

Towards Sustainable AI Software Systems through Energy-Aware Code Smell Refactoring

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Background

- Software engineers continuously try to improve software
- They continuously face the challenge of shorter time to market
- The rapid development and limited time results in software code suffering from code smells

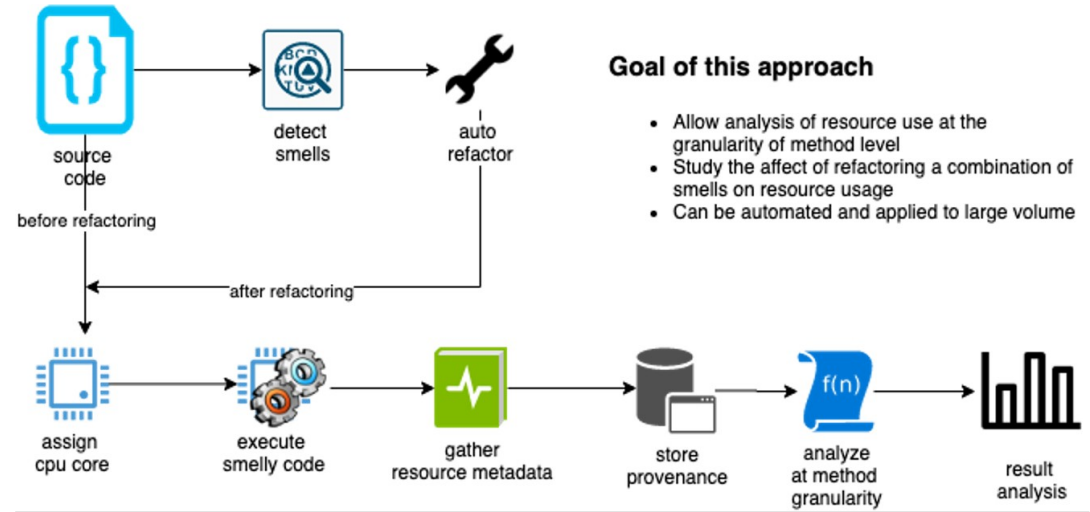
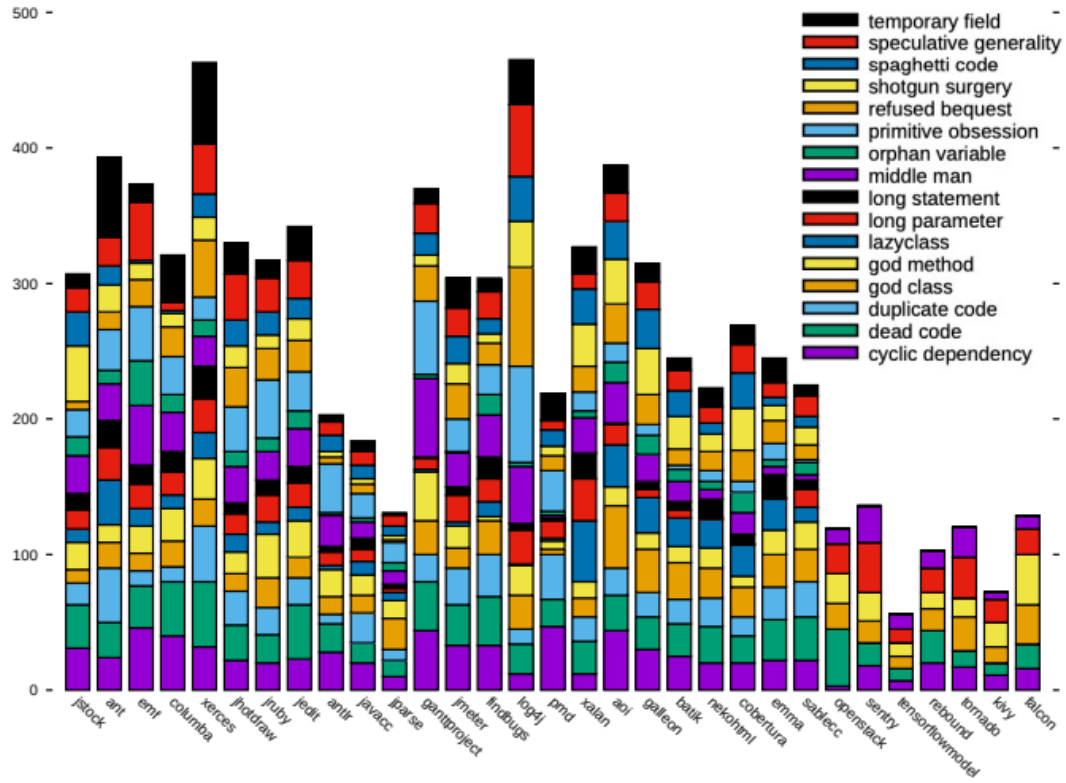
Code smells

Undesirable behavior of software which indicate a deeper problem, software behavior which indicate difficulty in maintenance and usability

Code smells are known to impact the quality of the software

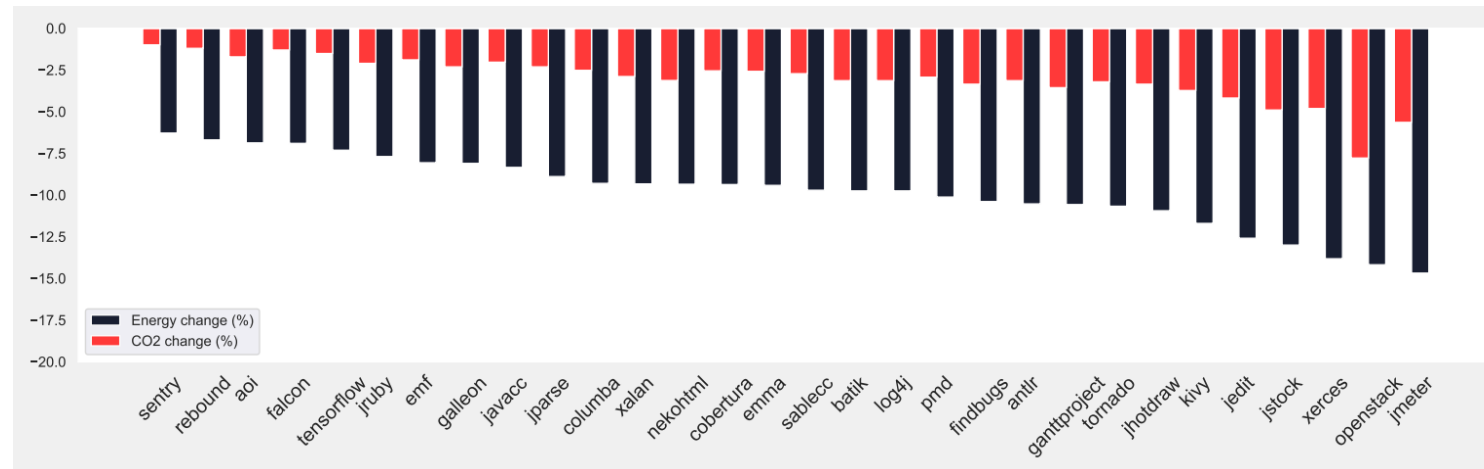
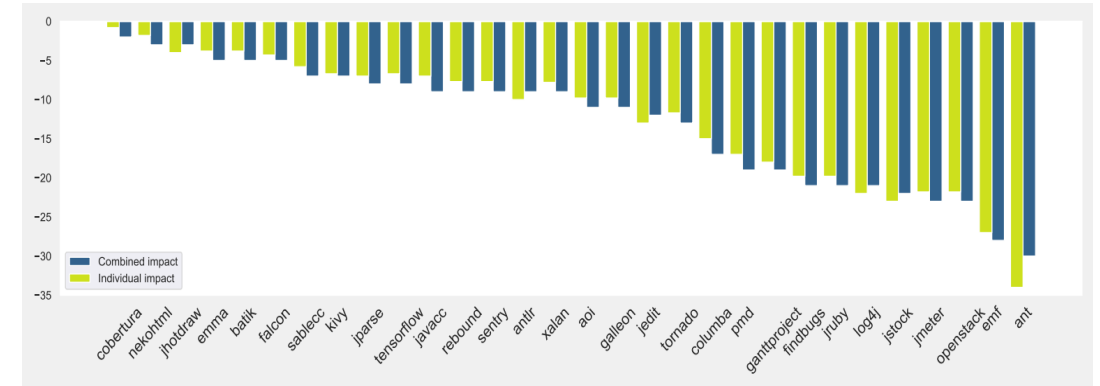
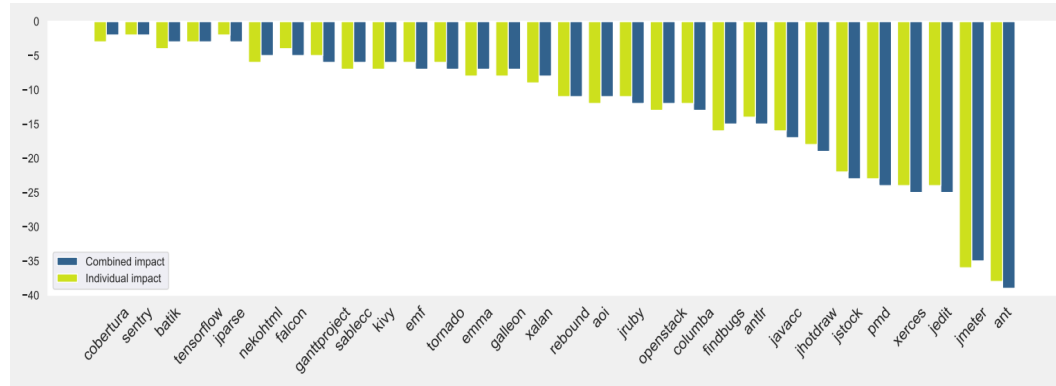
Recent studies have revealed that certain code smells impact resource usage as well





Flow of study

Findings



Thank you