Metrics Pipeline (Codename): An Analytics and Visualization Pipeline for Software Quality Metrics

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Goal
A platform for producing and observing metrics by mining open-source software repositories on GitHub.

Pipeline Process
Process for Collecting Data and Calculating Metrics:

- Data Collection
- Calculations
- Visualizations

Graphs

Calculated Metrics
- Defect Density: The amount of open defects in a repository compared to the total LOC
- LOC per Commit: Total LOC affected per commit
- Issues per Author: Total number of issues opened per contributor
- Issue Spoilage: The number of days open summed across all issues
- Lines of Code: The total number of lines of code
- Commits Over Time: The total number of commits
- Lines of Code per Language: The total number of LOC per language

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