

MICROSOFT TECH CONFERENCE AUSTRIA 2022

From Development to Deployment with GitHub and Microsoft Azure

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Microsoft MVP

Book Author (Professional C#, others)

Trainer, Consultant, Developer



A lap around GitHub

- Project Management
- Coding
- Automation & CI/CD

Managing Source Code

- Azure DevOps
- GitHub
- ...

Pricing

Free (\$0,- user/year)

- public & private repos
- 2000 CI/CD minutes/month
- 500 MB package stores
- New issues & projects

Team (\$48,- user/year)

- Codespaces
- Protected branches
- Multiple reviewers
- Draft pull requests
- Code owners
- 3000 CI/CD minutes/month

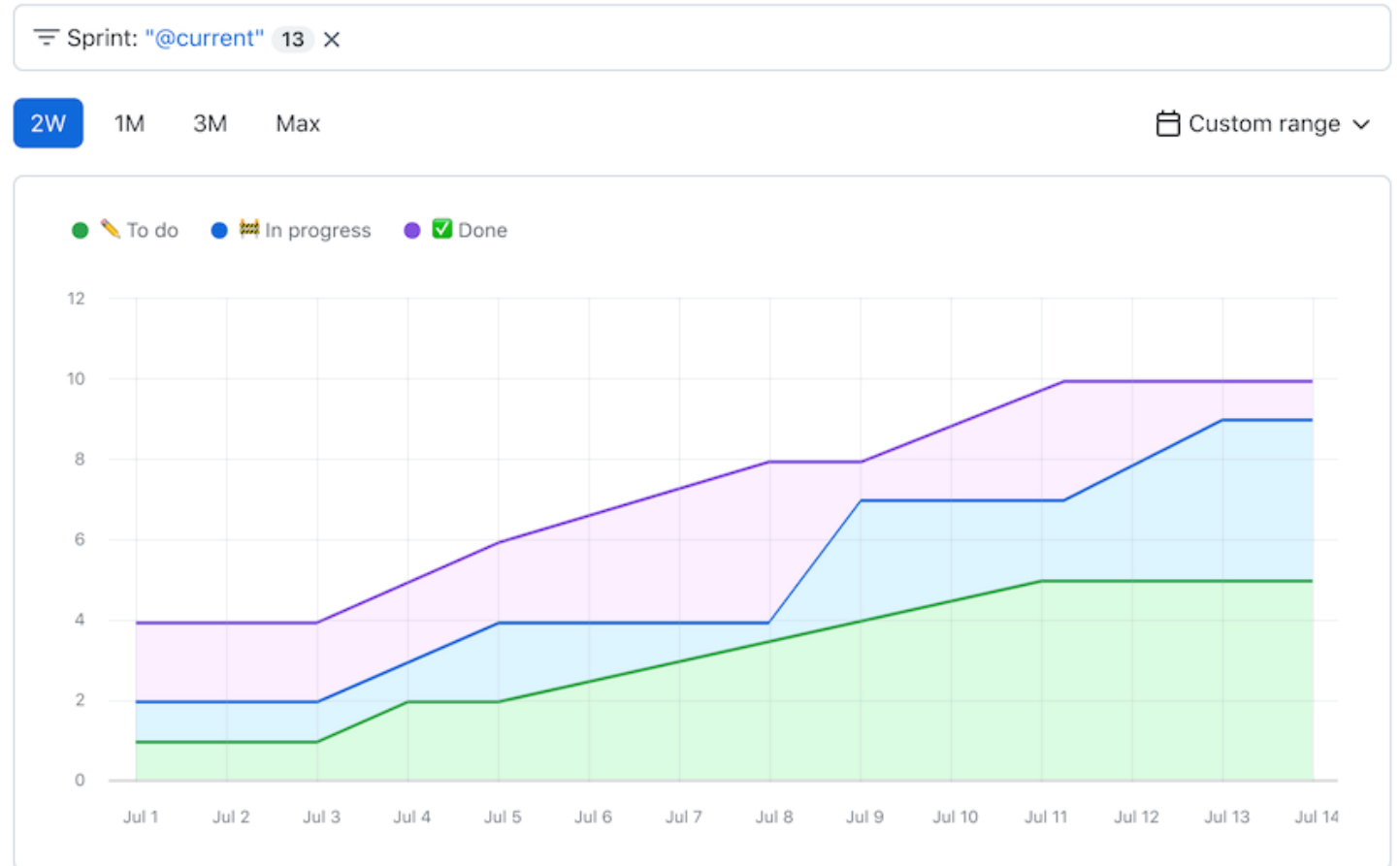
Enterprise (\$252,- user/year)

- Enterprise managed users
- Enterprise accounts, SAML...
- 50.000 CI/CD minutes/month
- GitHub Connect
- Advanced security (code scanning, secret scanning with private repos)

Projects and Issues

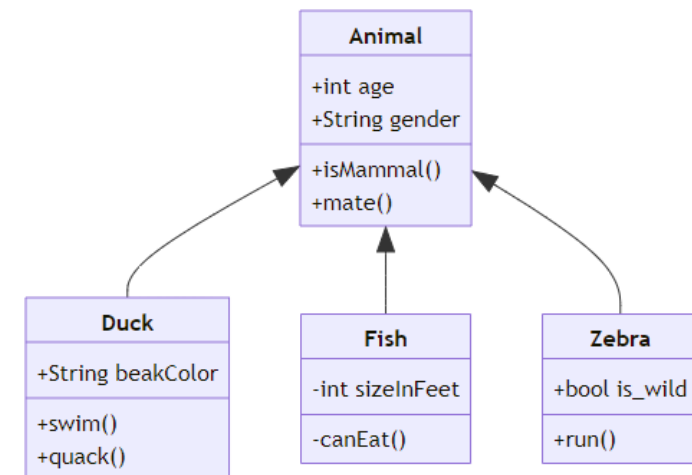
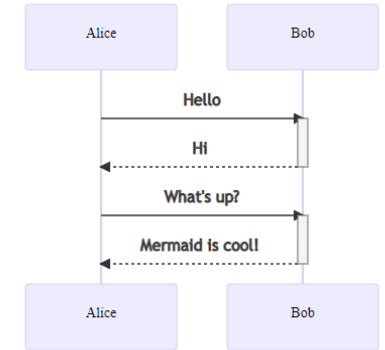
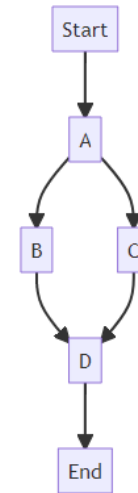
Projects (beta)

- Projects across multiple repos
- Custom fields
- Multiple views
- Iterations
- Insights (private beta)



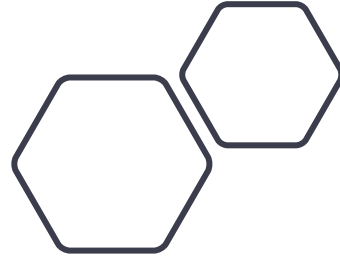
Mermaid

- Create diagrams with Markdown
- Was already supported by Azure DevOps



Coding

github.dev



- Quick edits in the browser
- Use the “dot”
- Powered by Visual Studio Code

GitHub Codespaces

What development environments do you need?

Standardized dev environments

2 – 32 Cores (2 cores \$ 0.18,- per hour)

Debug in browser or with Visual Studio Code

Browser or port forwarding

Teams and Enterprise Cloud plans



GitHub Copilot (Technical Preview)

- AI Pair programming
- Trained on selection of English language and source code from public repos



CI/CD

Branches

- Branch protection rules
 - Require pull request
 - Status checks before merging
 - Conversation resolution
 - ...
- Code owners

Environments

- Environments for staging/production... deployment
- GitHub Enterprise or public repos required
- Environment protection rules
- Configure environment with GitHub Actions

GitHub Actions

Build and test your
code

Deploy code to
Microsoft Azure or
other services

Runners

Hosted Runners

- Ubuntu 20.04, 18.04
- Windows Server 2022, 2019
- macOS 11, 10.15

Self-hosted Runners

Secrets Management

CI/CD with Microsoft Azure

- Create GitHub Actions
 - Using the Azure Portal
 - Using Visual Studio

Summary

- It's not just a source code repo
- Projects
- Codespaces
- Copilot
- GitHub Actions

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HERZLICHEN DANK!

THANK YOU!

