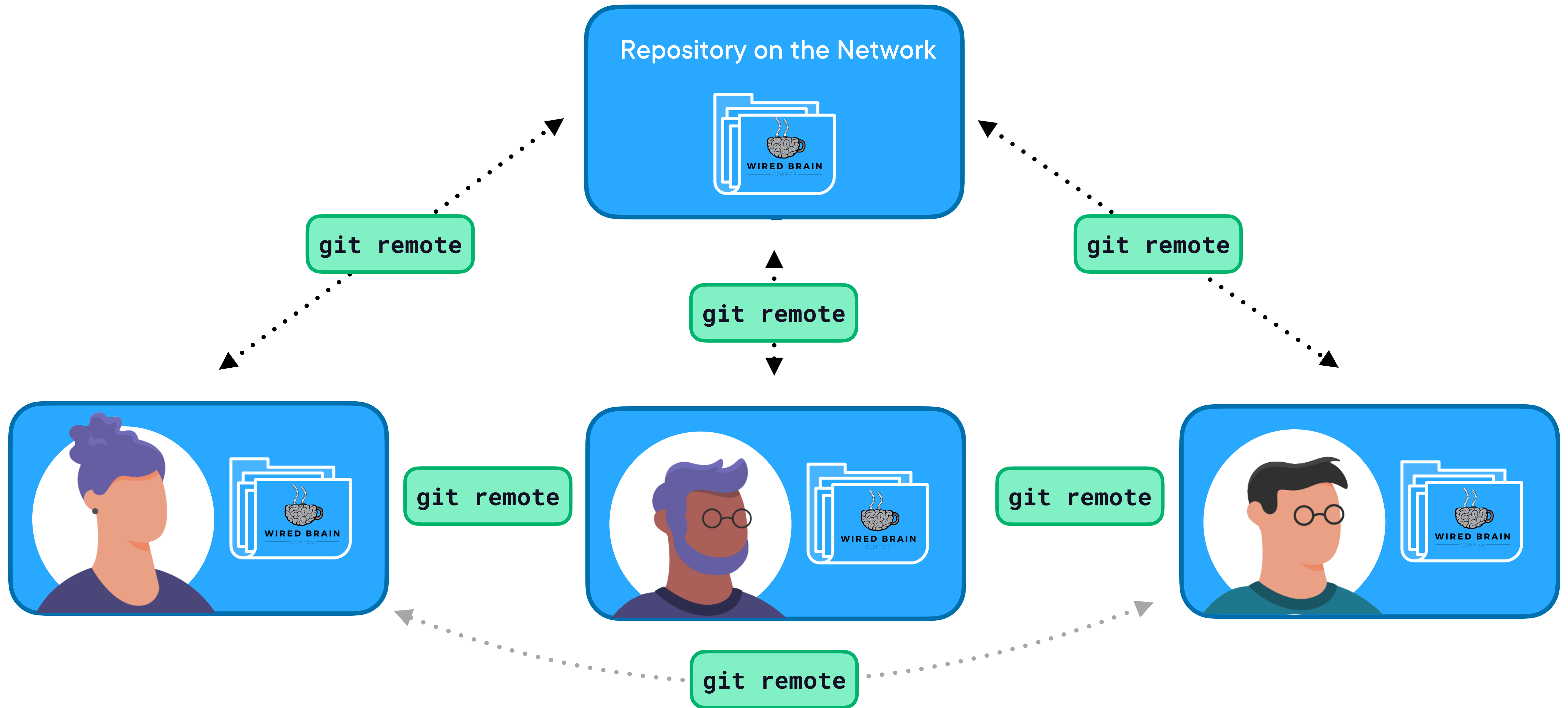

WIRED BRAIN
— COFFEE —



WIRED BRAIN
— COFFEE —







Git Basics

<code>git init</code>	Create a new .git repository and begins tracking
<code>git add</code>	Move modified files into the staging area
<code>git status</code>	Shows you the status of your files
<code>git commit</code>	Create a snapshot and commit to .git
<code>git config</code>	Set and read specific Git configurations
<code>git log</code>	Shows the committed snapshot history
<code>git diff</code>	Shows changes between your working directory and staging area

Git Branches

<code>git branch</code>	List, create, or delete branches
<code>git checkout</code>	Switch between branches
<code>git merge</code>	Bring changes from one branch into another

Remote Repositories

<code>git clone</code>	Copies an entire repository into a new local .git directory
<code>git remote</code>	Create and show linked repositories
<code>git push</code>	Send updates to associate repositories
<code>git pull</code>	Retrieves and integrates changes from other repositories
<code>git fetch</code>	Retrieves but doesn't integrate changes from other repositories

Undoing Changes

<code>git revert</code>	Create a new commit that undoes a previous commit
<code>git reset</code>	Remove files from the staging area

Remote Repositories

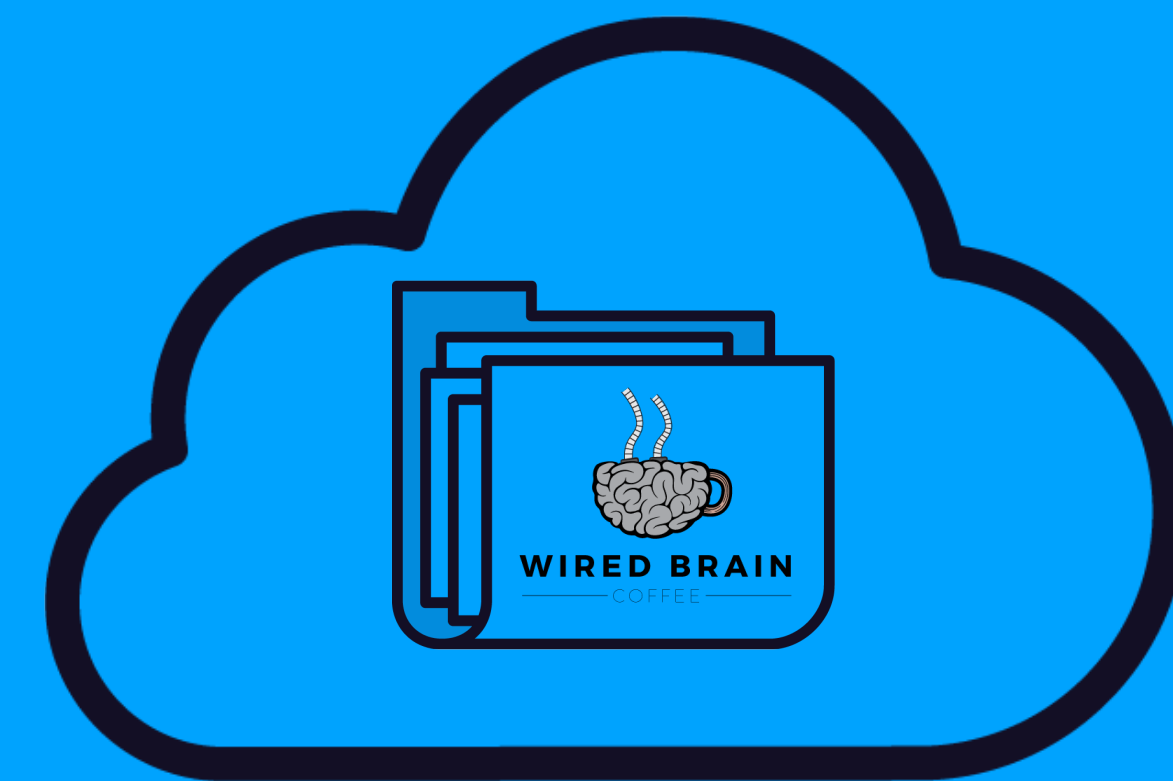
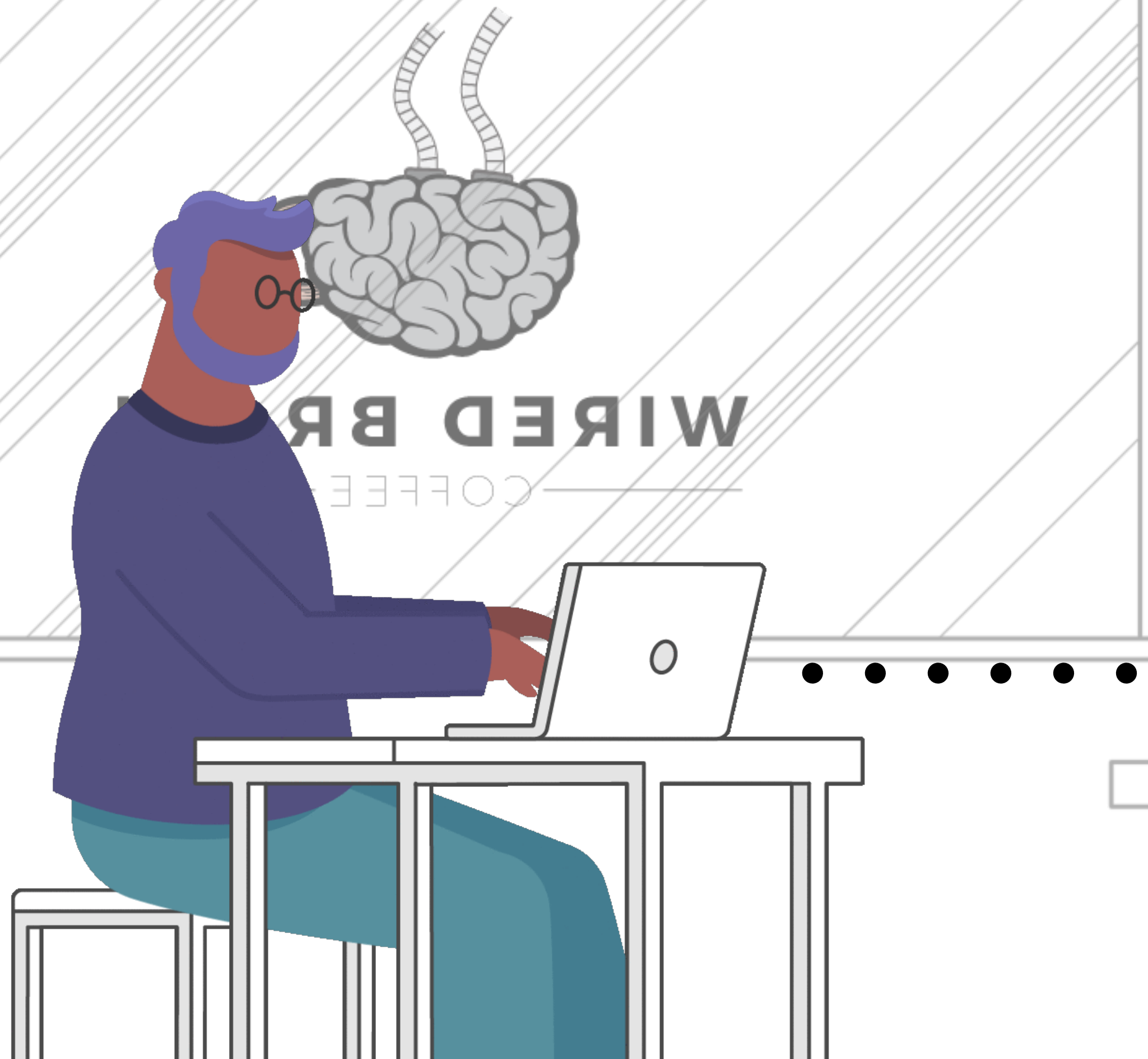
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```
git remote add origin https://codehostingsite.com/repository-name.git
```

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```
git push -u origin main
```



git push feature ❌

git push -u origin feature ✅

git push feature ✅

Git remote branches

- main
- feature

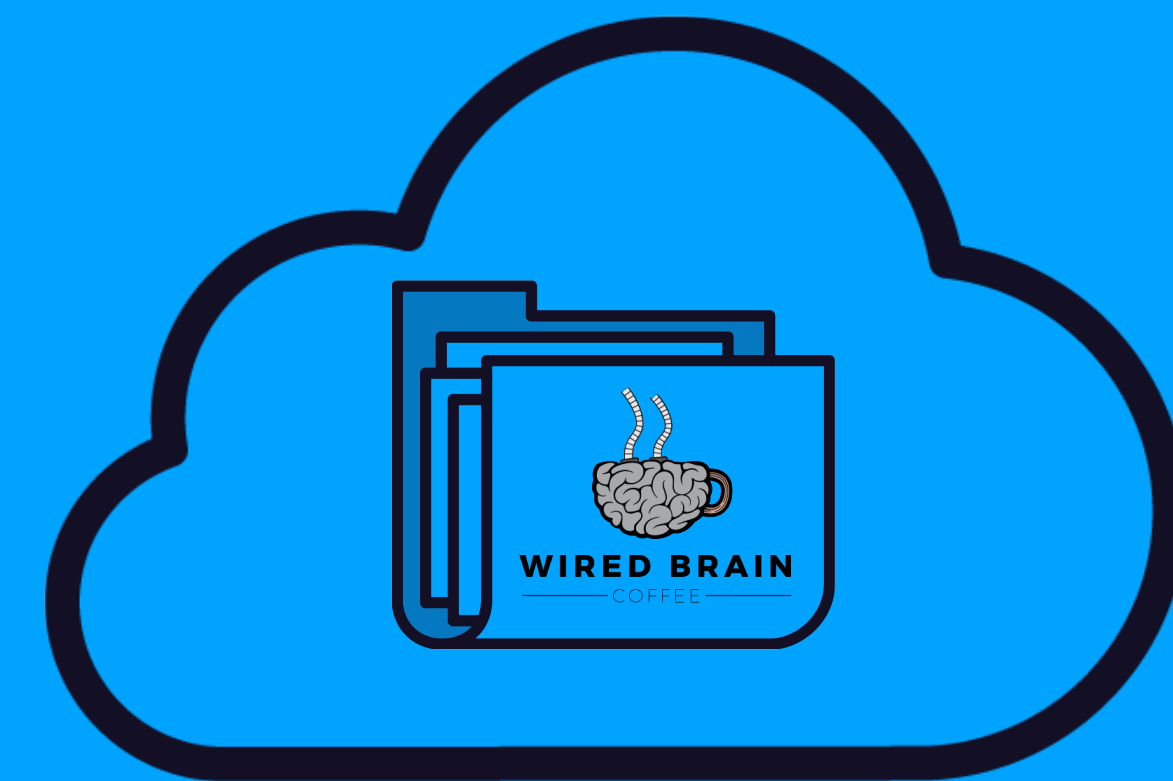


```
git pull    (git fetch , git merge)
```

```
Updating a601251..62d26d6
```

```
Fast-forward
```

```
iced-beverages/vanilla-sweetcream-coldfoam.md | 2 +-  
1 file changed, 1 insertion(+), 1 deletion(-)
```



Git remote branches

- main
- feature