

WEB ENGINEERING MEETUP / DÜSSELDORF / 27-02-2024

Remote Mob Programming

At home, but not alone



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**„Mob Programming
has changed my life“**

JOSHUA TÖPFER

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Joshua has been working full-time in remote mob for more than 3 years. He is the maintainer of mob.sh and coaches teams in remote mob programming.



Who has already done pair programming?



Who has already done mob programming?



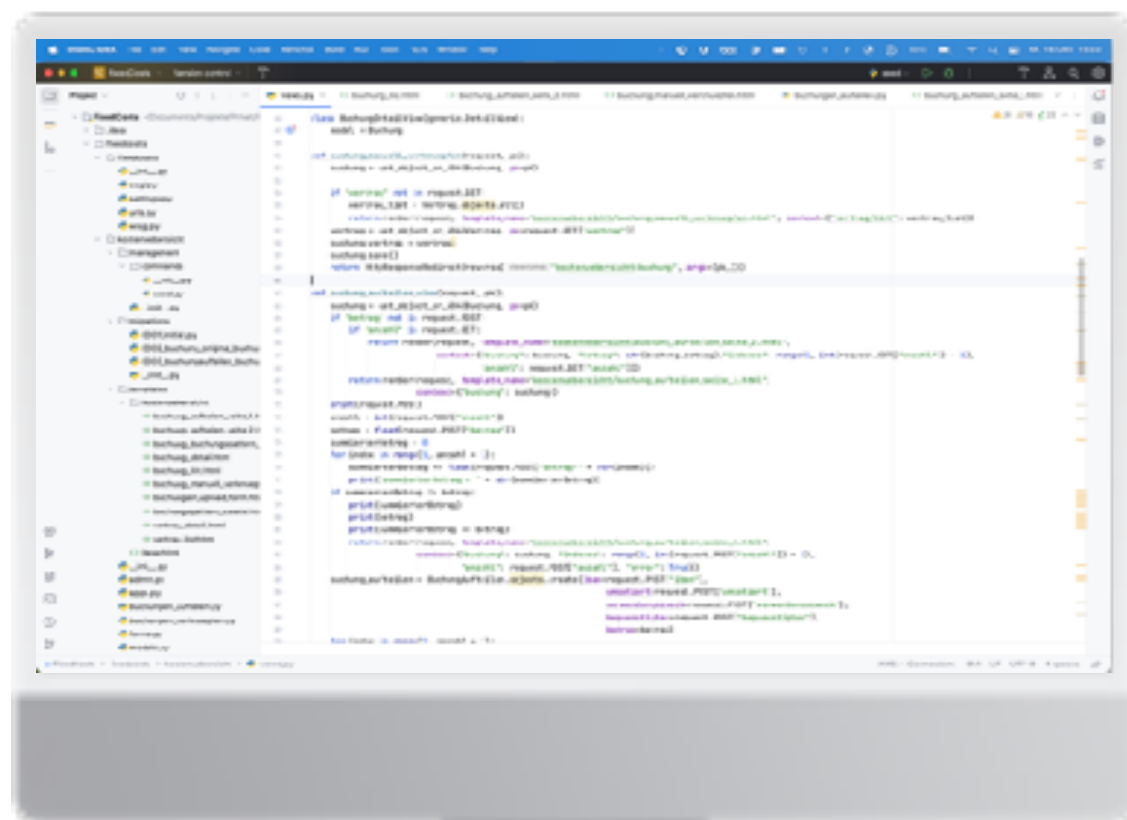
Who has already done remote mob programming?



What is Mob Programming?

**All the brilliant minds working together
on the same thing, at the same time, in
the same space, and at the same
computer**

Woody Zuill



Typist



Typist



Typist



Typist



Typist

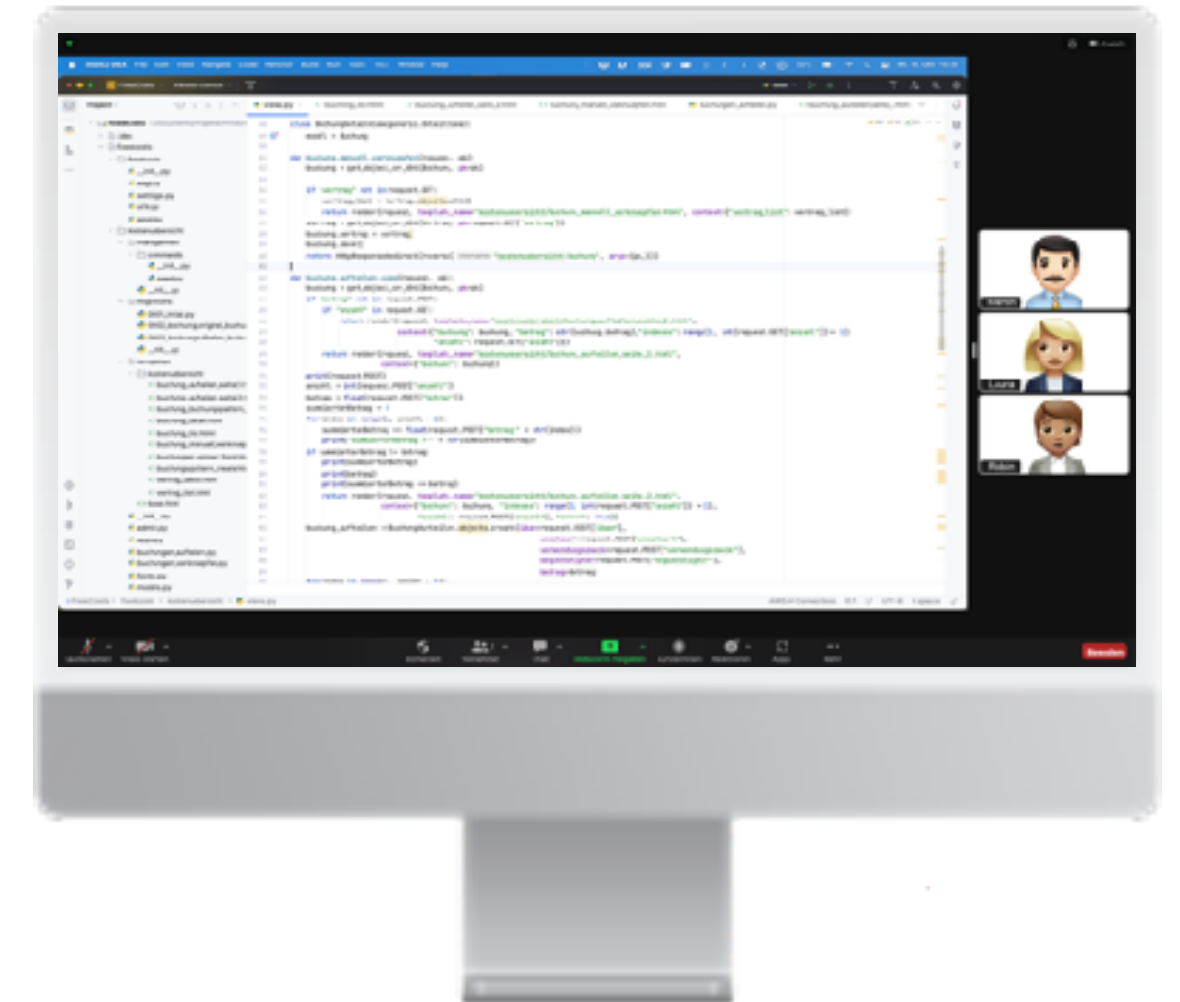
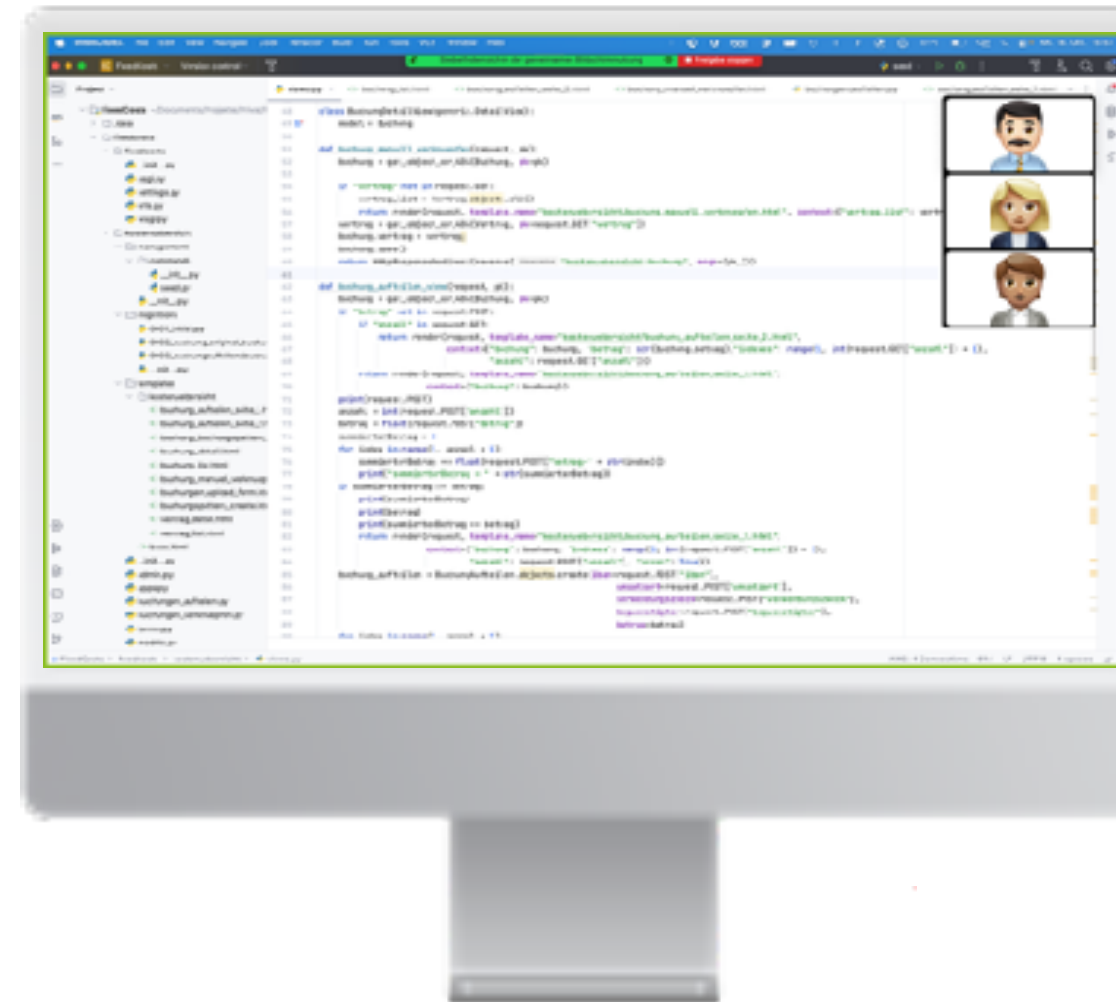
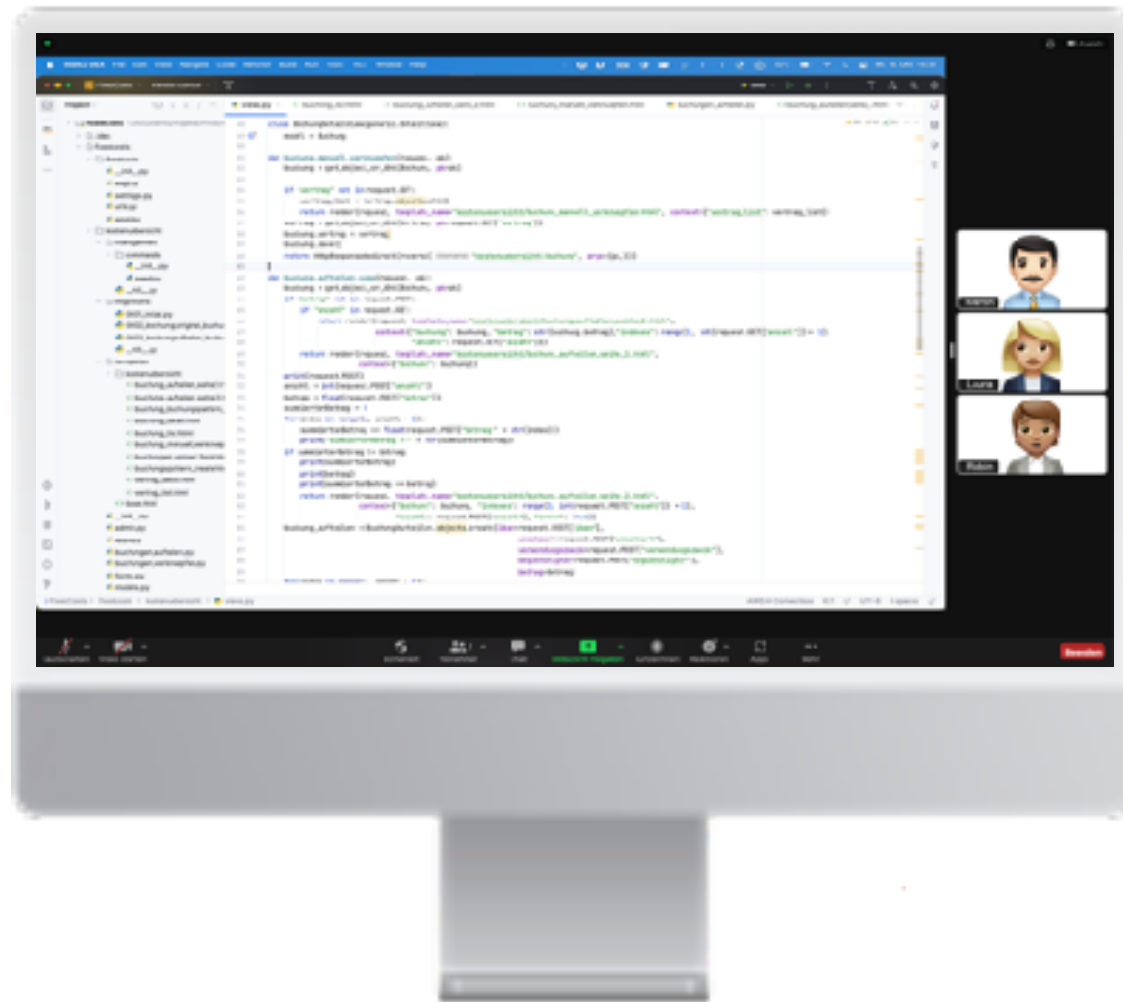


What is Remote Mob Programming?

Virtual team room

- Fixed location
- Everyone sees and hears each other
- Everyone sees the same screen
- Pass on keyboard
- Whiteboard



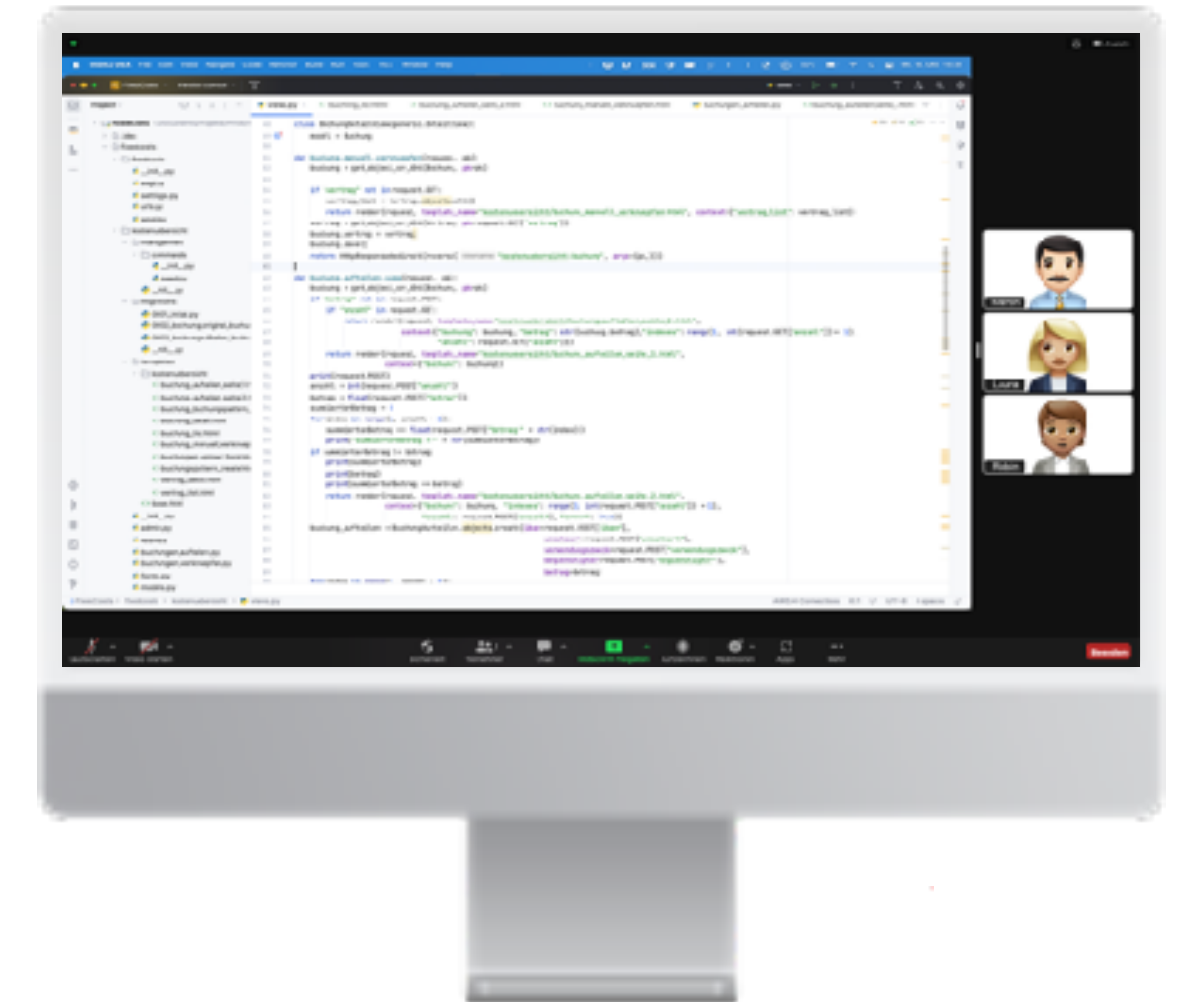
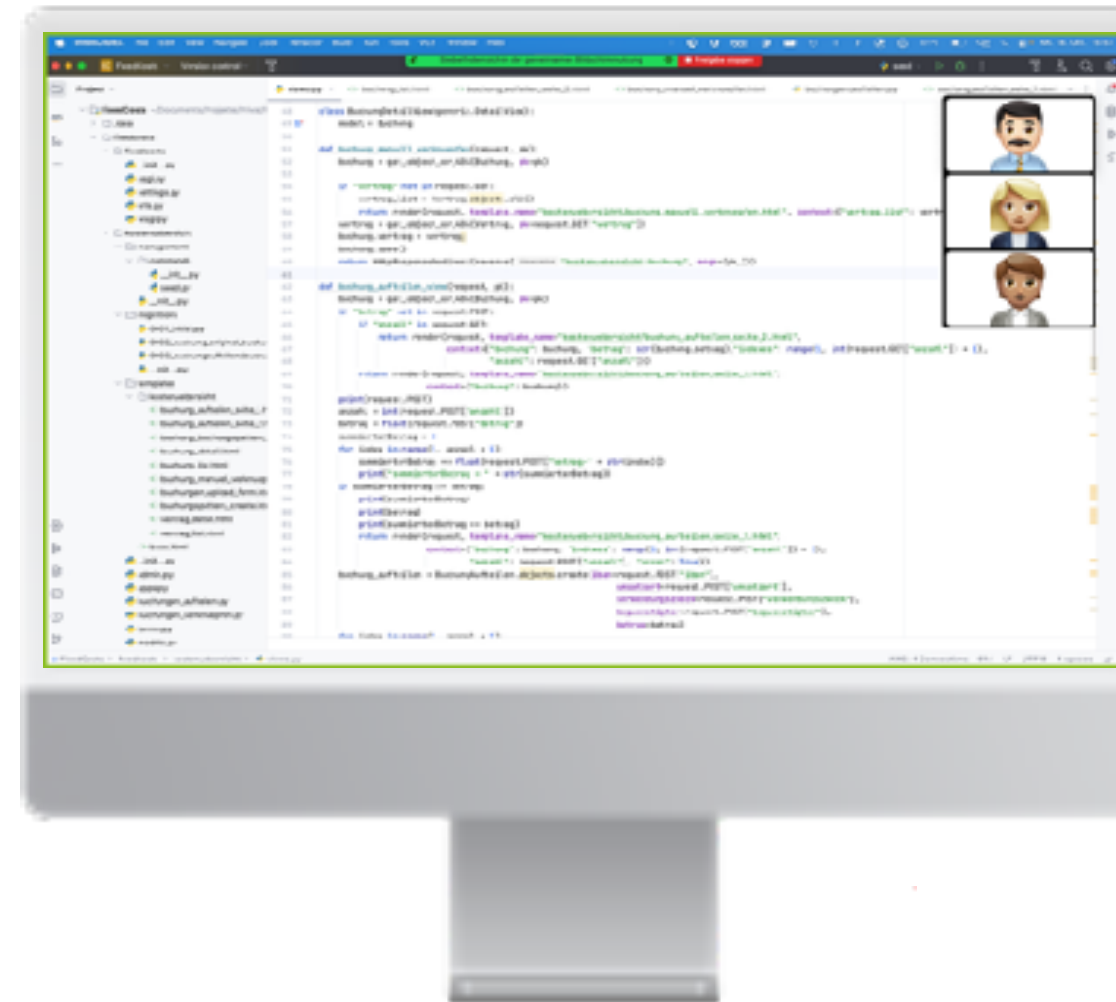
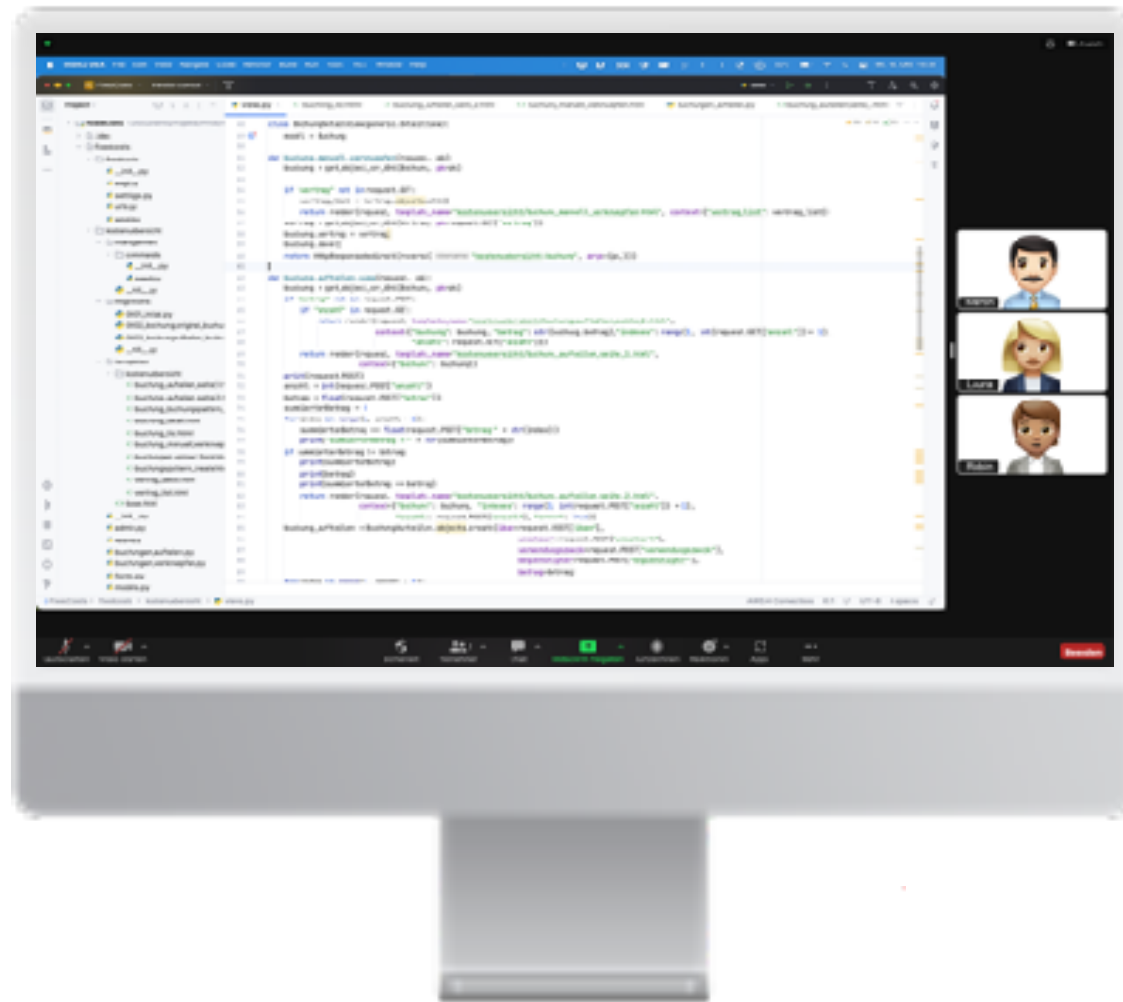


Typist

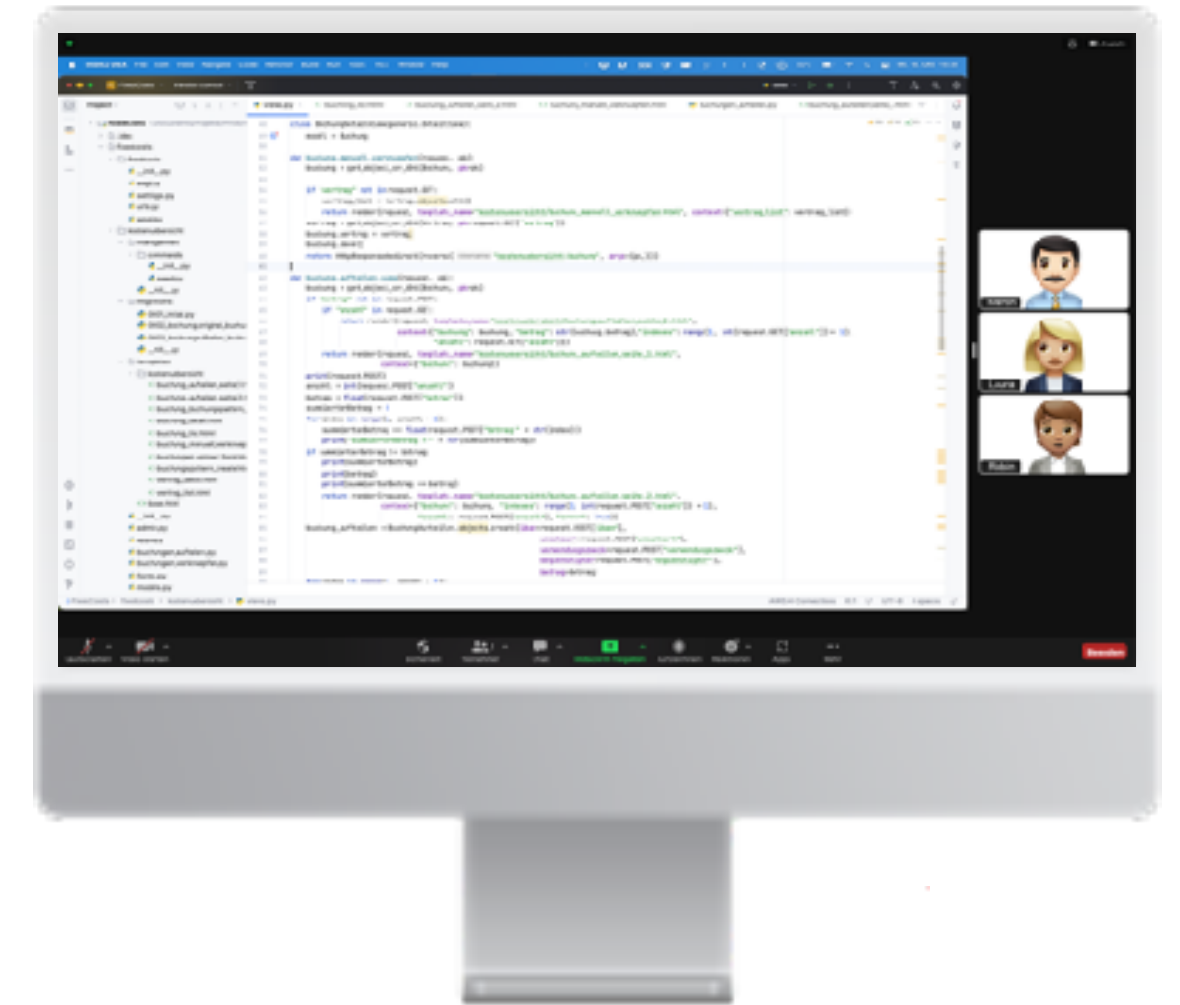
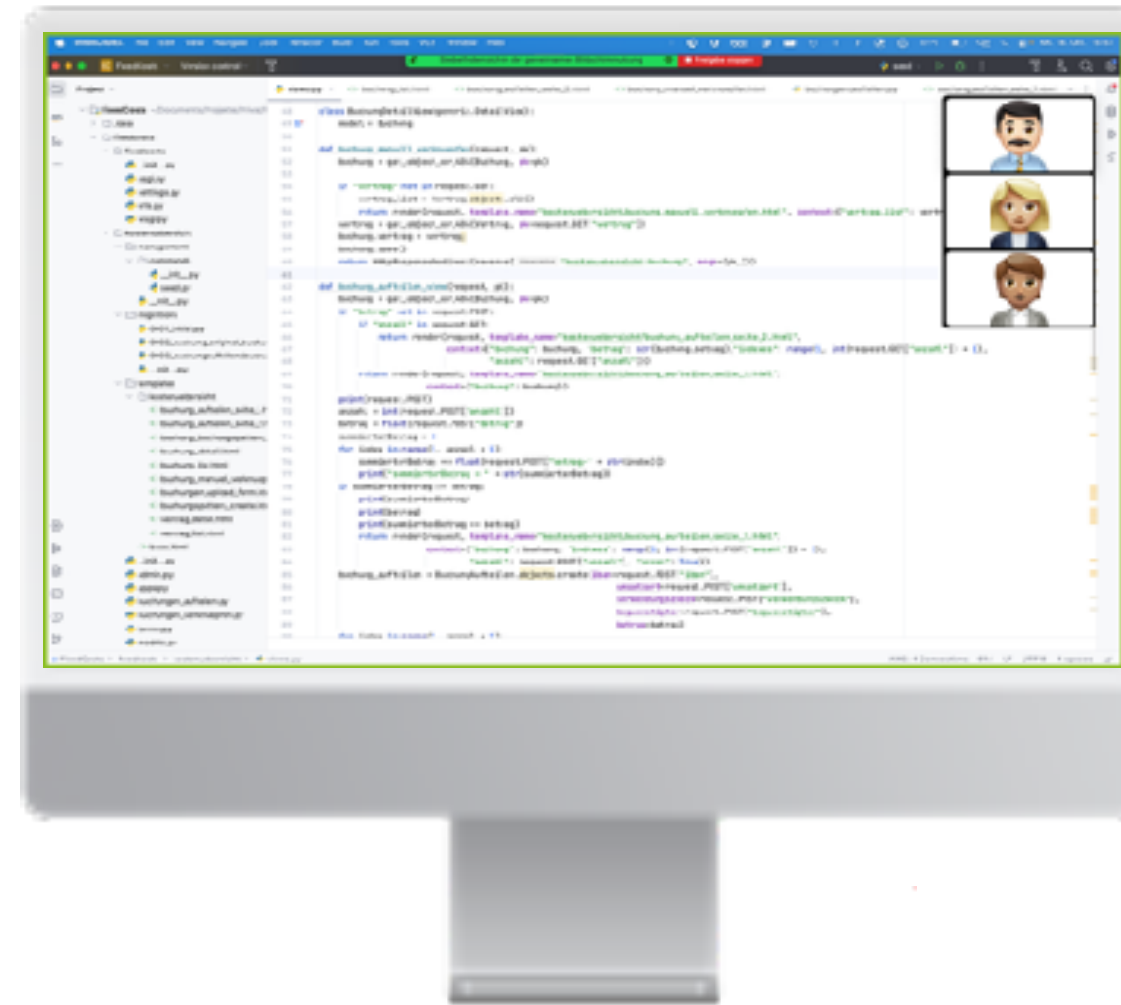
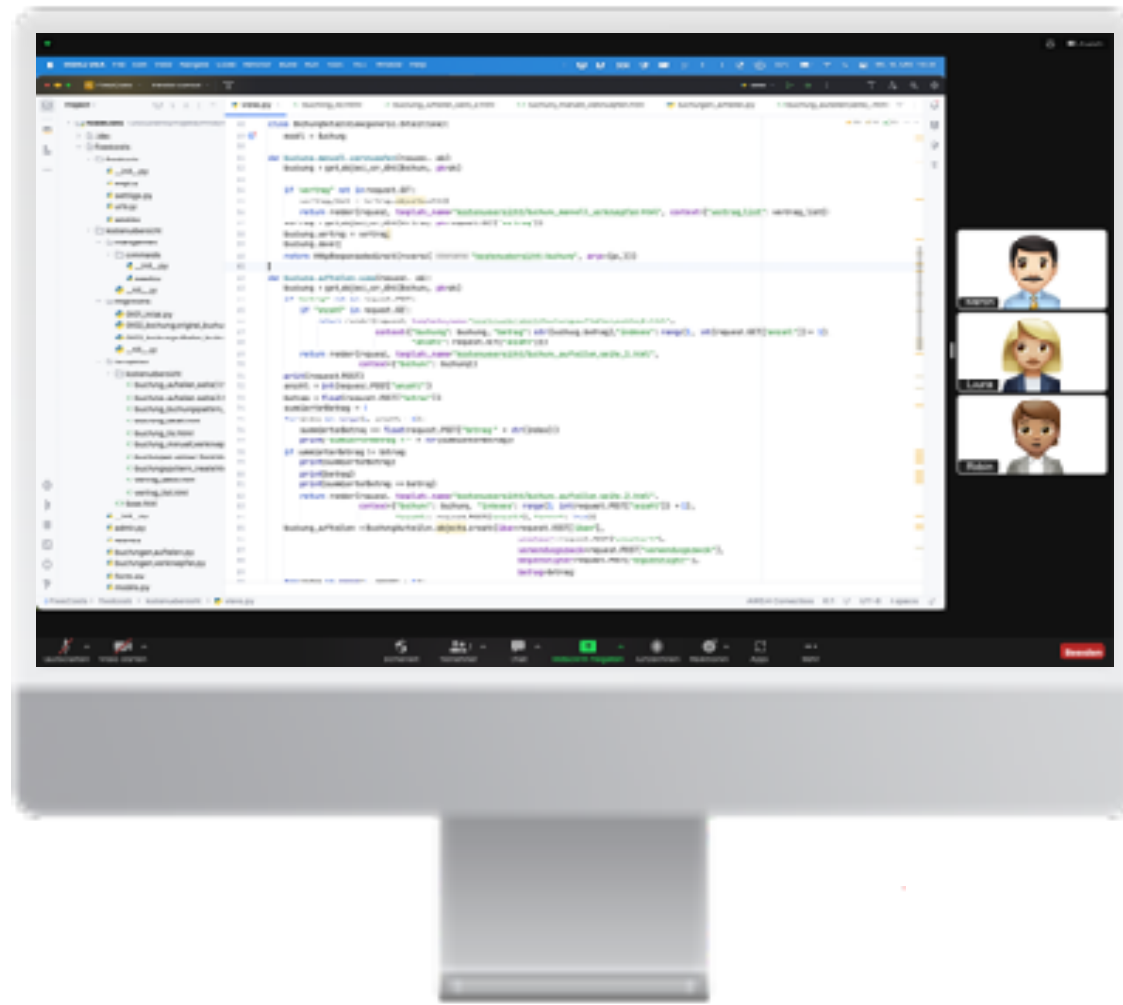


testrepo — joshuatopfer@Laptop-von-Joshua — ..NNOQ/testrepo — -zsh — 76x12

```
→ testrepo git:(main) mob start
  git fetch origin --prune
  git merge FETCH_HEAD --ff-only
> starting new session from origin/main
  git checkout -B mob/main origin/main
  git commit --allow-empty -m mob start [ci-skip] [ci skip] [skip ci]
  git push --no-verify --set-upstream origin mob/main:mob/main
> you are on wip branch 'mob/main' (base branch 'main')
5b5ca6f 2 seconds ago <Joshua Töpfer>
> PUT https://timer.mob.sh/test-room {"timer":1,"user":"Joshua Töpfer"}
> It's now 17:42. 1 min timer ends at approx. 17:43. Happy collaborating! :)
→ testrepo git:(mob/main) █
```

Typist

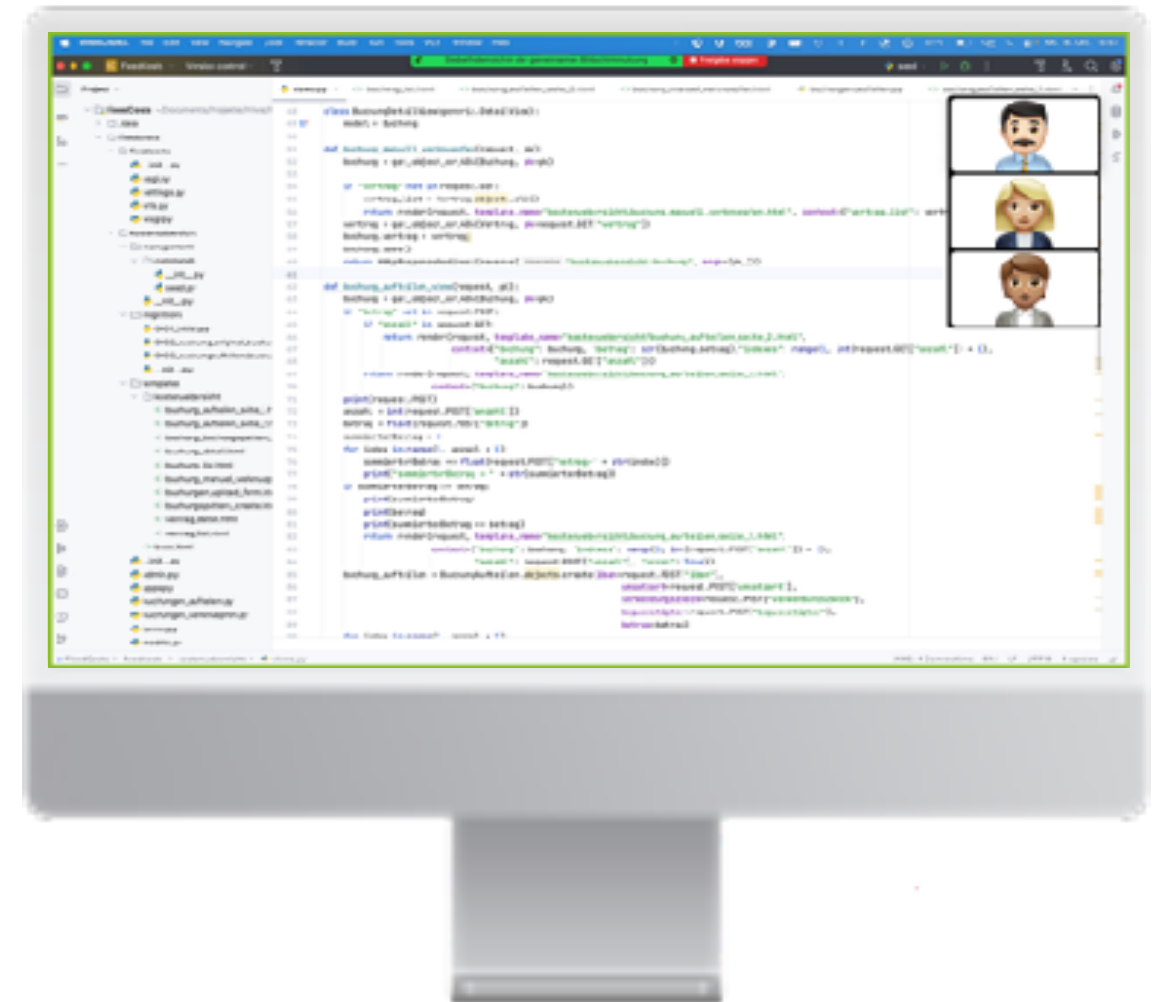
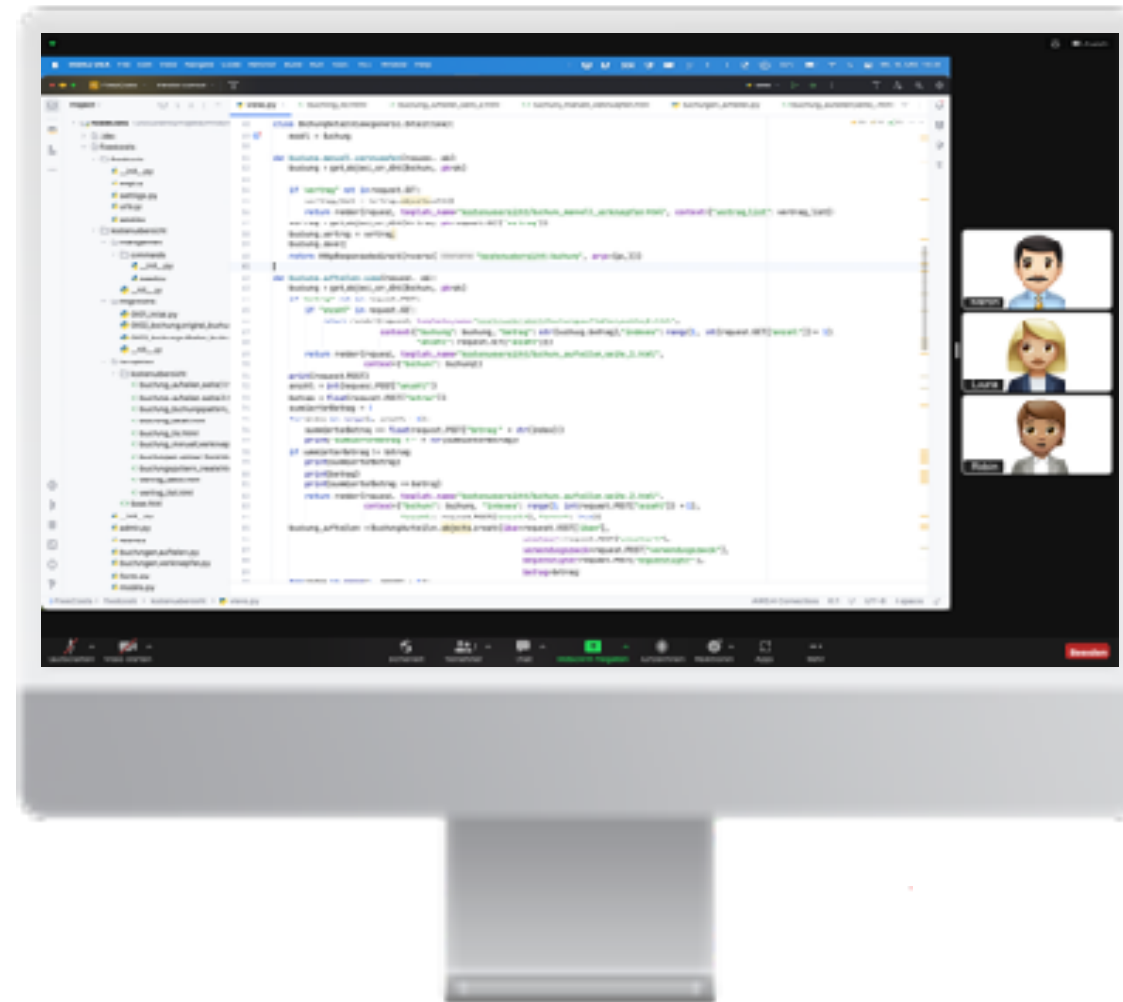
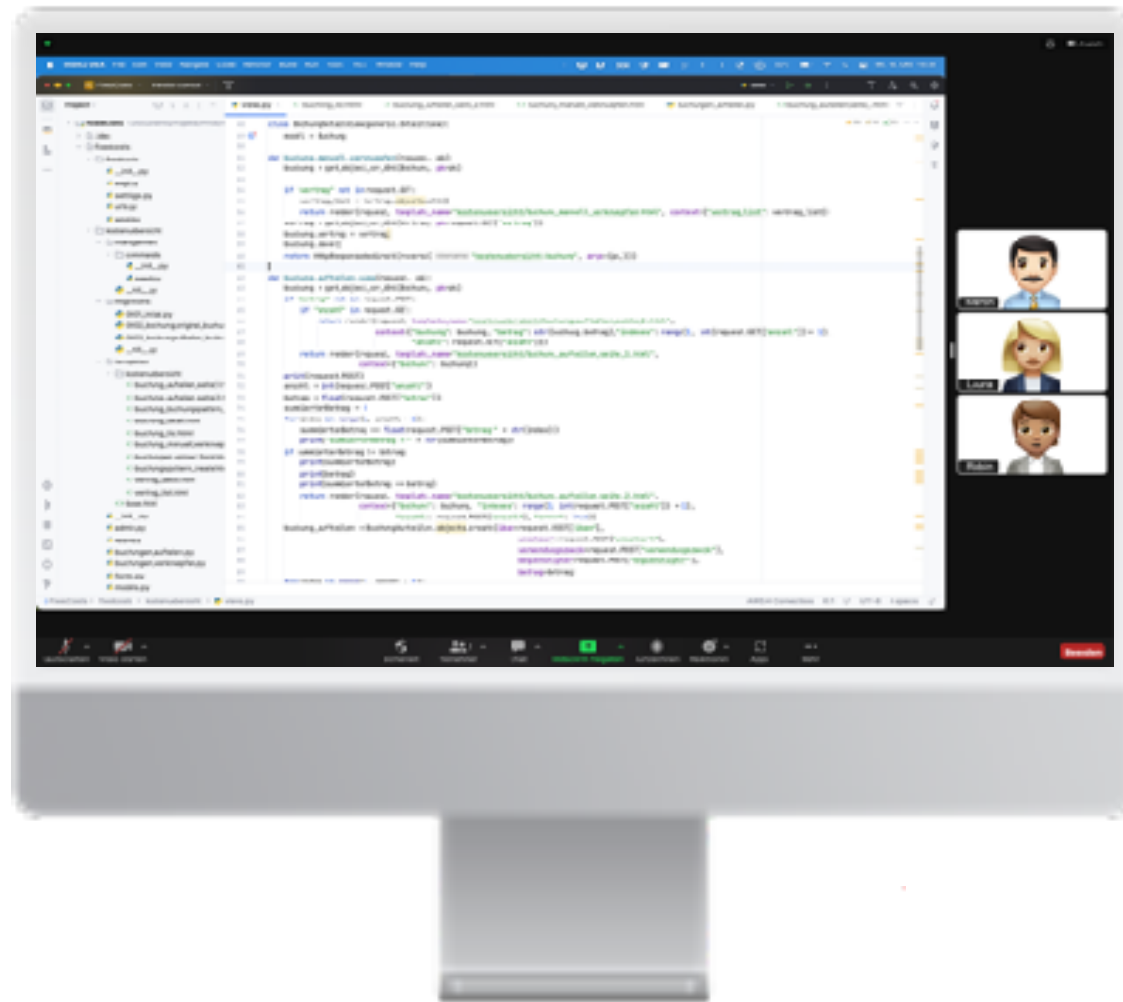


Typist

testrepo — joshuatopfer@Laptop-von-Joshua — ..NNOQ/testrepo — -zsh — 51x11

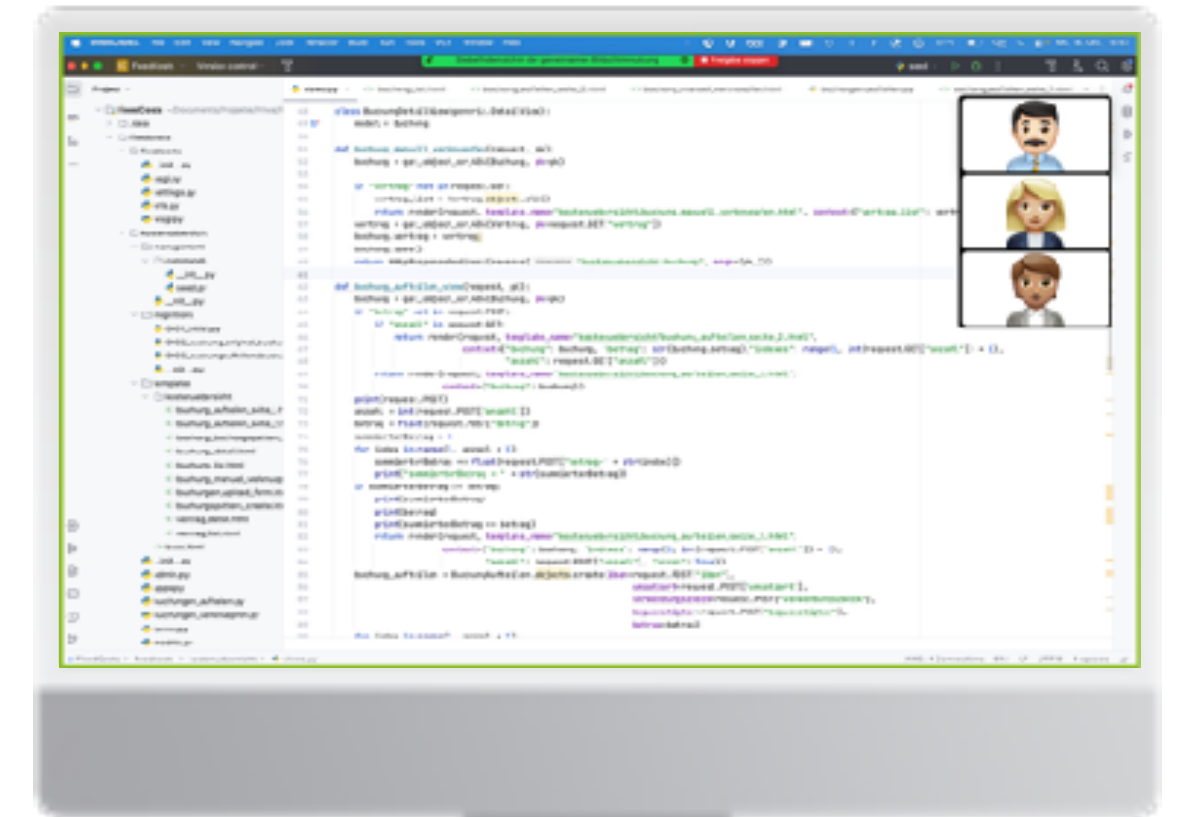
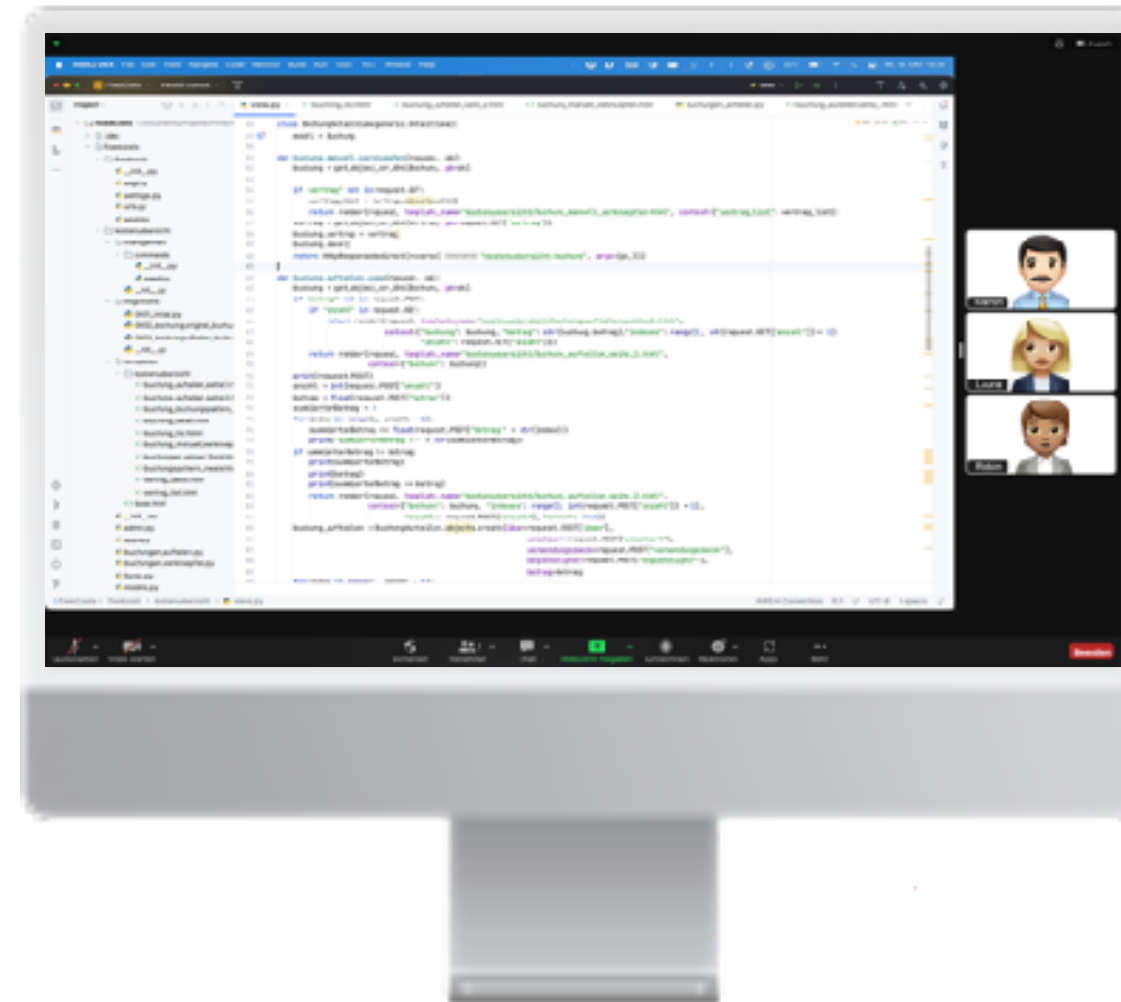
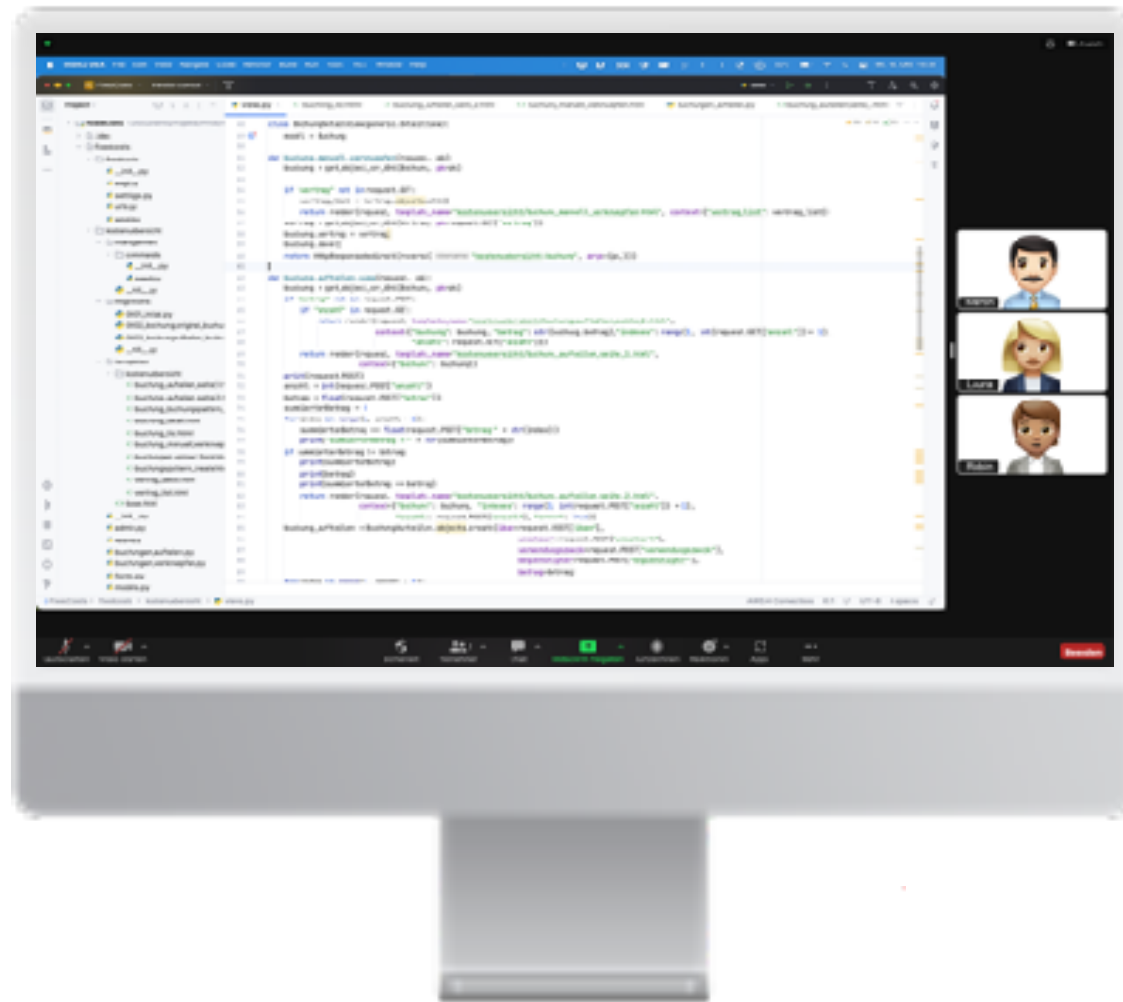
```
→ testrepo git:(mob/main) ✕ mob next
git add --all
git commit --message mob next [ci-skip] [ci skip]
[skip ci]

lastFile:text.txt --no-verify
text.txt | 0
1 file changed, 0 insertions(+), 0 deletions(-)
1465761cbc5963998e18a2ac61412ddc6f309eff
git push --no-verify origin mob/main
→ testrepo git:(mob/main) █
```

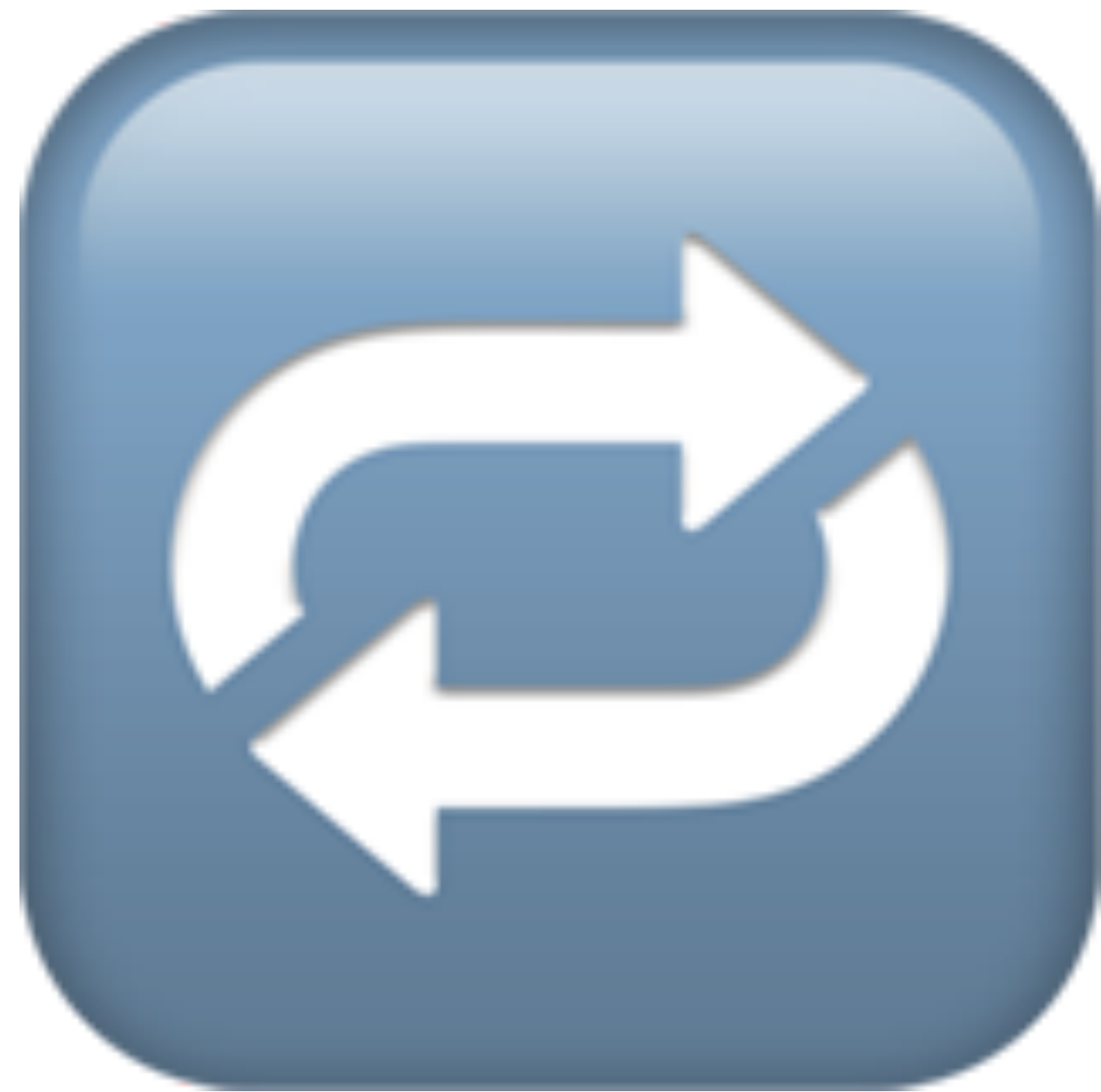



Typist


```
testrepo — joshuatopfer@Laptop-von-Joshua — ..NNOQ/testrepo — -zsh — 76x11
→ testrepo git:(mob/main) mob start
  git fetch origin --prune
> joining existing session from origin/mob/main
  git checkout -B mob/main origin/mob/main
  git branch --set-upstream-to=origin/mob/main mob/main
> you are on wip branch 'mob/main' (base branch 'main')
5b5ca6f 8 minutes ago <Joshua Töpfer>
31d2d5e 21 seconds ago <Joshua Töpfer>
> PUT https://timer.mob.sh/test-room {"timer":1,"user":"Joshua Töpfer"}
> It's now 17:50. 1 min timer ends at approx. 17:51. Happy collaborating! :)
→ testrepo git:(mob/main) █
```

Typist





→ testrepo git:(mob/main) mob done

```
git fetch origin --prune
```

```
git push --no-verify origin mob/main
```

```
git checkout main
```

```
git merge origin/main --ff-only
```

```
git merge --squash --ff mob/main
```

```
git branch -D mob/main
```

```
git push --no-verify origin --delete mob/main
```

```
  tesfile1.txt | 1 +
```

```
  testfile2.txt | 0
```

```
  2 files changed, 1 insertion(+)
```

👉 To finish, use

```
git commit
```

→ testrepo git:(main) ✕

Why?

Time-to-market
instead of resource efficiency

Constant momentum

- Focus on the most important task
- Reduce context switching & waiting times
- No code reviews



Meetings

- Attending as whole team
- Eliminate unnecessary meetings
- If not possible just one team member attends
- Regular meetings like daily scrum are not necessary anymore



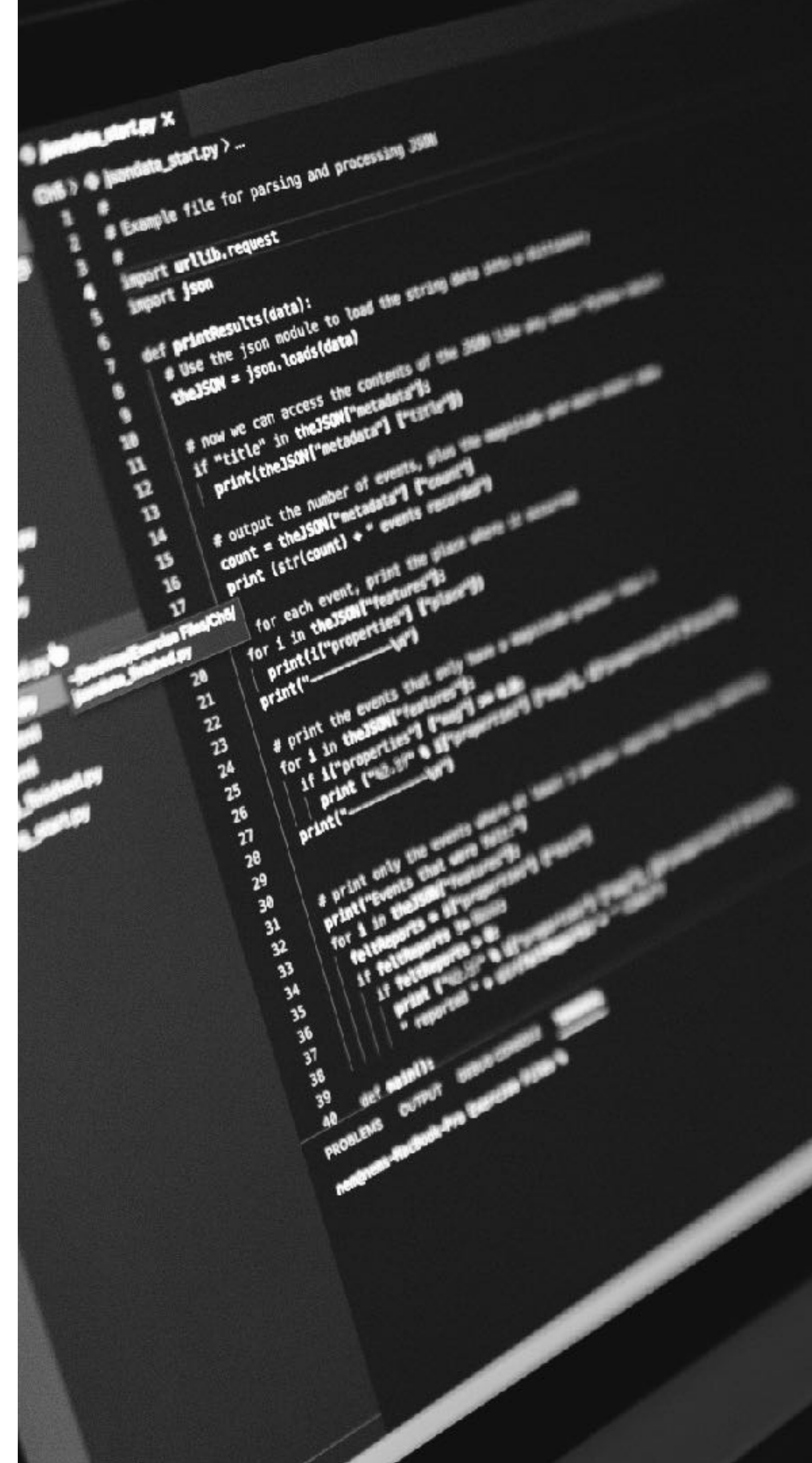
Architectural decisions

- Make architectural decisions explicit
- Team takes on the role of architect if required
- Create and discuss architecture decision records
- Consent instead of consensus



Code quality

- Many eyes
- Less bugs
- No asynchronous code reviews
- But refactor together



Learning from others

- Continuous learning
- Reduce bus factor
- Onboarding with no effort



At home, but not alone

- Lunch with the family
- Contact to colleagues
- No need to drive to the office

Photo by Vlada Karpovich: <https://www.pexels.com/de-de/foto/dammerung-fashion-frau-entspannung-4050387/>



The *silver* bullet?

Different timezones

- Small time offset:
 - Hard to find common time slot
 - Core hours
 - Need for coordination
- Bigger time offset:
 - Just short mobbing session
 - 24/5 mob around the word



Conflicts within the team

- Conflicts quickly come to the surface
- Introduction must be accompanied by a coach
- Many small retrospectives at the beginning



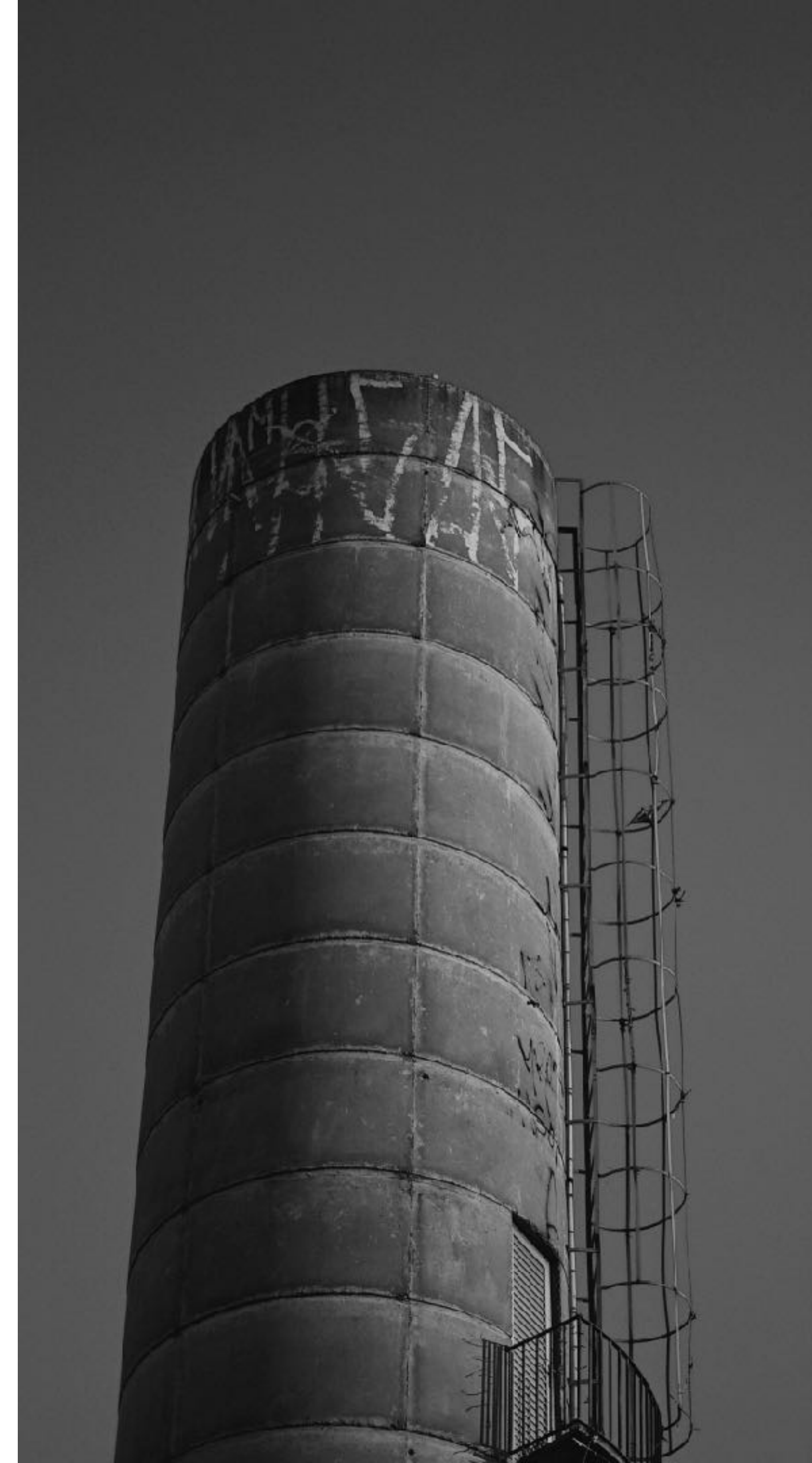
Dependencies

- Waiting times
- Context switching
- Reduce dependencies
- Teams should have end to end ownership



Break down silos

- Share general knowledge within the team
- Very in-depth knowledge is difficult to share
- Bus factor is reduced, but not completely mitigated



Not suitable for everyone

- Social Fatigue
- Social Anxiety
- Over Stimulation
- Etc.

Photo by Karolina Grabowska: <https://www.pexels.com/de-de/foto/frau-emotionen-tisch-ausbrennen-7272596/>



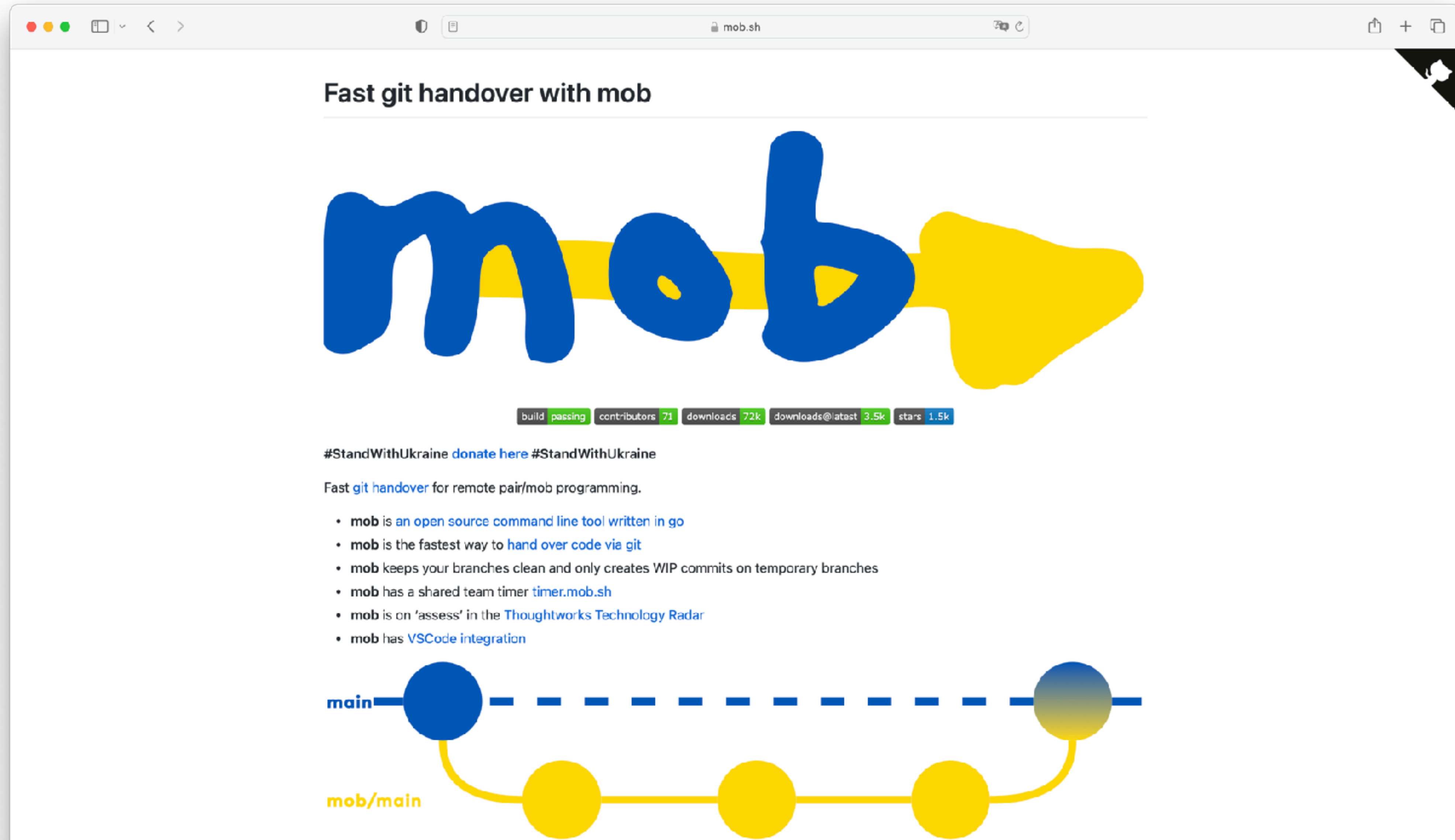
How to *start*?

Do an experiment

- Just try out a sprint full time
- Many retrospectives
- 1-day workshop for your team at Socreatory
- Accompany with a coach (I am happy to support)



mob.sh



The screenshot shows the mob.sh website in a browser window. The page has a clean, modern design with a white background. At the top, the title "Fast git handover with mob" is displayed. Below the title is a large, stylized logo for "mob" in blue, with a yellow arrow pointing to the right. Underneath the logo is a row of status indicators: "build passing", "contributors 71", "downloads 72k", "downloads@latest 3.5k", and "stars 1.5k". Below these indicators is a line of text: "#StandWithUkraine [donate here](#) #StandWithUkraine". The main content area features a paragraph: "Fast [git handover](#) for remote pair/mob programming." followed by a bulleted list of features. At the bottom, there is a diagram illustrating the workflow. It shows a horizontal line representing the "main" branch, with a blue circle at the left end and a blue-to-yellow gradient circle at the right end. Below this line, a yellow line represents the "mob/main" branch, with four yellow circles connected by a solid line. A curved yellow line connects the left blue circle to the first yellow circle, and another curved yellow line connects the last yellow circle to the right gradient circle.

Fast git handover with mob

mob

build passing contributors 71 downloads 72k downloads@latest 3.5k stars 1.5k

#StandWithUkraine [donate here](#) #StandWithUkraine

Fast [git handover](#) for remote pair/mob programming.

- **mob** is an [open source command line tool written in go](#)
- **mob** is the fastest way to [hand over code via git](#)
- **mob** keeps your branches clean and only creates WIP commits on temporary branches
- **mob** has a shared team timer [timer.mob.sh](#)
- **mob** is on 'assess' in the [Thoughtworks Technology Radar](#)
- **mob** has [VSCode integration](#)

main

mob/main

Our Primer



www.innoq.com/en/primer

Download for free

Jochen Christ
Simon Harrer
Martin Huber

Remote Mob Programming

At home, but not alone

INNOQ

Foreword by Mark Pearl

remotemobprogramming.org

Remote Mob Programming

New: [How to act as a typist](#) and a [rotation timer](#)

Camera Always On

Screen Sharing

Git Handover

10 Minutes Intervals

Small Team

Dine with your Family

Typist and the Rest of the Mob

Remote Mob Programming combines two ways of working: Mob Programming and working as a distributed team. Woody Zuill describes [Mob Programming](#) as creating the “same thing, at the same time, in the same space, and on the same computer”. Working in the same space clashes with working as a distributed team at first glance, but actually, it goes together really well. With Remote Mob Programming, we collaborate closely in the same virtual space. But Remote Mob Programming is more than that.

Conclusion

- More focus
- Learn continuously
- High performing team
- Colleagues became friends
- More time for the family



Thank you! Any questions?



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