APACHE SLING & FRIENDS TECH MEETUP
10-12 SEPTEMBER 2018

A better developer experience

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Developer Experience

Experience

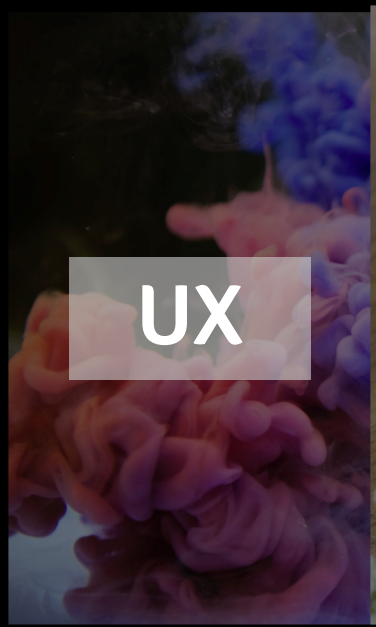
https://www.pexels.com/photo/man-standing-937546/

Developer Experience

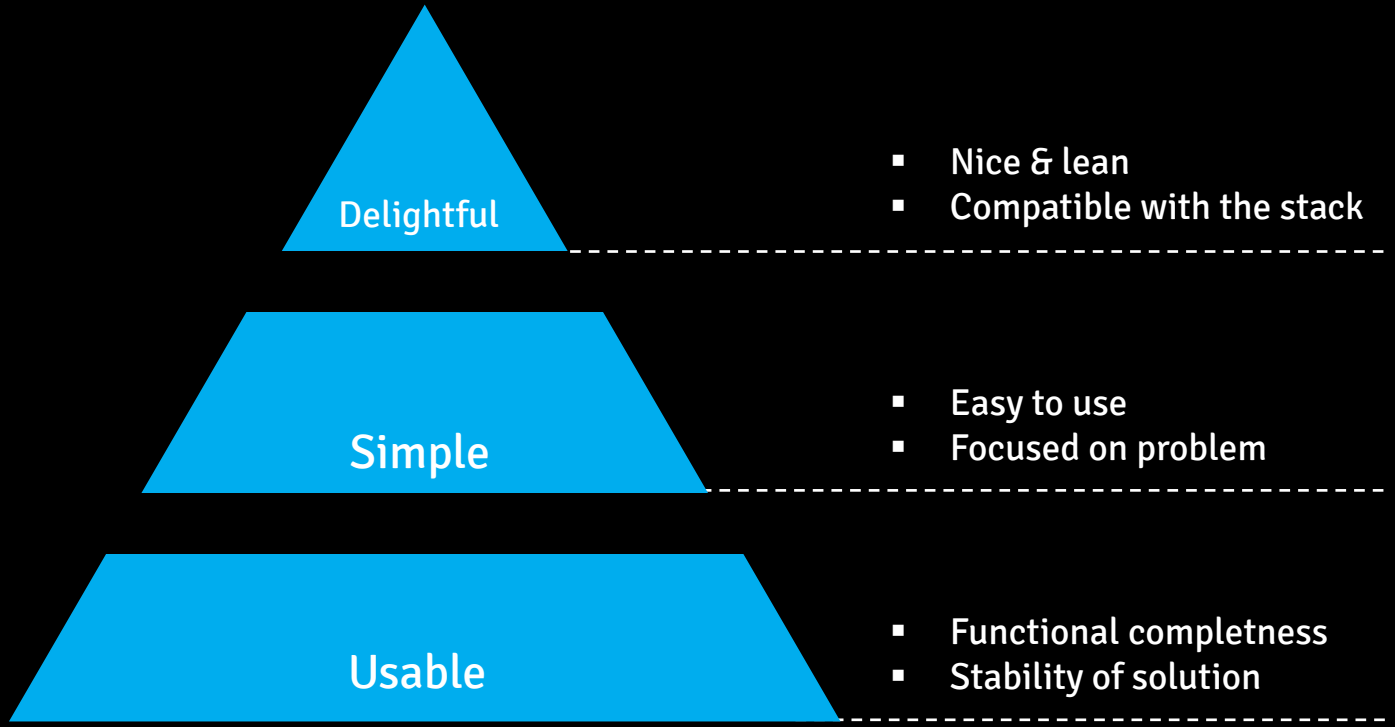
Developer Experience

adaptTo()

Developer Experience



Developer’s hierarchy of needs



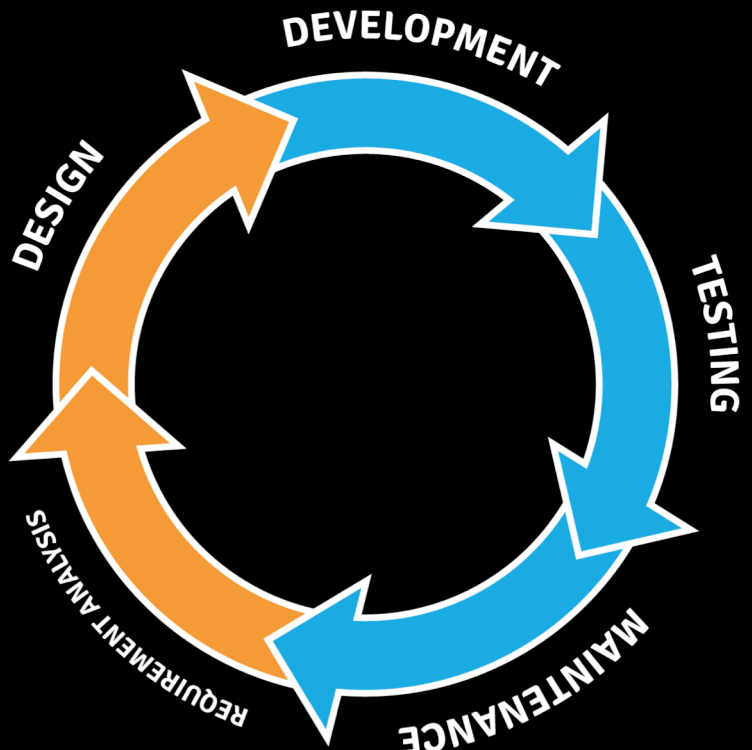
Developer Experience on Assembly Lines

https://upload.wikimedia.org/wikipedia/commons/2/29/Ford_assembly_line_-_1913.jpg

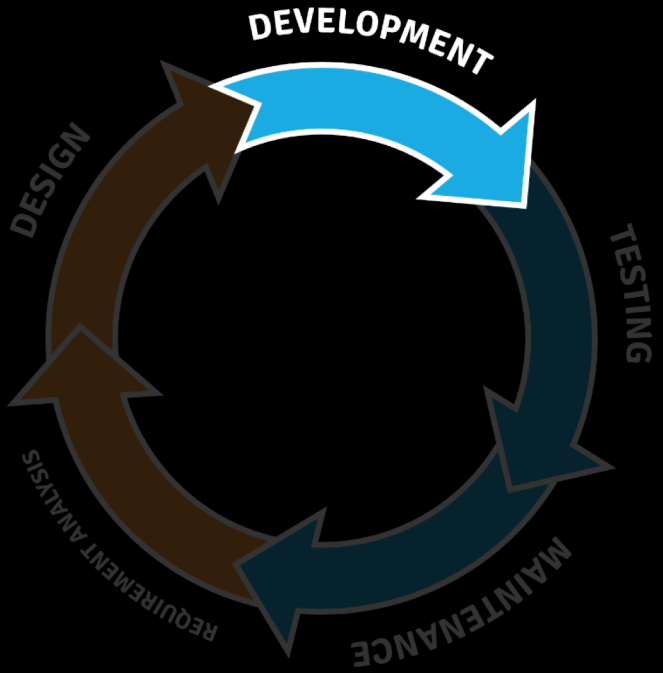
adaptTo()

DX while building Sling based applications

Software Development Life Cycle

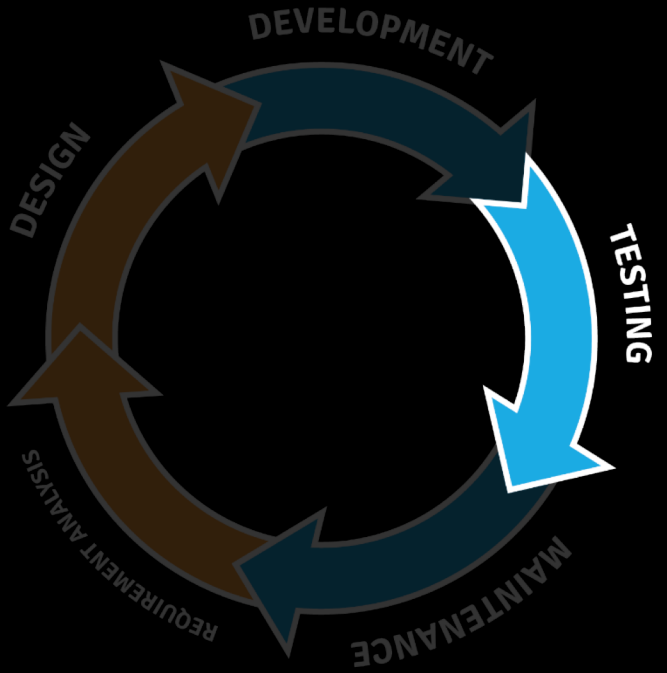


Development: typical activities



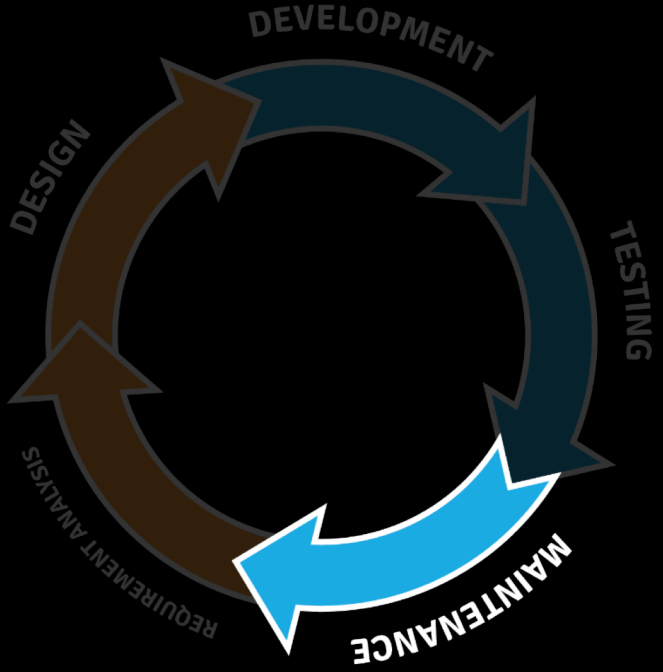
- Environment setup
- Application setup
- Code development
- Application build

Testing: typical activities



- Manual testing
- Unit testing
- Functional testing
- Regression testing
- Static code analysis

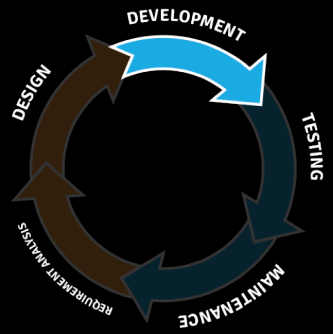
Maintenance: typical activities



- Diagnostic & monitoring
- Issue reproduction
- Troubleshooting

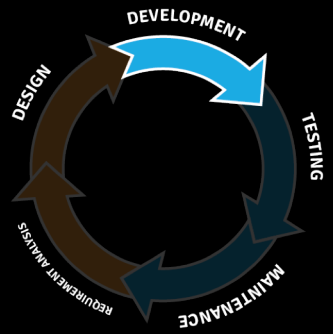
Improvements

Environment setup: expectations



- Minimal time to run application
- Minimal manual steps
- Fast & reproducible environment
- Environment as a code

Environment setup powered by Gradle



Gradle
AEM Plugin

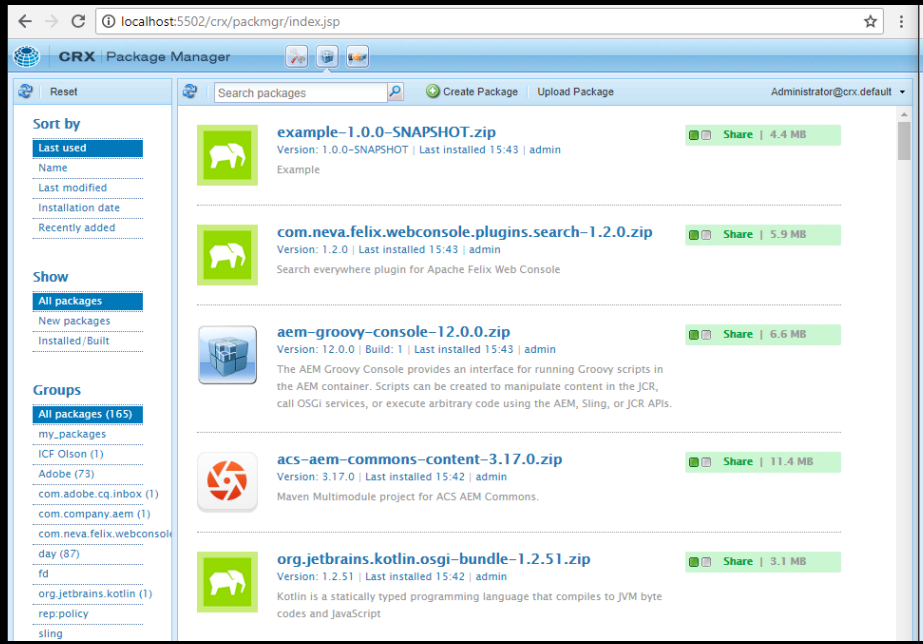
- No virtualization → Native AEM performance
- Environment as a code → Easily maintainable
- Gradle based → Basic software prerequisites (JDK only)

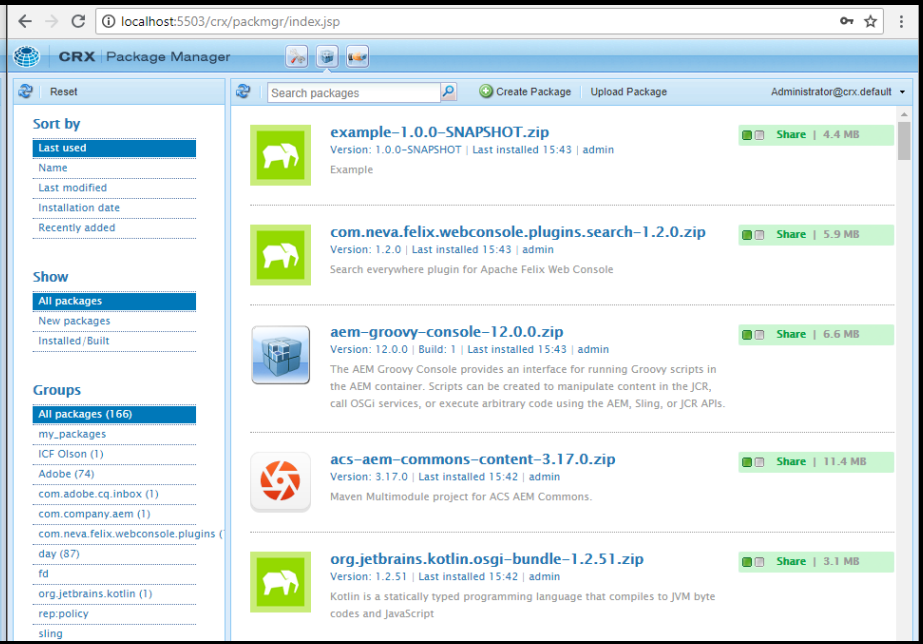
https://github.com/Cognifide/gradle-aem-plugin

Environment setup: demo

https://youtu.be/7VG5AjpKZyo

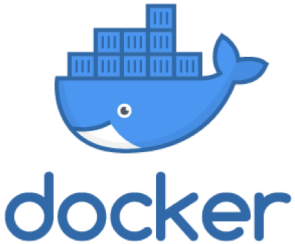
Environment setup powered by Gradle

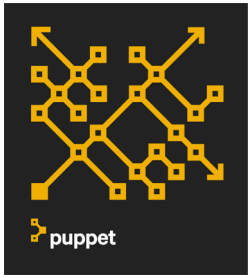




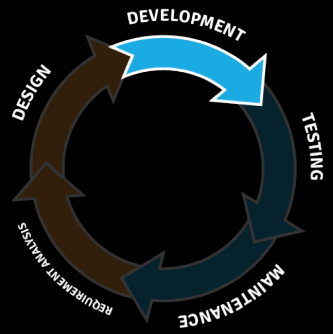
Environment setup: alternatives

HashiCorp Vagrant



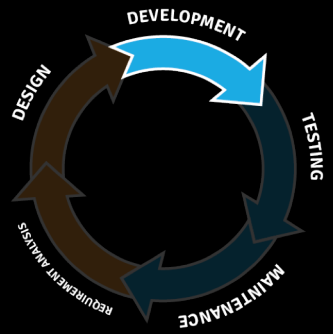


Application build: expectations



- Quick build time
- Intelligent & interactive
- Perfectly integrated
- Well customizable

Application build powered by Gradle

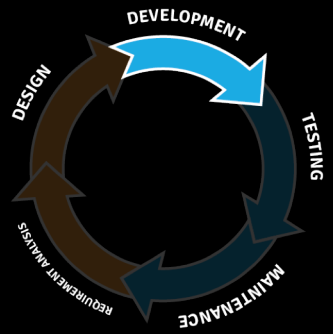


Gradle
AEM Plugin

- Incremental build → 2-3x faster comparing to Maven
- Instance health checking → Notifications when up&running
- Automated dependencies deployment → Self-sufficient dev

https://github.com/Cognifide/gradle-aem-plugin

Application build powered by Gradle



Gradle
AEM Plugin

- Very useful for building AEM applications
- **Optionally** useful to set up AEM environments

https://github.com/Cognifide/gradle-aem-plugin

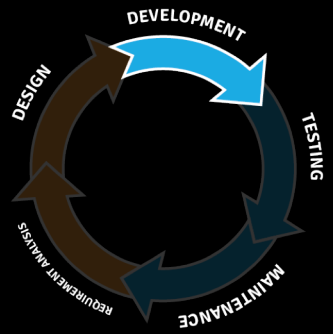
Application build: demo

https://youtu.be/sEUn2-uxlog

Application build: alternatives

Gradle plugin CQ Package

Gradle for Sling - now available

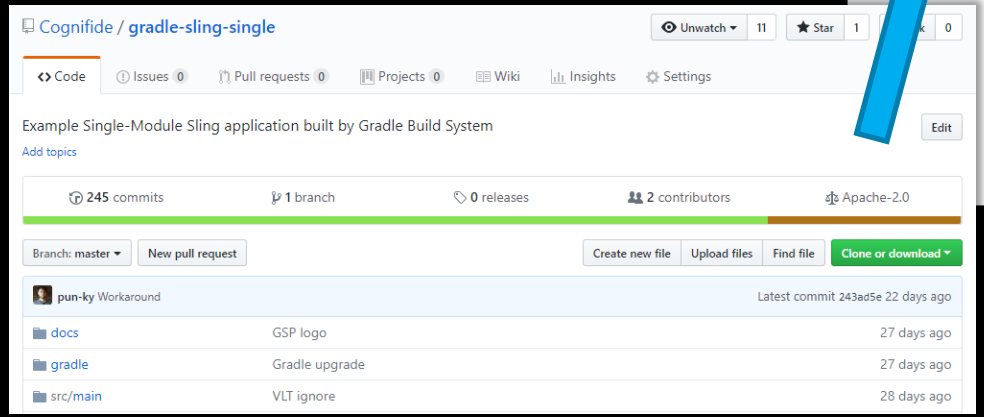


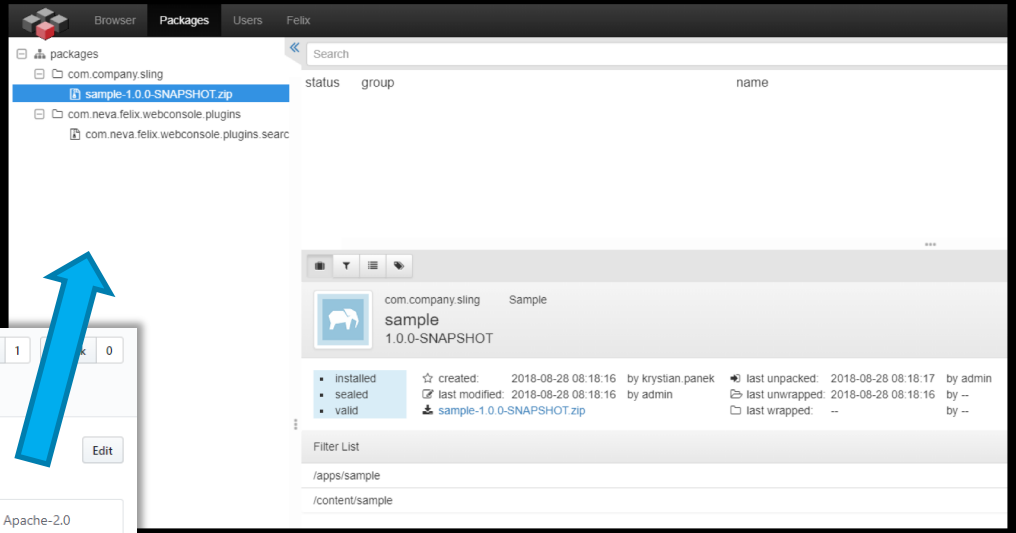
Gradle
Sling Plugin

- Fork of Gradle AEM Plugin that includes **all** it's features

https://github.com/Cognifide/gradle-sling-plugin

Gradle for Sling - all-in-one demo:

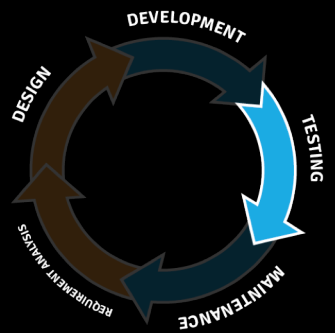




Gradle for Sling: demo

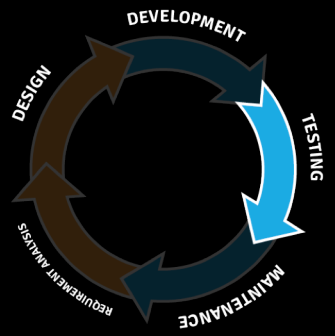
https://youtu.be/sEUn2-uxlog

Regression testing: expectations



- Focus on change
- Shield against change by accident
- Test quickly
- Reduce human testing

Regression testing powered by AET



aet

- Configurable website monitoring → Find unwanted changes
- Scalable → Testing all volume platforms
- Various comparators → Testing change wide

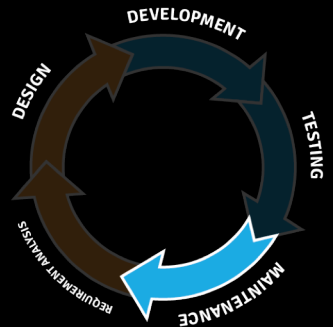
https://github.com/Cognifide/aet

Regression testing: demo

https://youtu.be/8Zpn7LGeV98

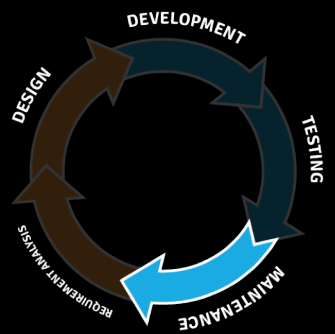
Regression testing: alternatives

Troubleshooting: expectations



- Easy way to find source of bug
- Easy issue reproduction
- See actual code instead of just version

Troubleshooting with Search Plugin



Search Web Console Plugin

for Apache Felix

- Single JAR to deploy → Immediate way to discover runtime
- Decompile & search → Finding bug root cause
- Assemble OSGi bundles → Debugging at breakpoint

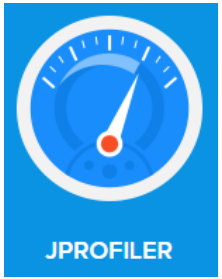
https://github.com/neva-dev/felix-search-webconsole-plugin

Troubleshooting: demo

https://youtu.be/6UH0U5uNvU4

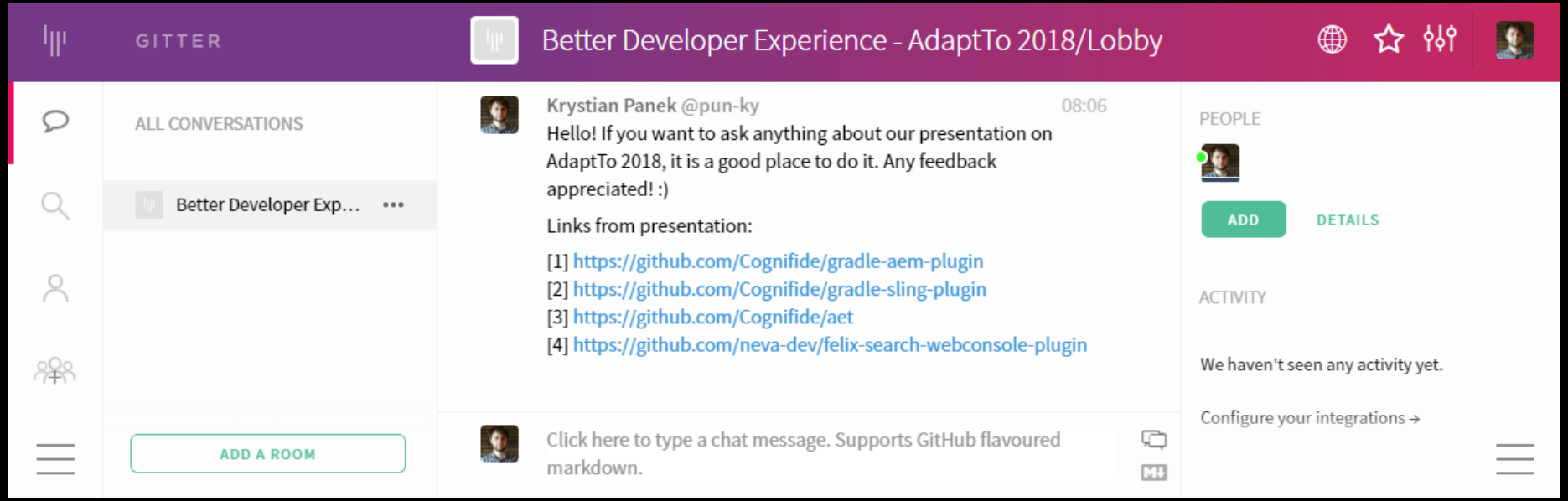
Troubleshooting: alternatives

Memory Analyzer Tool



Summary

Feedbacks, support and more



https://gitter.im/better-dx-adaptto2018

adaptTo()

All berries are edible*

https://images.pexels.com/photos/87818/background-berries-berry-blackberries-87818.jpeg

Thank you

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