Future of the Developer Workplace

Michael Kaufmann, Vice President

6/16/21

CGI

DevOps Forum an ebook

https://aka.ms/DevOpsForum2021

DevOps Forum II - Security

7th July 9:00 – 12:30 CET (German, free)

Announcement:
Microsoft eBook: The future of the (remote) developer workplace

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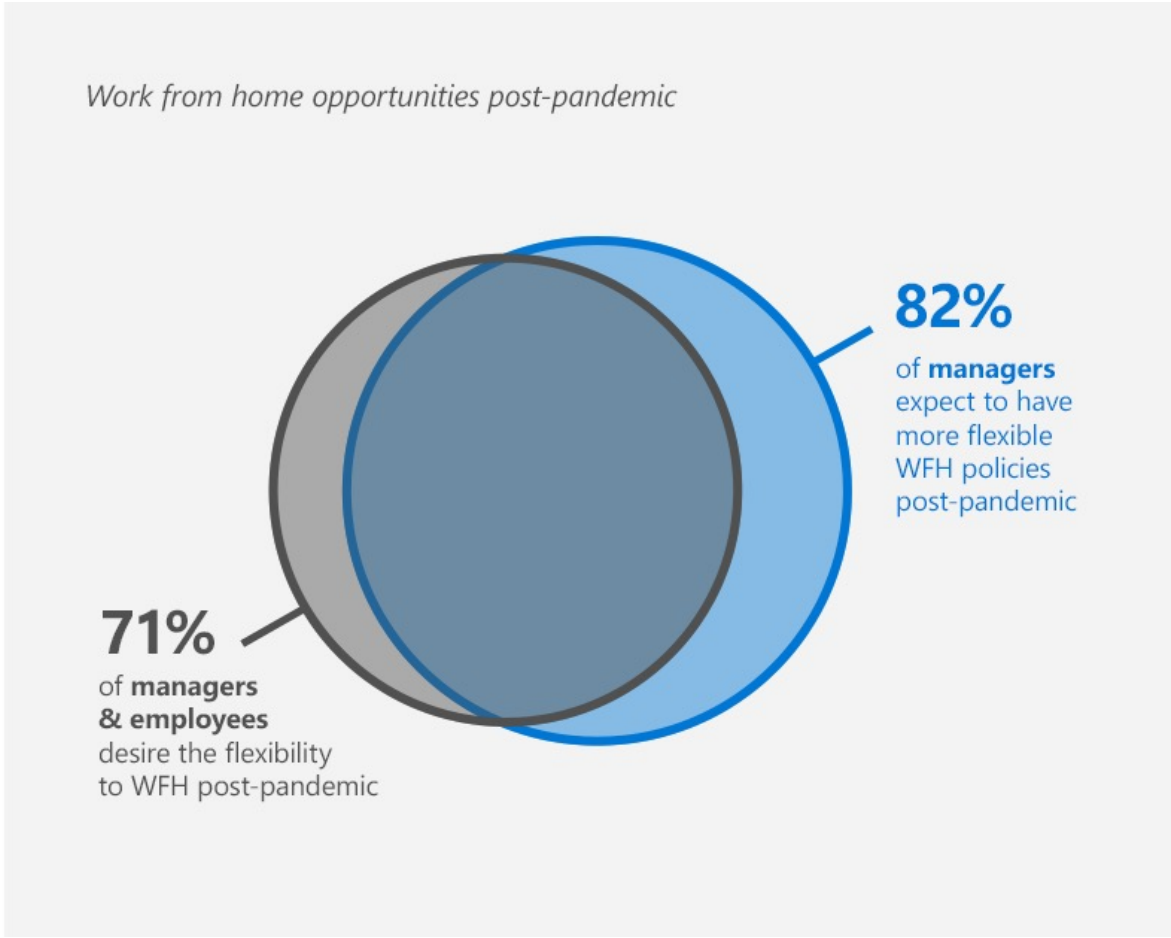
The new normal?

The pandemic will have a lasting impact on how we work…

Microsoft 365

Managers and employees agree: working from home must be an option long-term

Source: Harris Poll survey commissioned by Microsoft on May 26-30, 2020, among 2,285 total adults ages 18+ who are currently working remotely across the US, UK, Germany, Italy, Mexico and China.



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The new normal?

- Twitter declared its workers could work remotely “forever.”
- Dropbox announced it will essentially eliminate office space for focused work
- Microsoft, employees can now work from home up to 50 percent of the time

Hybrid will be the new normal!

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Development Teams

But what about development?

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What are the options?

Onsite

Advantage:

- ✓ Communication and Knowledge sharing
- ✓ Ad-hoc meetings
- ✓ Network access
- ✓ Dev. Machines
- ✓ Sep. Work – Life

Challenges:

- ○ Work-life-balance
- ○ Diversity
- ○ Focus time
- ○ Costs
- ○ Environment

Hybrid

Advantage:

- ✓ Remote fatigue
- ✓ Best of both worlds?

Challenges:

- ○ Inclusion of remote participants
- ○ Interactive workshops
- ○ Meeting rooms
- ○ Knowledge sharing (in breaks, Silos)

Remote

Advantage:

- ✓ Focus time
- ✓ War of talent?
- ✓ Close to customer?
- ✓ Follow the sun?
- ✓ Asynchronous Work enforces documentation

Challenges:

- ○ Remote fatigue
- ○ Ceremonies
- ○ Workshops
- ○ Team building
- ○ Security

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Hybrid is only an option in a remote culture…

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Extend to hybrid

Remote culture

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Remote culture

Meetings

- Keep meetings short and focused
- Record all meetings
- Make meetings optional
- Turn on camera
- Hardware
  - Good cam
  - Light
  - Microphone
- Document work and outcomes
- Code of conduct

Communication

- One to many (chat room) over 1:1 (email)
- Make everything asynchronous
- Document everything (work related)
- Use a common language (English?)
- Leave room for social communication
  - Pair-programming
  - Virtual coffee
- Make it fun (giffs, emoticons)

Collaboration

- Meeting/Ceremony window (Time zones? Breaks?)
- Pull-requests
  - Auto-complete
  - Code owners
- Issues
- Wiki (yaml/pr)
- Everything as code
  - Design documents
  - Config / infrastructure
- Teams/Slack
- Automation
- ChatOps

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Ceremonies

- Keep them in a common time window
- Keep the timebox (parking lot for additional conversations)
- Record all meetings (for people that cannot attend)
- Do more documentation (estimation, planning -> split more BPIs in concept phase and doing)
- Use joint (remote) whiteboard (i.e. Microsoft Whiteboard) or a digital workspace (i.e. mural.co) for interactive visual collaboration

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Open-Source

- ✓ 80% - 90% of new applications is already open-source
- ✓ It’s better to contribute than to rewrite
- ✓ Open-source communities are
  - ✓ 100% remote
  - ✓ Distributed (normally across the globe)
- ✓ Contributing and engaging during work time can save time and money

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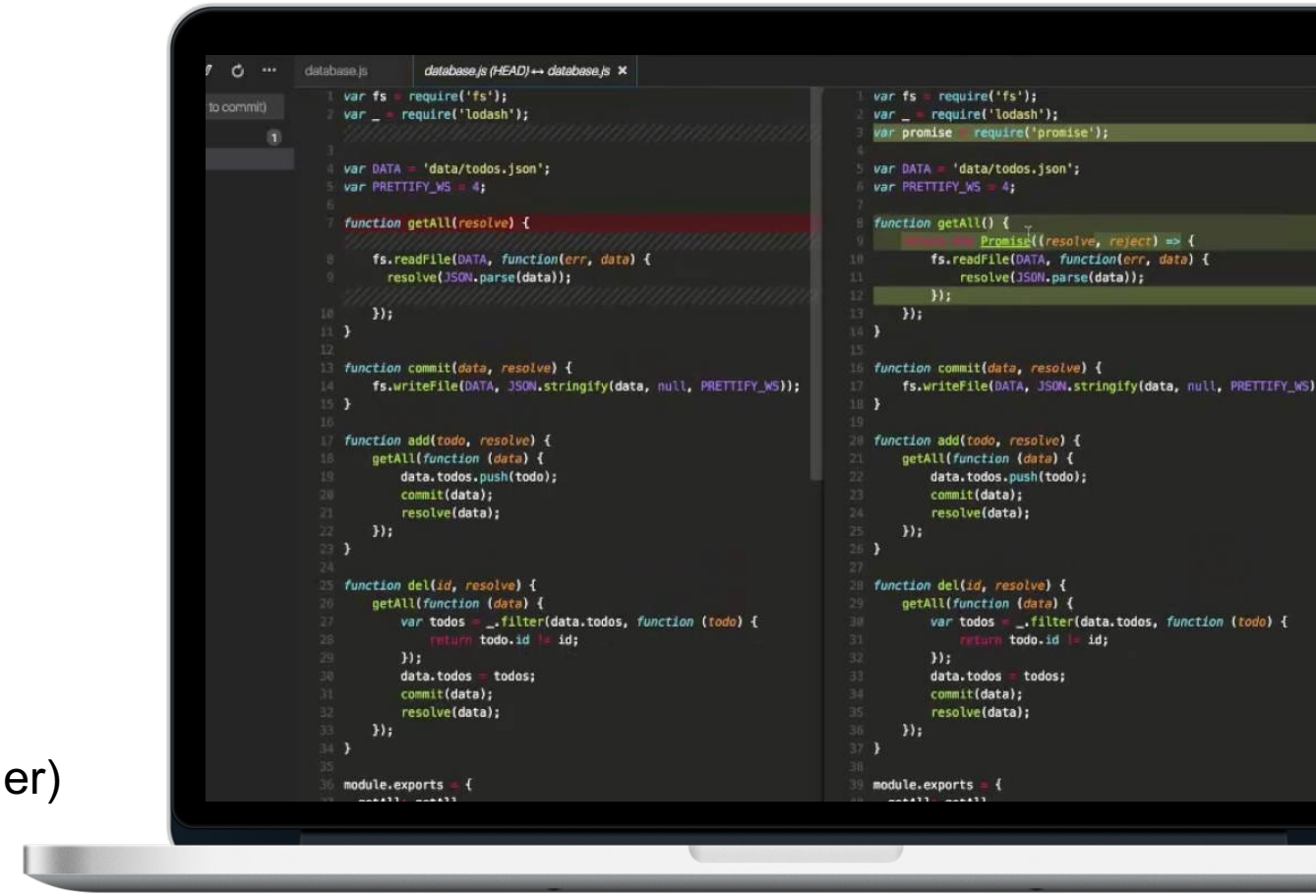
Development Environments

Challenges:

- ✓ Secure
- ✓ Unified
- ✓ Maximum developer productivity
- ✓ Fast deployment (minutes, not days)
- ✓ Access to back-end systems
- ✓ Tools & Licenses
- ✓ Policies / Governance
- ✓ Cost effectiveness
- ✓ Remote work
- ✓ Identity Management (3rd Party, Service Provider)
- ✓ Bring-Your-Own-Device (BYOD)



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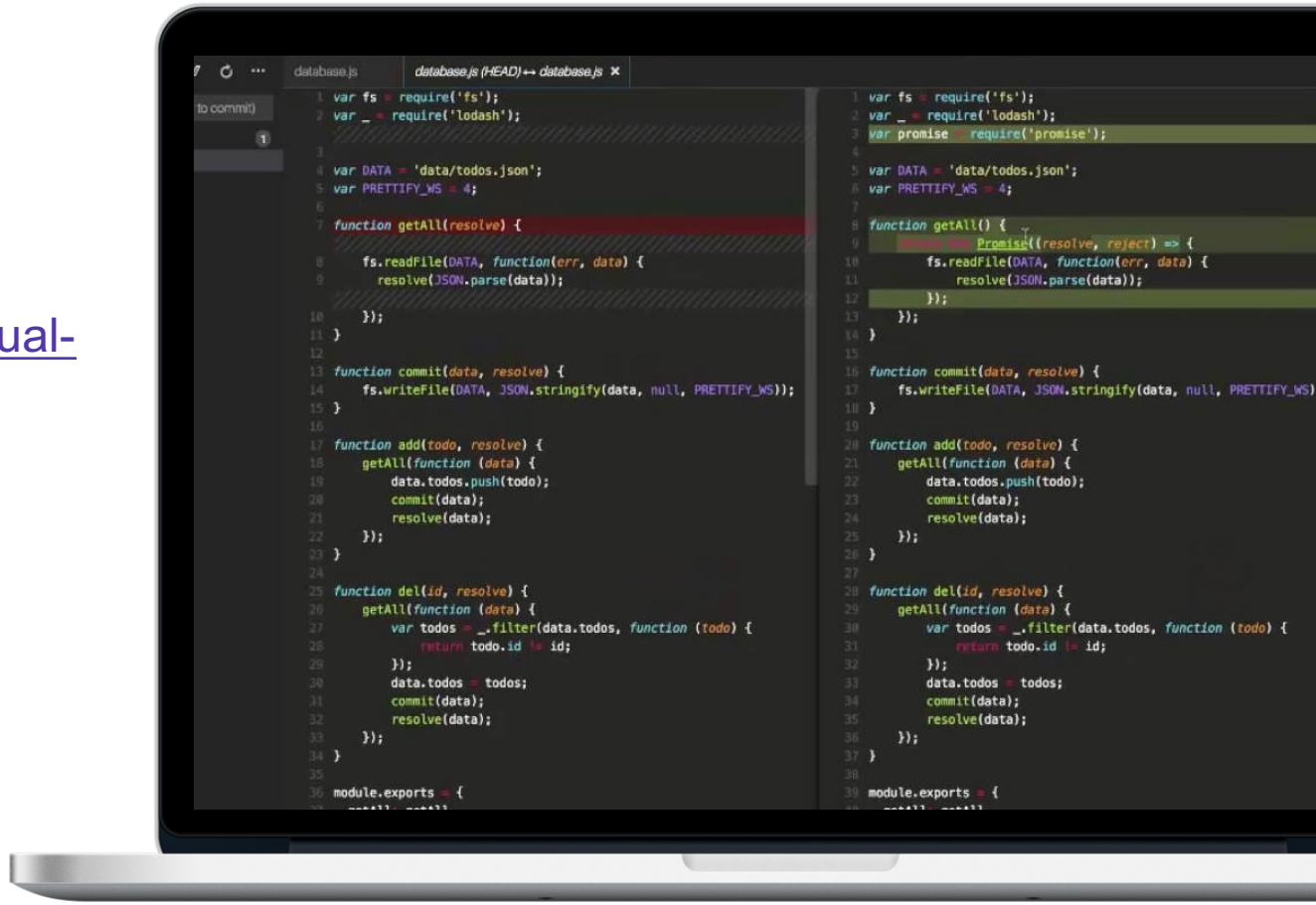
Development Environments

Options:

- ✓ GitHub Codespaces
- ✓ Container-based (docker + vscode) https://writeabout.net/2020/03/30/containerized-development-environments-with-docker-and-visual-studio-code/
- ✓ Azure Virtual Desktop (VDI)

Don’ts:

- ✓ local VMs
- ✓ Install all tools locally
- ✓ Developer is always local admin



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A day in the life of an enigneer

In 2025…

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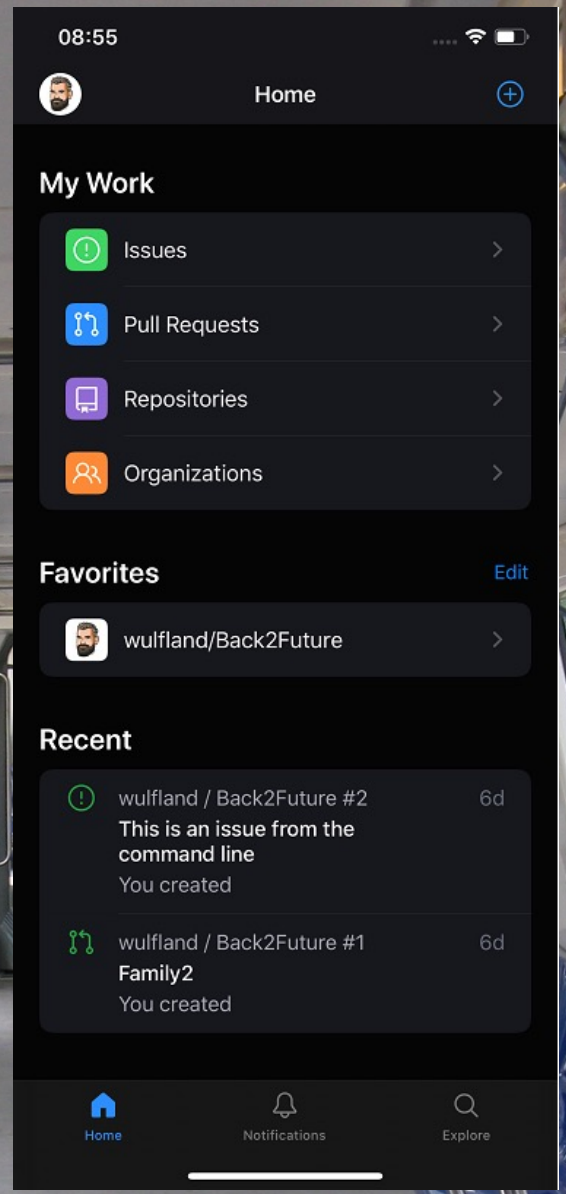
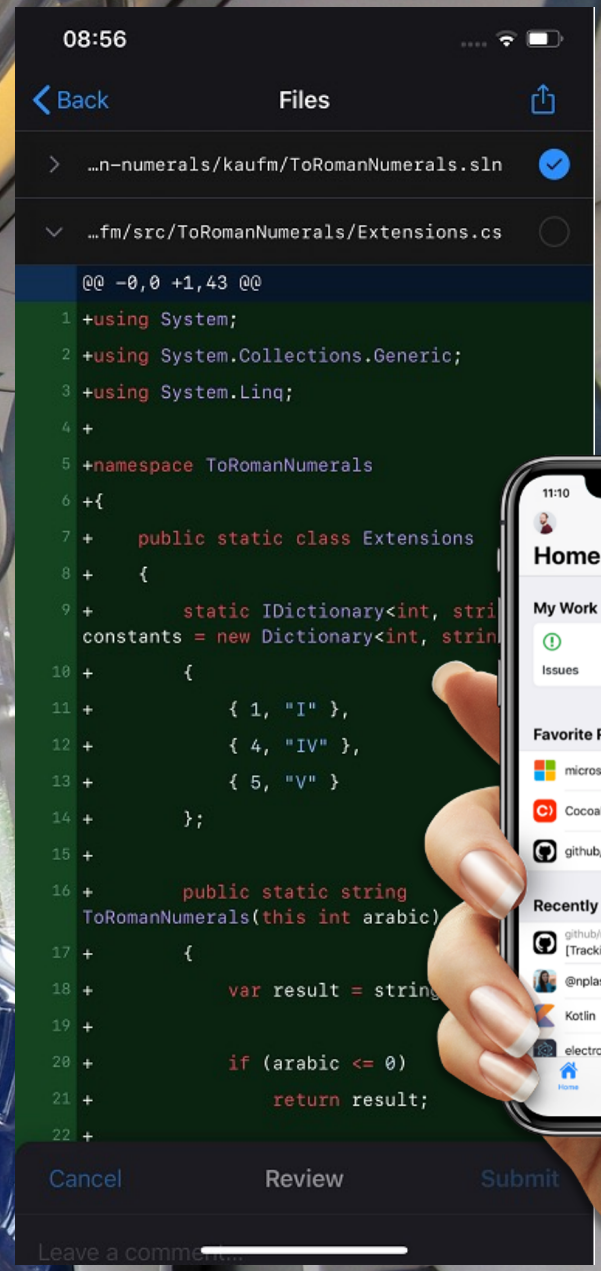
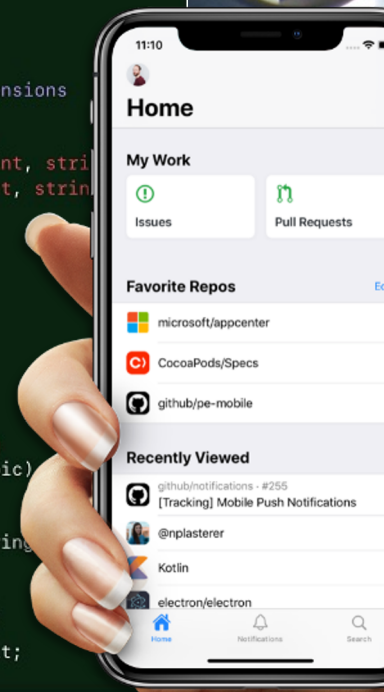
8:30 After breakfast I bring
my kids to school…

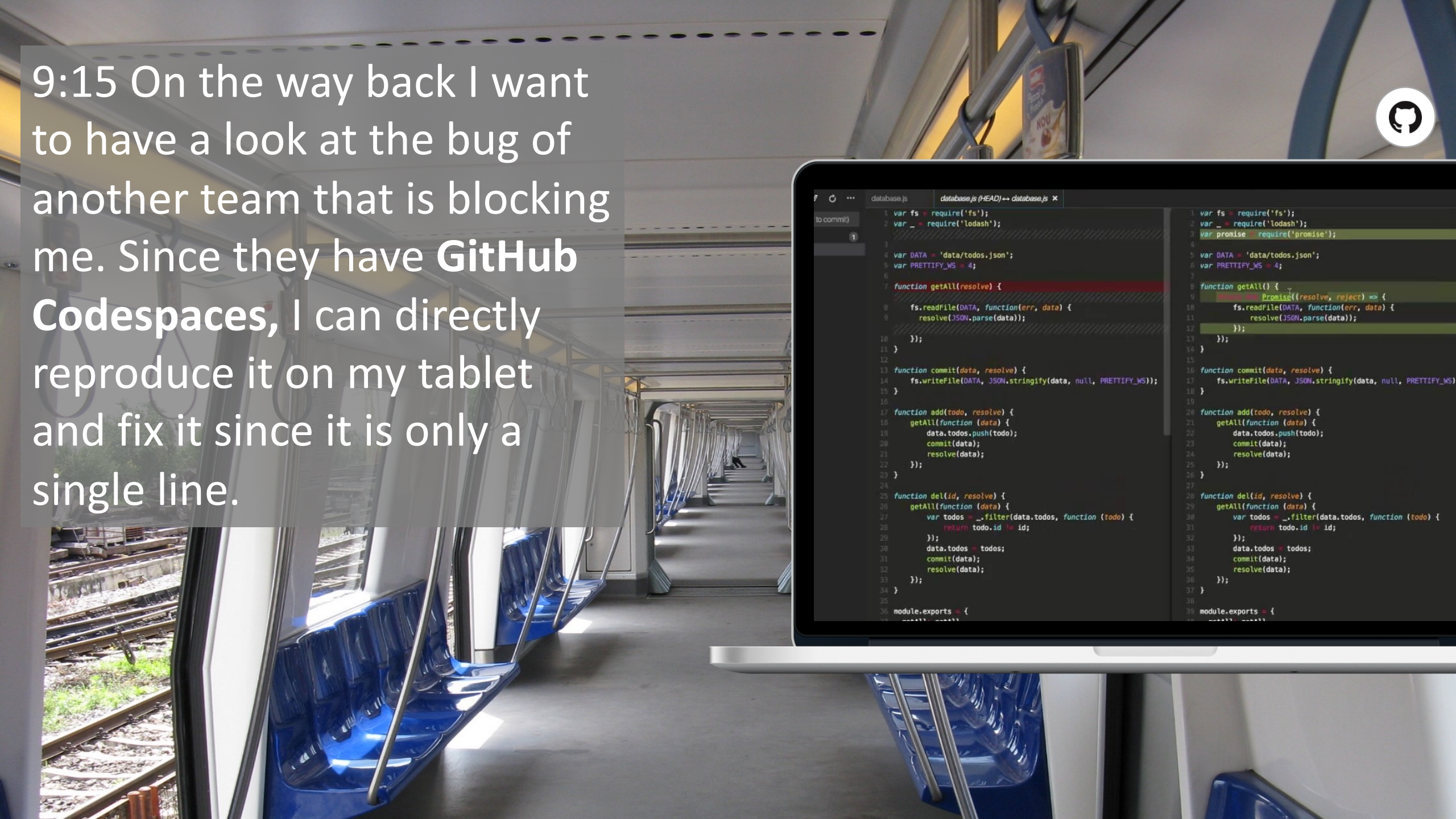
8:45 In the bus I receive a PR in **GitHub Mobile** from the colleague in Soul that is blocked in another task. I review and approve the PR and close the issue.

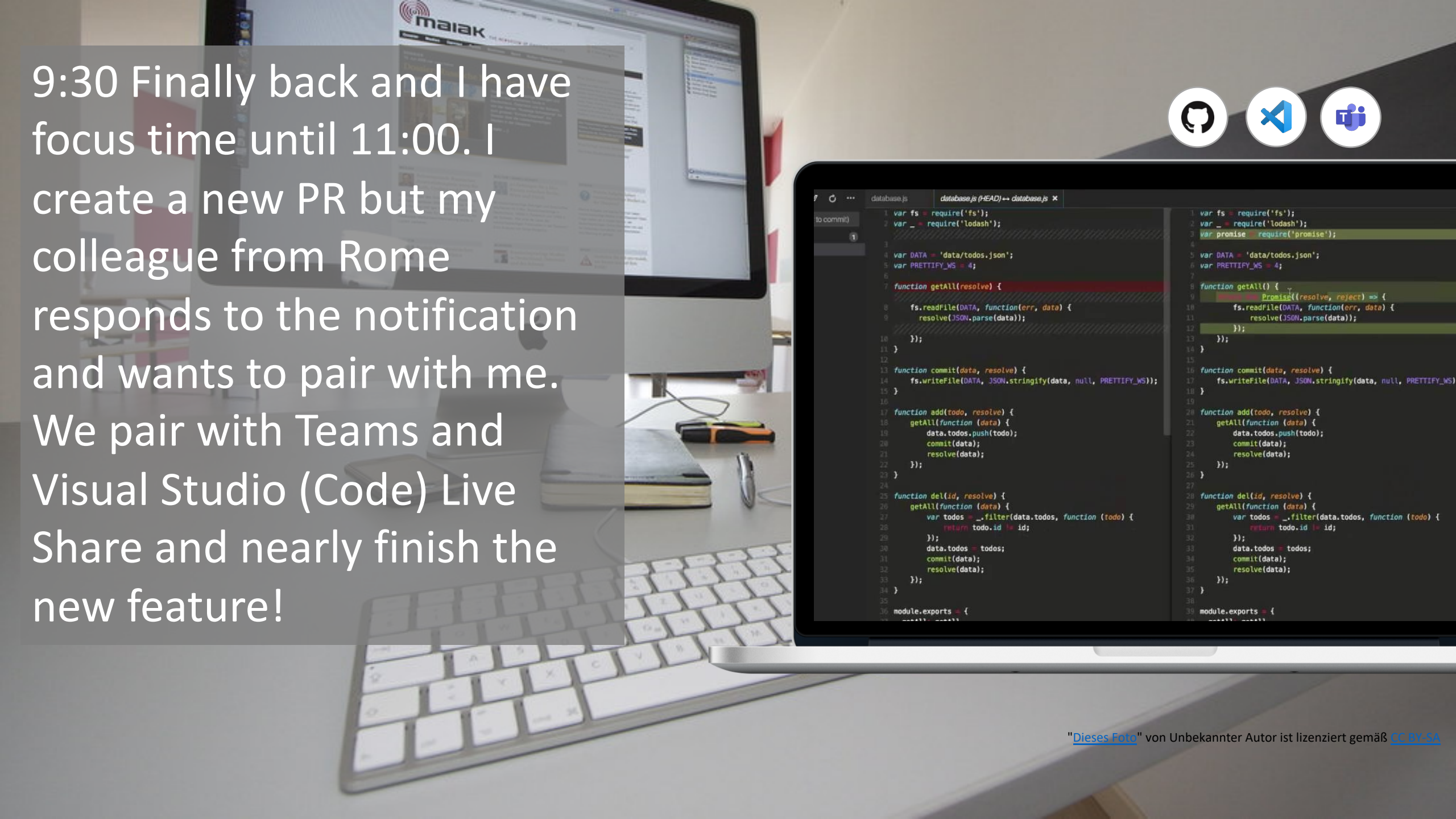






9:15 On the way back I want to have a look at the bug of another team that is blocking me. Since they have **GitHub Codespaces,** I can directly reproduce it on my tablet and fix it since it is only a single line.





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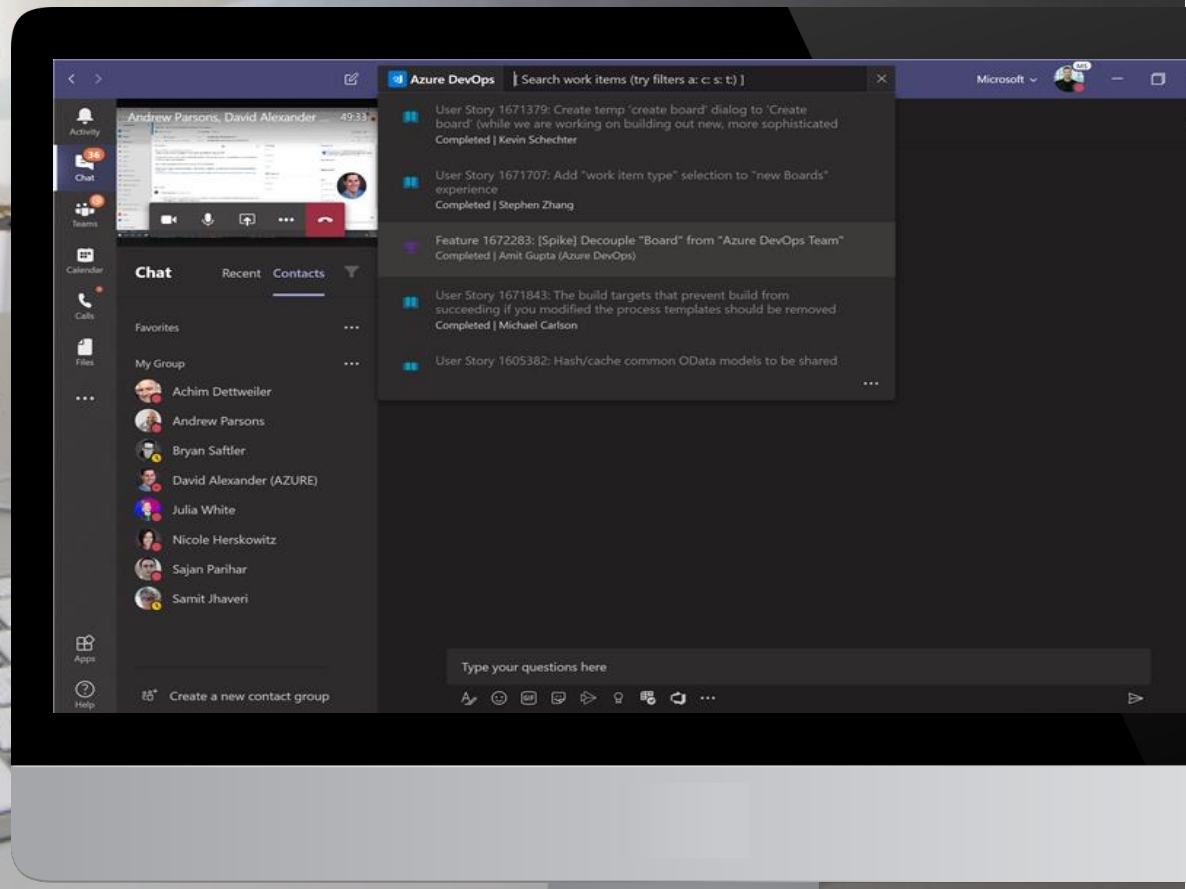
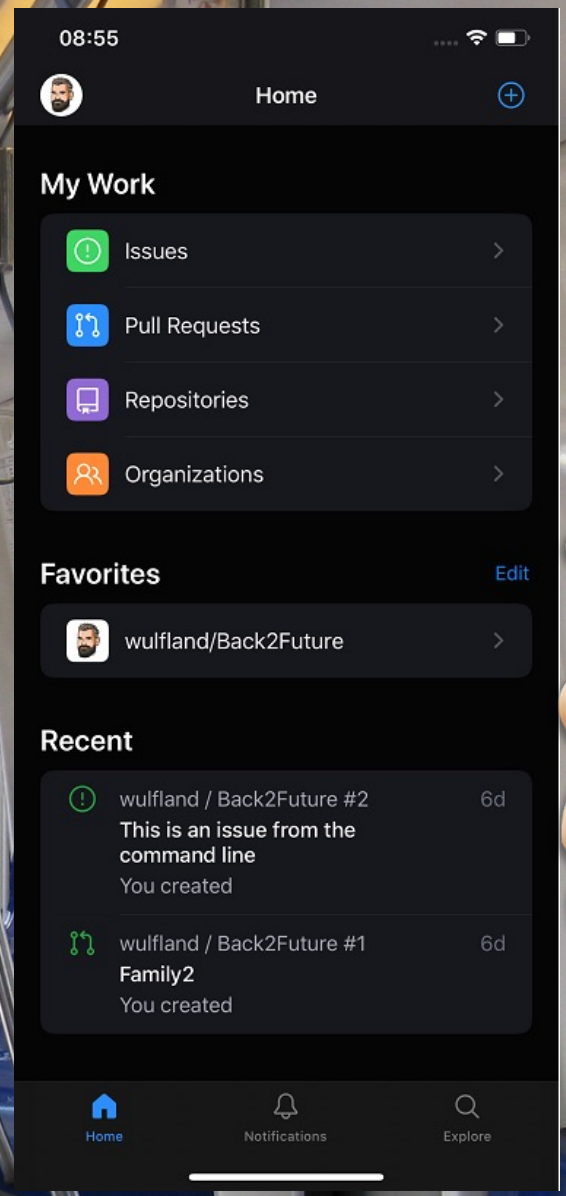
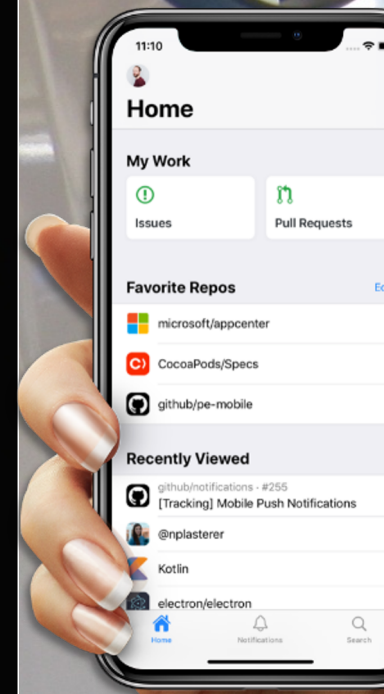
11:30 I meet with two peers in the office to have a design session. The colleague from Rome also joins and we use the whiteboard of the Surface Hub to collaborate. We record the session and publish the results in our wiki.

14:30 After lunch back at home is meeting time. Our colleagues from New York are awake and Asia will drop out soon. In the 15 minutes daily, we move some topics to the “parking lot” reserved after the daily.



15:30 On the way to the school I provide our new feature to a group of internal preview testers. I can do this directly from the teams chat using ChatOps.





16:30 Before I enjoy the evening with my kids, I finish my work on the PR from the morning. I set it to auto-complete. If my colleagues in Asia will approve in the morning, it will automatically be released before I start working.

Deep Dive

Workshop in Remote (Distibuted) Development

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Verteilte Entwicklungs-Teams

Wie Remote-Work ihre Softwareentwicklung effizienter gestalten kann

In Zeiten von Corona sind viele Unternehmen dazu gezwungen ihre Entwicklungsteams auf Remote-Arbeit umzustellen. Aber verteilte Teams können viele Vorteile haben, wenn man die ersten Hürden gemeistert hat. Viele Unternehmen stellen sogar fest, dass die Effizienz im Team nach einer Eingewöhnungsphase steigt. In diesem Drei-Tage-Bootcamp bringen wir Ihr Entwicklungsteam auf Kurs und vermitteln alles, was zu einer guten Remote-Kultur nötig ist.

Was eine Remote-Kultur ausmacht:

- Asynchrones arbeiten
- Meeting-Kultur
  - Anzahl und Dauer der Meetings
  - Soziale Kontakte pflegen
  - Kamera
  - Aufzeichnungen
- Gestaltung der Arbeitszeiten
- Gestaltung von Prozessen

Vorteile von verteilten Teams:

- Follow-The-Sun-Prinzip
- Fokuszeiten
- Diversität
- Kostenersparnis (Blended Rate)
- Kundennähe

Staffing:

- Wie verteilt ist verteilt?
- T-Shaped-People: die richtigen Skills im Team
- Umgang mit Sprachbarieren
- Onboarding / Hiring

Produkte für Remote Teams:

GitHub

- Projects, Issues und Discussions
- Pull-Requests
- Actions
- Code-Spaces

Live-Share

- Visual Studio
- VS Code

Teams

- Meetings, Chats
- GitHub-Integration
- ChatOps

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Remote Development Teams

Michael Kaufmann

Thomas Tomow

Das Drei-Tage-Bootcamp

Bringen Sie Ihre Teams in nur drei Tage zum Fliegen:

2.900 EUR
per Trainer

- **Ein, zwei oder mehr erfahrene Trainer – je nach Teamgröße und Wunsch**
- **Komplett Remote – „eat your own dogfood“**
- **Deckt alle Aspekte von agilen Softwareentwicklungsteams ab:**
  - Hard- und Software-Anforderungen an verteilte Teams
  - Meetings und Meeting-Kultur
  - Pull-Requests und Automatisierung
  - Live Share für Zusammenarbeit in Echtzeit
  - Microsoft Teams für ChatOps
  - Durchführung von Remote-Workshops
  - Whiteboards, Flipcharts und andere Moderations- und Visualisierungstechniken
  - Zusammenarbeit über verschiedene Zeitzonen
- **Hands-on mit vielen Übungen**
- **Unabhängig von Programmiersprache und Plattform (Mac, Linux, Windows)**

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