

# HUBLISTENER



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# OUR TOOL : HUBLISTENER

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- GitHub project analysis tool
  - Provides users with relevant metrics, trends, and information
  - Provides a detailed analysis of a repository's commit history
- Intended for project review and evaluation
  - Up to the user to make any improvements or corrections based on their observations



*“What specific metrics lead to success, and how do we measure this success?” - HubListener 2018*

# OUR CONSUMER AUDIENCE

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- General consumer audience
  - Any member of the open-source community (with experience using open-source software)
- Example User Groups:
  - Developers and Creators
  - Students
  - Researchers
  - Companies/Organizations
  - Project Managers



# OUR DEMO

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# OUR METRICS

## Static Metrics used for Static Analysis

- |                                |                       |                                |
|--------------------------------|-----------------------|--------------------------------|
| ✓ Number of Files              | ✓ Halstead Effort     | GitHub metrics:                |
| ✓ Number of Lines              | ✓ Halstead Bugs       | ✓ Number of Open/Closed Issues |
| ✓ Number of Logical Lines      | ✓ Halstead Length     | ✓ Number of Forks              |
| ✓ Number of Comments           | ✓ Halstead Difficulty | ✓ Number of Commits in Master  |
| ✓ <i>Cyclomatic Complexity</i> | ✓ Halstead Time       | ✓ Total Pull Requests          |
|                                | ✓ Halstead Vocabulary |                                |
|                                | ✓ Halstead Volume     |                                |

- ✓ **Collected on a PER COMMIT basis; giving you a COMPLETE history**



# OUR PROCESS



- Agile approach
  - GitHub issues & ZenHub for project management
  - <https://github.com/pjmc-oliveira/HubListener>
- Ongoing focus on documentation
  - Development Plan, Requirements Specification, Verification & Validation, Module Diagram, detailed Onboarding plan and more...
  - GitHub Wiki: Contributors Guide, Quick Start, and References
- Ongoing focus on performance/optimization
  - Design decision voting
  - Defined the purpose and impact of these decisions

