

Better Code and Collaboration

Through Open-Source Concepts, Dev Containers, and Codespaces

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April 8-11, 2024

Global Summi





PURESTORAGE®















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Who am I?

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- Consulting Field Solutions Architect @ Pure Storage
- Co-leader Denver PowerShell & VMware User Groups
- Serial collector of Communities, now an International speaker (huzzah!)



- Find me: Green Orange Colored hat, big grin & the loud "Howdy Y'all."
- I have little (no) shame, and try to share my learnings with others
- Push yourself, Learn more, Don't fear sharing
- Share YOUR knowledge (Perspective is important)
- Teach whatever you can (Be The Master Don Jones)
- Job vs Career

Don't let any of this scare you! Even I'll screw this up, and we'll all survive...



















Some Git Basics

Avoiding mistakes/conflicts, meaningful commits & pulls



.gitignore



Ignoring files & preventing mistakes

- O Log files
- © Compiled code
- System files
- Usernames, passwords, environment vars, oh my...
- Global / personal / by file
- O Do this by:
 - Pattern per line (Blanks for readability)
 - * Wildcard
 - / Directory
 - ! Negate
 - ? 1 char wildcard





Branching Out



- Focus on a single task
- Avoiding conflicts
- Keeps your code streamlined
- Can be used as a training/onboarding tool
- Does not need to be only code/software features



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Committing to Be Meaningful

- High-level vs low-level (strategic vs tactical or what vs why)
- Smaller & single-purpose
- © Commit more often
- Test before you commit
- Concise description, then more detailed explanation
- Character limit
- Use text editor
- Searchability



April 8-11, 2024 7 / 15

Pulling the Right Way



- Write it smaller
- Link it to an issue or ticket
- Review it yourself, as not yourself
- Linters & automatic tools
- Define workflow & owners
- Comments to reviewers; respond quickly
- Git commit "rules" still apply



8 / 15

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VMs vs Containers



VM

App 2

/ / /

App 3

Bins/Lib

Bins/Lib

Guest OS

App 1

Bins/Lib

Guest OS

Guest OS

Hypervisor

Infrastructure

Container

App 1

App 2

App 3

Bins/Lib

Bins/Lib

Bins/Lib

Container Runtime Engine (Docker)

Operating System

Infrastructure



More Demos

Pray to the Demo Gods



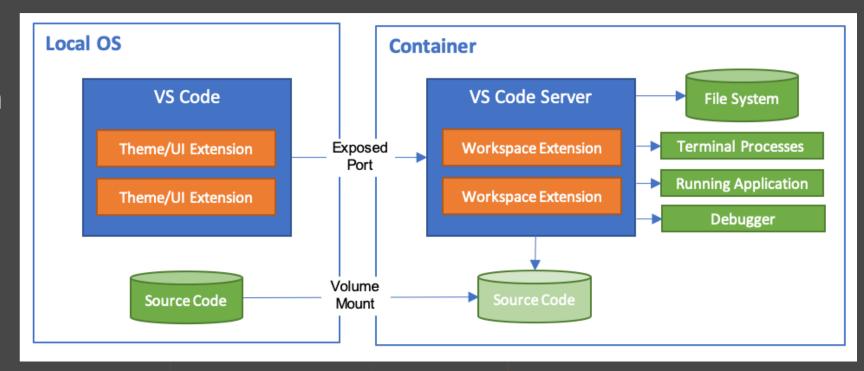


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DevContainers



- .devcontainer/ devcontainer.json
- Image
- Options





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Codespaces

- .devcontainer/ devcontainer.json
- Image Registry or Dockerfile
- Extras as you need



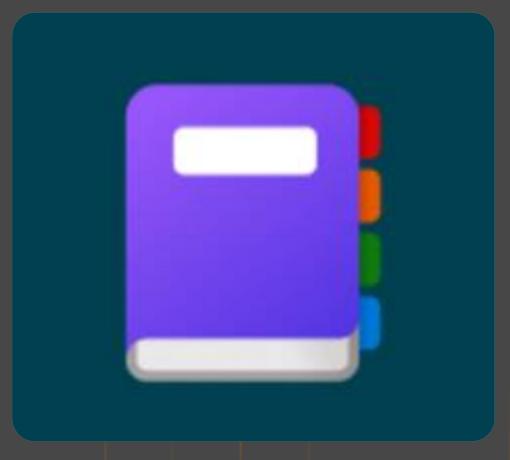


April 8-11, 2024 12 / 15

Polyglot (Jupyter) Notebooks



- .NET Interactive
- Multi-language
- Saves previous runs
- Just friggin' awesome to have a CYA...





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Learning Resources



https://github.com/microsoft/workshop-library

https://github.com/devcontainers/

https://docs.github.com/en/codespaces/setting-up-your-project-for-

codespaces/adding-a-dev-container-configuration/introduction-to-dev-containers

https://github.com/features/codespaces

https://docs.github.com/en/codespaces/getting-started/quickstart

https://code.visualstudio.com/docs/languages/polyglot

https://devblogs.microsoft.com/dotnet/announcing-polyglot-notebooks-harness-the-power-of-multilanguage-notebooks-in-visual-studio-code/



April 8-11, 2024 14 / 15

Thanks for Listening



Make a Connection, Do Things, Share Them

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April 8-11, 2024 15 / 15



THANK YOU

Please review this session



Session Review
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