A Prime on Software Debloating +

Projects' Overview

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Agenda

- Motivations
- Approaches
- Our projects
  - DepClean
  - JDBL

Why debloating software?

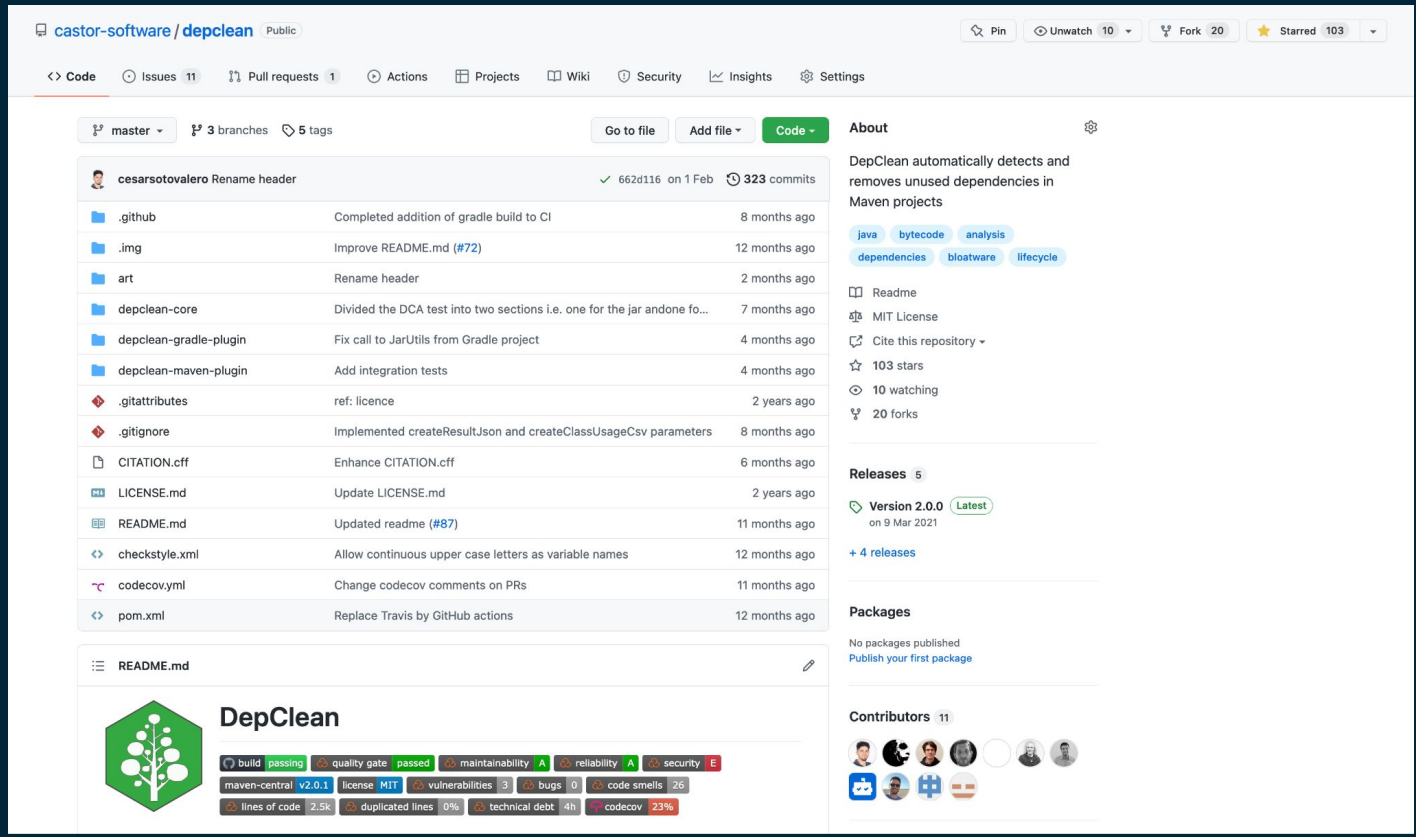
- For security
- For performance
- For maintenance

How to debloat software?

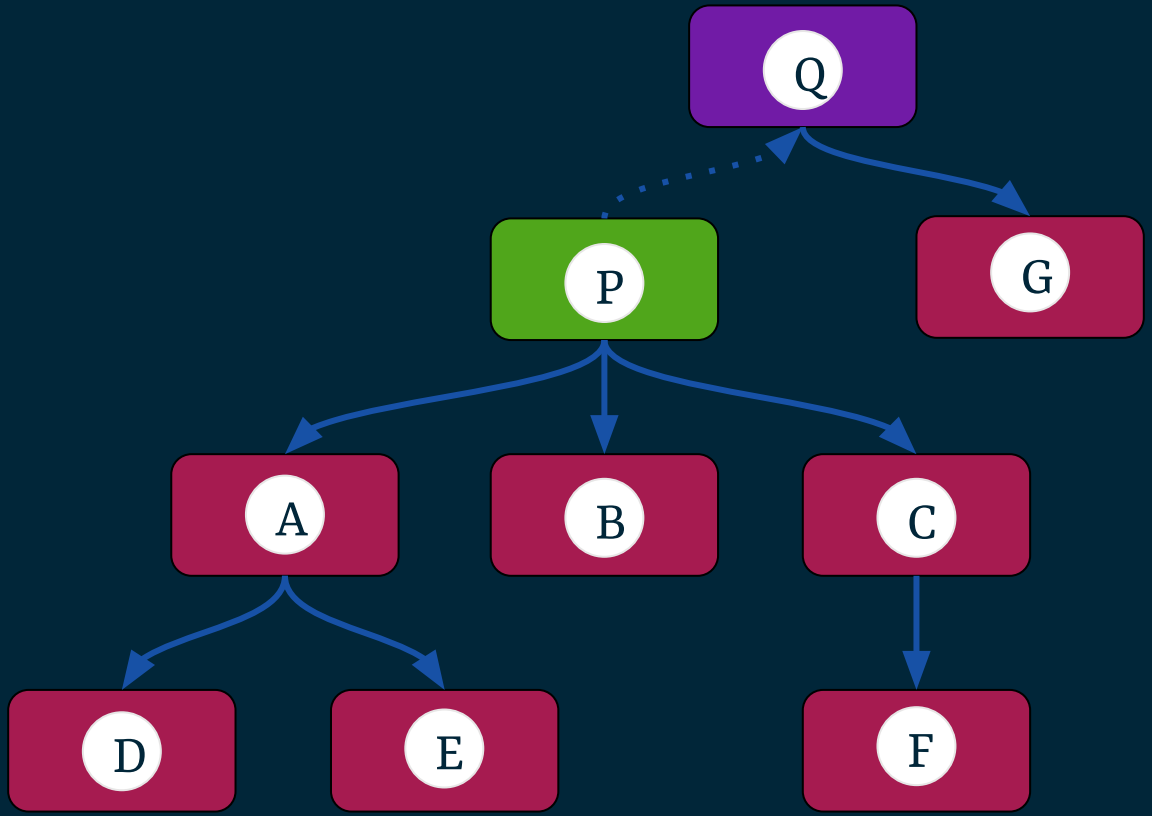
- Using static analysis
- Using dynamic analysis
- Using a hybrid approach

DepClean

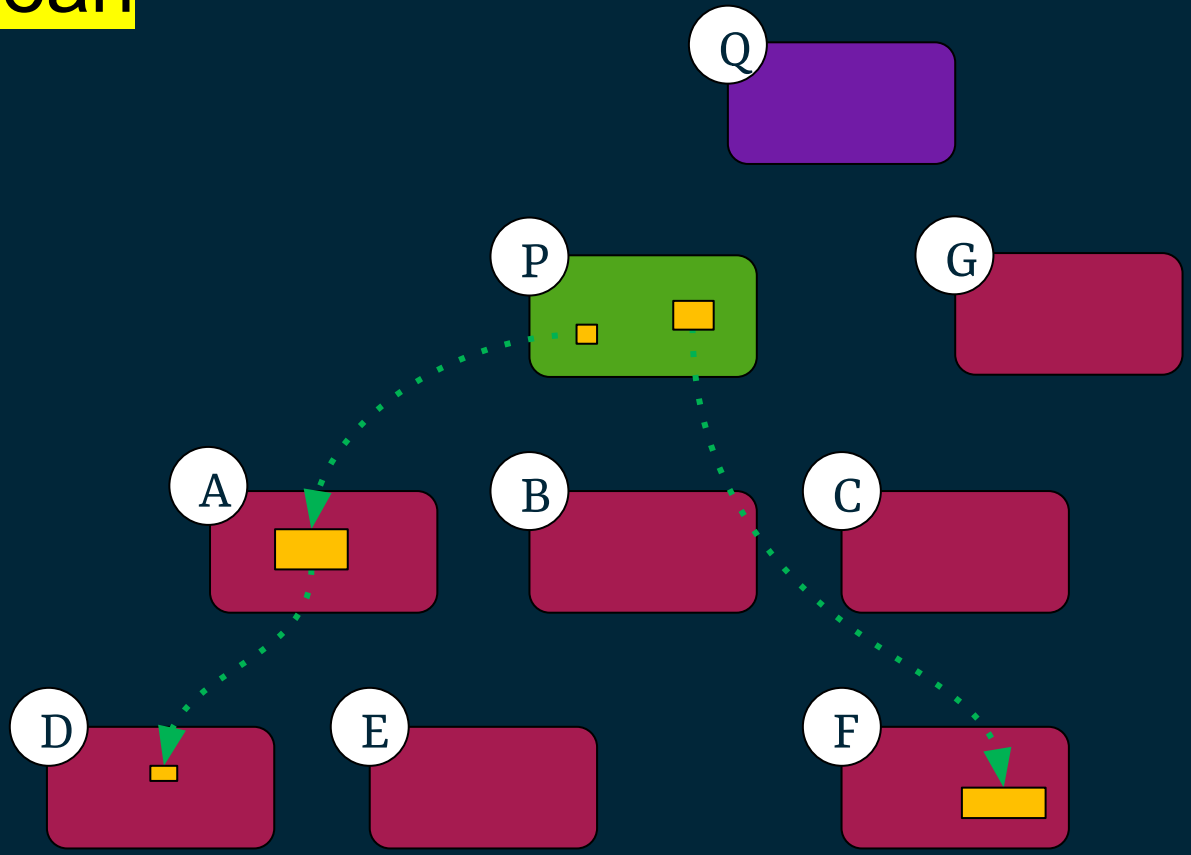
https://github.com/castor-software/depclean



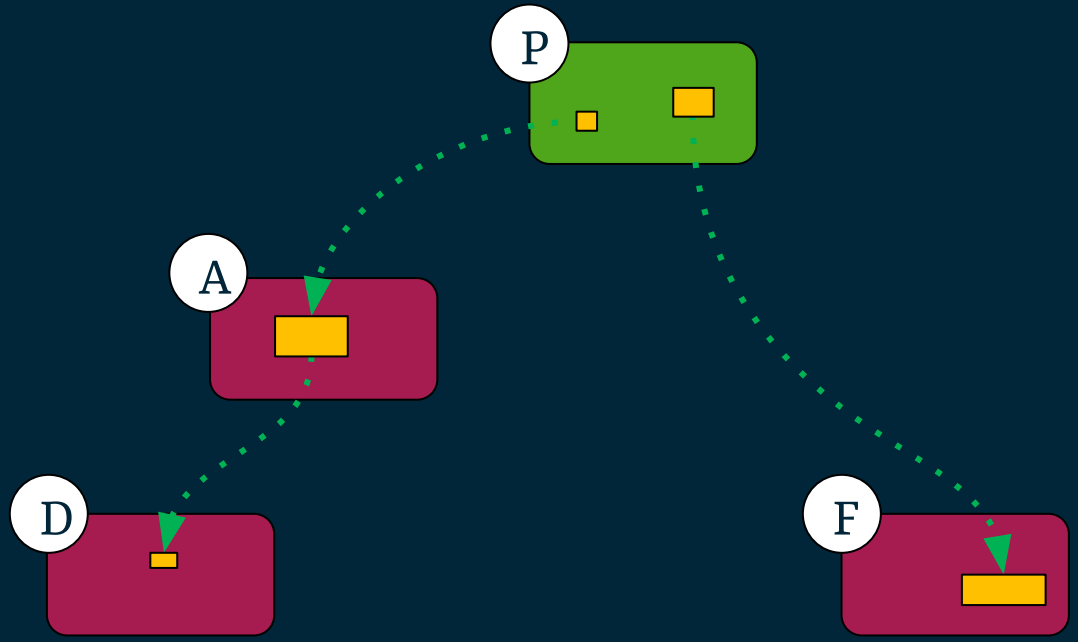
DepClean



DepClean

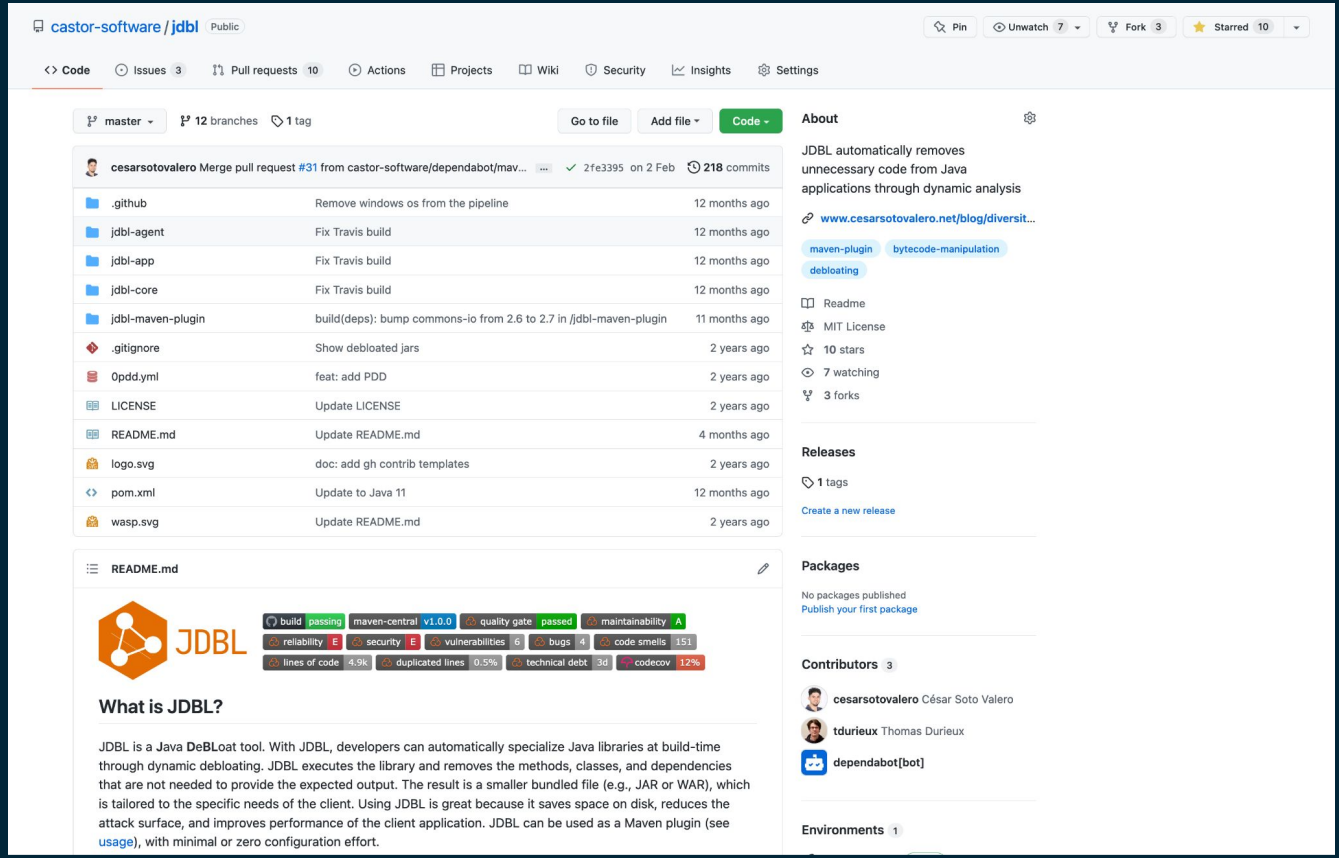


DepClean

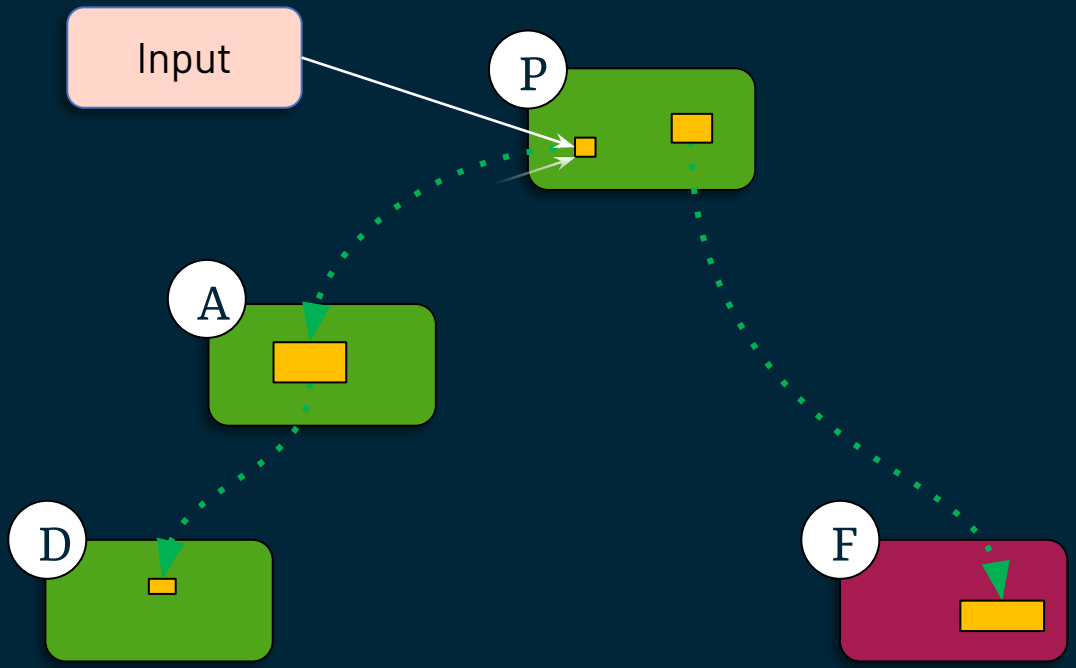


JDBL

https://github.com/castor-software/jdbl



JDBL



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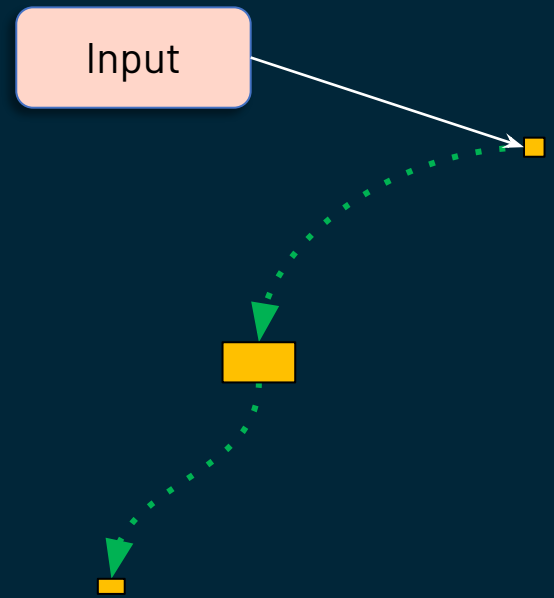

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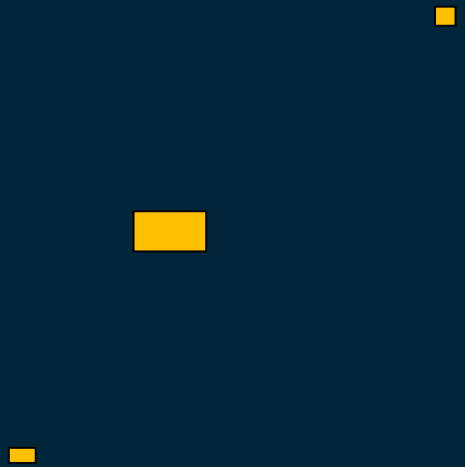

JDBL

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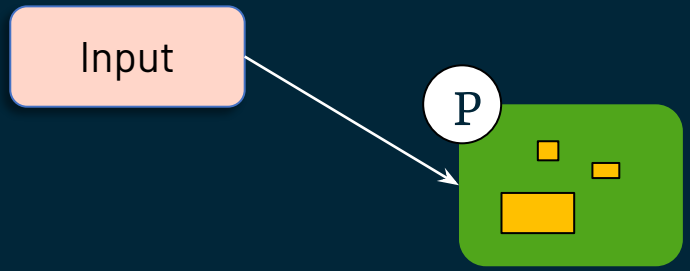

Impact

- With DepClean:
  - 30 projects debloated, 21 pull requests accepted
  - First experiment that shows that the usage status of dependencies is mostly constant over time
- With JDBL:
  - 211 Java libraries debloated
  - First experiment that assesses the utility of debloated libraries with respect to client applications that reuse them

Time for Discussion!

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