Alambic – R analysis document

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Contents

Summary

This plugin generates a PDF document with information about project **modeling.epsilon**.

This plugin is intended as an example of R Markdown document to help people easily setup their own R analysis on software development data.

Metrics

Mnemo	Value
CI_JOBS	6
CI_JOBS_FAILED_1W	1
CI_JOBS_GREEN	5
CI_JOBS_GREEN_RATIO	83
CI_JOBS_RED	1
CI_JOBS_YELLOW	0
ITS_AUTHORS	137
ITS_AUTHORS_1M	0
ITS_AUTHORS_1W	0
ITS_AUTHORS_1Y	9
ITS_CREATED_1M	0
ITS_CREATED_1W	0
ITS_CREATED_1Y	22
ITS_ISSUES_ALL	609
ITS_OPEN	139
ITS_OPEN_OLD	0
ITS_OPEN_PERCENT	23
ITS_OPEN_UNASSIGNED	0
ITS_UPDATED_1M	0
ITS_UPDATED_1W	0
ITS_UPDATED_1Y	22
MLS_USR_AUTHORS	486
MLS_USR_AUTHORS_1M	6
MLS_USR_AUTHORS_1W	0
MLS_USR_AUTHORS_1Y	38
MLS_USR_POSTS	1844
MLS_USR_POSTS_1M	9
MLS_USR_POSTS_1W	0
MLS_USR_POSTS_1Y	327
MLS_USR_THREADS	1844
MLS_USR_THREADS_1M	5
MLS_USR_THREADS_1W	0
MLS_USR_THREADS_1Y	70
PROJECT_ACCESS_INFO	1
PROJECT_DOC_INFO	2
PROJECT_ITS_INFO	5
PROJECT_REL_VOL	5
PROJECT_SCM_INFO	1
SCM_AUTHORS	18
SCM_AUTHORS_1M	3
SCM_AUTHORS_1W	2
SCM_AUTHORS_1Y	7
SCM_COMMITS	3280
SCM_COMMITS_1M	5
SCM_COMMITS_1W	4
SCM_COMMITS_1Y	382
SCM_COMMITTERS	16
SCM_COMMITTERS_1M	3
SCM_COMMITTERS_1W	2
SCM_COMMITTERS_1Y	7
SCM_MOD_LINES	5312015
SCM_MOD_LINES_1M	4304
SCM_MOD_LINES_1W	4301
SCM_MOD_LINES_1Y	414051

Number of critical issues

ID: SQ_VIOLATIONS_CRITICAL

Value:

Description: The total number of issues (violations) found by SonarQube with a severity equal to CRITICAL.

SCM authors one week

ID: SCM_AUTHORS_1W

Value: 2

Description: Total number of identities found as authors of commits in source code management repositories dated during the last week. Source code management repositories are those considered as such in the project documentation. Date used for each commit is 'author date' (when there is a difference between author date and committer date). Time range is measured as a one week period starting the day before the data retrieval.

Public documented API (%)

ID: SQ_PUBLIC_API_DOC_DENSITY

Value:

Description: Density of public documented API = (Public API - Public undocumented API) / Public API * 100

SCM Commits one month

ID: SCM_COMMITS_1M

Value: 5 (3 / 5)

Description: Total number of commits in source code management repositories dated during the last month. Source code management repositories are those considered as such in the project documentation. Date used for each commit is 'author date' (when there is a difference between author date and committer date). Time range is measured as a one month period starting the day before the data retrieval (example: if retrieval is on Feb 3rd, period is from Jan 3rd to Feb 2nd, both included).

Project committers one year

ID: PROJECT_COMMITTERS_1Y

Value:

Description: Total number of identities found as committers of commits in source code management repositories dated during the last year. Source code management repositories are those considered as such in the project documentation. Date used for each commit is 'committer date' (when there is a difference between author date and committer date). Time range is measured as a one year period starting the day before the data retrieval (example: if retrieval is on Feb 3rd 2016, period is from Feb 3rd 2015 to Feb 3rd 2016, both included).

ITS issues created last week

ID: ITS_CREATED_1W

Value: 0

Description: Number of issues created during last week. If today is Wed. 2017-02-01 then the range is from Wed. 2017-01-25 to Wed. 2017-02-01.

User ML Posts

ID: MLS_USR_POSTS_1M

Value: 9 (2 / 5)

Description: The total number of posts found in the User mailing list during last month. Having many posts shows the mailing list is active. It encourages people to participate, ask and answer questions.

ITS information

ID: PROJECT_ITS_INFO

Value: 5 (5 / 5)

Description: Is the bugzilla info correctly filled in the PMI records? The project management infrastructure file holds information about one or more bugzilla instances. This test checks that at least one bugzilla instance is defined, with a product identifier, a create_url to enter a new issue, and a query_url to fetch all the issues for the project.

SCM information

ID: PROJECT_SCM_INFO

Value: 1 (4 / 5)

Description: Is the source_repo info correctly filled in the PMI records? The project management infrastructure file holds information about one or more source repositories. This test checks that at least one source repository is defined, and accessible.

SCM committers one year

ID: SCM_COMMITTERS_1Y

Value: 7

Description: Total number of identities found as committers of commits in source code management repositories dated during the last year. Source code management repositories are those considered as such in the project documentation. Date used for each commit is 'committer date' (when there is a difference between author date and committer date). Time range is measured as a one year period starting the day before the data retrieval (example: if retrieval is on Feb 3rd 2016, period is from Feb 3rd 2015 to Feb 3rd 2016, both included).

SCM Changed Lines

ID: SCM_MOD_LINES

Value: 5312015

Description: Total number of changed lines (added, removed, changed) in source code management repositories. Source code management repositories are those considered as such in the project documentation. Date used for each commit is 'author date' (when there is a difference between author date and committer date).

Doc information

ID: PROJECT_DOC_INFO

Value: 2 (3 / 5)

Description: Is the documentation info correctly filled in the PMI records? The project management infrastructure file holds information about various documentation and manuals. This test checks the number of doc-related entries defined in the PMI: build_doc, documentation, documentation_url, forums, gettingstarted_url, mailing_lists, website_url, wiki_url.

SCM Commits one year

ID: SCM_COMMITS_1Y

Value: 382

Description: Total number of commits in source code management repositories dated during the last year. Source code management repositories are those considered as such in the project documentation. Date used for each commit is 'author date' (when there is a difference between author date and committer date). Time range is measured as a one year period starting the day before the data retrieval (example: if retrieval is on Feb 3rd 2016, period is from Feb 3rd 2015 to Feb 3rd 2016, both included).

ITS Open issues

ID: ITS_OPEN

Value: 139 (5 / 5)

Description: Number of issues with a state 'open' at the time of analysis.

Technical debt

ID: SQ_SQALE_INDEX

Value:

Description: Effort to fix all maintainability issues. The measure is stored in minutes in the DB.

Number of red jobs

ID: CI_JOBS_RED

Value: 1

Description: The number of red (failed) jobs on the Hudson engine. Red jobs in Hudson define failed builds.

Package Tangle index

ID: SQ_PACKAGES_TANGLE_IDX

Value:

Description: The Package tangle index, as defined in SonarQube.

User ML Authors

ID: MLS_USR_AUTHORS_1W

Value: 0

Description: The total number of different identities found in the User mailing list during last week. Having many different authors is a sign of diversity and activity. It makes the support more reliable (i.e. increased presence of people) and more complete (i.e. more eyes to solve a problem).

Stack Overflow Askers (5Y)

ID: SO_ASKERS_5Y

Value:

Description: The number of distinct people asking questions related to the project's tag posted on Stack Overflow during the last 5 years. Having many people ask questions about the project indicates a strong interest from the community, and a good support. The list of questions and their answers associated to the tag can be browsed on the Stack Overflow web site.

Project authors one month

ID: PROJECT_AUTHORS_1M

Value:

Description: Total number of identities found as authors of commits in source code management repositories dated during the last month. Source code management repositories are those considered as such in the project documentation. Date used for each commit is 'author date' (when there is a difference between author date and committer date). Time range is measured as a one month period starting the day before the data retrieval (example: if retrieval is on Feb 3rd, period is from Jan 3rd to Feb 2nd, both included).

Number of jobs

ID: CI_JOBS

Value: 6

Description: The total number of jobs defined on the Hudson engine.

SCM Changed Lines one week

ID: SCM_MOD_LINES_1W

Value: 4301

Description: Total number of changed lines (added, removed, changed) in source code management repositories dated during the last week. Source code management repositories are those considered as such in the project documentation. Date used for each commit is 'author date' (when there is a difference between author date and committer date). Time range is measured as a one week period starting the day before the data retrieval.

User ML Threads

ID: MLS_USR_THREADS

Value: 1844

Description: The total number of threads (one question followed by zero or more answers) found in the User mailing list. Having many threads shows the mailing list is active. It encourages people to participate, ask and answer questions.

Stack Overflow Views (5Y)

ID: SO_VIEWS_VOL_5Y

Value:

Description: The total number of views for questions related to the project's tag on Stack Overflow during the last 5 years. Having many views on questions about the project indicates a strong interest from the community. The list of questions and their answers associated to the tag can be browsed on the Stack Overflow web site.

User ML Authors

ID: MLS_USR_AUTHORS_1Y

Value: 38

Description: The total number of different identities found in the User mailing list during last year. Having many different authors is a sign of diversity and activity. It makes the support more reliable (i.e. increased presence of people) and more complete (i.e. more eyes to solve a problem).

Number of green jobs

ID: CI_JOBS_GREEN

Value: 5

Description: The number of green (successful) jobs on the Hudson engine. Green (or blue) jobs in Hudson define successful builds.

User ML Threads

ID: MLS_USR_THREADS_1M

Value: 5 (3 / 5)

Description: The total number of threads (one question followed by zero or more answers) found in the User mailing list during last month. Having many threads shows the mailing list is active. It encourages people to participate, ask and answer questions.

SCM Open Pull requests one year

ID: SCM_PRS_OPENED_1Y

Value:

Description: Total number of Pull Requests (PRs) or Merge Requests (MRs) that have been opened within the last year in source code management repositories. Source code management repositories are those considered as such in the project documentation. Date used for each commit is 'author date' (when there is a difference between author date and committer date). Time range is measured as a one year period starting the day before the data retrieval (example: if retrieval is on Feb 3rd 2016, period is from Feb 3rd 2015 to Feb 3rd 2016, both included).

User ML Threads

ID: MLS_USR_THREADS_1W

Value: 0

Description: The total number of threads (one question followed by zero or more answers) found in the User mailing list during last week. Having many threads shows the mailing list is active. It encourages people to participate, ask and answer questions.

Number of yellow jobs

ID: CI_JOBS_YELLOW

Value: 0

Description: The number of yellow (unstable) jobs on the Hudson engine. Yellow jobs in Hudson define unstable builds. According to Hudson's documentation, a build is unstable if it was built successfully and one or more publishers report it unstable. For example if the JUnit publisher is configured and a test fails then the build will be marked unstable.

User ML Posts

ID: MLS_USR_POSTS

Value: 1844

Description: The total number of posts found in the User mailing list. Having many posts shows the mailing list is active. It encourages people to participate, ask and answer questions.

Public API

ID: SQ_PUBLIC_API

Value:

Description: Number of public Classes + number of public Functions + number of public Properties

Number of functions

ID: SQ_FUNCS

Value:

Description: Number of functions. Depending on the language, a function is either a function or a method or a paragraph. For Java, constructors are considered as methods and accessors are considered as methods if the sonar.squid.analyse.property.accessors property is set to false. For Cobol, it is the number of paragraphs.

SCM Still Open Pull requests one year

ID: SCM_PRS_OPENED_STILL_1Y

Value:

Description: Total number of Pull Requests (PRs) or Merge Requests (MRs) that have been opened more than one year ago and are still in the opened state in source code management repositories. Source code

management repositories are those considered as such in the project documentation. Date used for each commit is 'author date' (when there is a difference between author date and committer date). Time range is measured as a one year period starting the day before the data retrieval (example: if retrieval is on Feb 3rd 2016, period is from Feb 3rd 2015 to Feb 3rd 2016, both included).

SCM authors

ID: SCM_AUTHORS

Value: 18

Description: Total number of identities found as authors of commits in source code management repository. Source code management repositories are those considered as such in the project documentation. Commits in all branches are considered. Date used for each commit is 'author date' (when there is a difference between author date and committer date). An identity is considered as author if it appears as such in the commit record (for systems logging several identities related to the commit, authoring identity will be considered).

File complexity

ID: SQ_CPX_FILE_IDX

Value:

Description: Average complexity by file.

SCM authors one year

ID: SCM_AUTHORS_1Y

Value: 7

Description: Total number of identities found as authors of commits in source code management repositories dated during the last year. Source code management repositories are those considered as such in the project documentation. Date used for each commit is 'author date' (when there is a difference between author date and committer date). Time range is measured as a one year period starting the day before the data retrieval (example: if retrieval is on Feb 3rd 2016, period is from Feb 3rd 2015 to Feb 3rd 2016, both included).

Number of stars

ID: PROJECT_STARS

Value:

Description: The number of times people have starred this project. Users use stars to show their interest for a project, and more stars usually mean a greater visibility and interest.

ITS Open issues (%)

ID: ITS_OPEN_PERCENT

Value: 23

Description: Percentage of open issues compared to the overall number of issues registered in the system.

Project Commits one year

ID: PROJECT_COMMITS_1Y

Value:

Description: Total number of commits in source code management repositories dated during the last year. Source code management repositories are those considered as such in the project documentation. Date used for each commit is 'author date' (when there is a difference between author date and committer date). Time range is measured as a one year period starting the day before the data retrieval (example: if retrieval is on Feb 3rd 2016, period is from Feb 3rd 2015 to Feb 3rd 2016, both included).

Project Commits

ID: PROJECT_COMMITS

Value:

Description: Total number of commits in source code management repositories. Source code management repositories are those considered as such in the project documentation. Date used for each commit is 'author date' (when there is a difference between author date and committer date).

SCM Staled Open Pull requests one month

ID: SCM_PRS_OPENED_STALED_1M

Value:

Description: Total number of Pull Requests (PRs) or Merge Requests (MRs) that are in the opened state and have not been updated since one month. Source code management repositories are those considered as such in the project documentation. Date used for each commit is 'author date' (when there is a difference between author date and committer date). Time range is measured as a one month period starting the day before the data retrieval (example: if retrieval is on Feb 3rd, period is from Jan 3rd to Feb 2nd, both included).

SCM Open Pull requests one week

ID: SCM_PRS_OPENED_1W

Value:

Description: Total number of Pull Requests (PRs) or Merge Requests (MRs)that have been opened within the last week in source code management repositories. Source code management repositories are those considered as such in the project documentation. Date used for each commit is 'author date' (when there is a difference between author date and committer date). Time range is measured as a one week period starting the day before the data retrieval.

Number of failed jobs one week

ID: CI_JOBS_FAILED_1W

Value: 1 (4 / 5)

Description: The number of jobs that failed during last week on the Hudson engine.

Stack Overflow Votes (5Y)

ID: SO_VOTES_VOL_5Y

Value:

Description: The total number of votes on questions related to the project's tag on Stack Overflow during the last 5 years. Having many votes on questions about the project indicates a strong interest from the community. The list of questions and their answers associated to the tag can be browsed on the Stack Overflow web site.

SCM Closed Pull requests

ID: SCM_PRS_CLOSED

Value:

Description: Total number of Pull Requests (PRs) or Merge Requests (MRs) in the closed state in source code management repositories.

Stack Overflow Questions (5Y)

ID: SO_QUESTIONS_VOL_5Y

Value:

Description: The number of questions related to the project's tag posted on Stack Overflow during the last 5 years. Having many questions posted about the project indicates a strong interest from the community. The list of questions associated to the tag can be browsed on the Stack Overflow web site.

Number of minor issues

ID: SQ_VIOLATIONS_MINOR

Value:

Description: The total number of issues (violations) found by SonarQube with a severity equal to MINOR.

Duplicated lines (%)

ID: SQ_DUPLICATED_LINES_DENSITY

Value:

Description: Density of duplication = Duplicated lines / Lines * 100.

SCM Merged Pull requests

ID: SCM_PRS_MERGED

Value:

Description: Total number of Pull Requests (PRs) or Merge Requests (MRs) in the 'merged' state in source code management repositories.

Last activity

ID: PROJECT_LAST_ACTIVITY_AT

Value:

Description: The date of last activity for this project. This includes any type of action: changes on issues, git commits or pushes, merge requests, comments... A project with a old last activity timestamp shows the project is dead (or in agony at least).

Test coverage

ID: SQ_COVERAGE

Value:

Description: Overall test coverage.

Project authors one week

ID: PROJECT_AUTHORS_1W

Value:

Description: Total number of identities found as authors of commits in source code management repositories dated during the last week. Source code management repositories are those considered as such in the project documentation. Date used for each commit is 'author date' (when there is a difference between author date and committer date). Time range is measured as a one week period starting the day before the data retrieval.

CI information

ID: PROJECT_CI_INFO

Value:

Description: Is the continuous integration info correctly filled in the PMI records? The project management infrastructure file holds information about the location of CI services. This test checks the number of ci-related entries defined in the PMI.

ITS issues created last month

ID: ITS_CREATED_1M

Value: 0

Description: Number of issues created during last month. If today is 2017-02-01 then the range is from 2017-01-01 to 2017-02-01.

Maintainability rating

ID: SQ_SQALE_RATING

Value:

Description: Rating given to your project related to the value of your Technical Debt Ratio. The default Maintainability Rating grid is: A=0-0.05, B=0.06-0.1, C=0.11-0.20, D=0.21-0.5, E=0.51-1. The Maintainability Rating scale can be alternately stated by saying that if the outstanding remediation cost depends on the time that has already gone into the application: A <=5% , B between 6 to 10%, C between 11 to 20%, D between 21 to 50%, and anything over 50% is an E.

SCM committers

ID: SCM_COMMITTERS

Value: 16

Description: Total number of identities found as committers of commits in source code management repository. Source code management repositories are those considered as such in the project documentation. Commits in all branches are considered. Date used for each commit is 'committer date' (when there is a difference between author date and committer date). An identity is considered as committer if it appears as such in the commit record.

User ML Authors

ID: MLS_USR_AUTHORS

Value: 486

Description: The total number of different identities found in the User mailing list. Having many different authors is a sign of diversity and activity. It makes the support more reliable (i.e. increased presence of people) and more complete (i.e. more eyes to solve a problem).

ITS authors last year

ID: ITS_AUTHORS_1Y

Value: 9

Description: Number of authors who created issues during last year. If today is 2017-02-01 then the range is from 2016-02-01 to 2017-02-01.

ITS issues created last year

ID: ITS_CREATED_1Y

Value: 22

Description: Number of issues created during last year. If today is 2017-02-01 then the range is from 2016-02-01 to 2017-02-01.

Project committers

ID: PROJECT_COMMITTERS

Value:

Description: Total number of identities found as committers of commits in source code management repository. Source code management repositories are those considered as such in the project documentation. Commits in all branches are considered. Date used for each commit is 'committer date' (when there is a difference

between author date and committer date). An identity is considered as committer if it appears as such in the commit record.

Sqale Debt ratio

ID: SQ_SQALE_DEBT_RATIO

Value:

Description: The Technical Debt Ratio, as defined in Sqale.

ITS Pending issues

ID: ITS_OPEN_UNASSIGNED

Value: 0

Description: Number of issues in state open with no assignee (i.e. pending). It is considered to be good practice to keep this number low. In an active project, people would either work on the bug (i.e. assign it) or triage it (pass it to some other state or assigning it).

Project committers one month

ID: PROJECT_COMMITTERS_1M

Value:

Description: Total number of identities found as committers of commits in source code management repositories dated during the last month. Source code management repositories are those considered as such in the project documentation. Date used for each commit is 'committer date' (when there is a difference between author date and committer date). Time range is measured as a one month period starting the day before the data retrieval (example: if retrieval is on Feb 3rd, period is from Jan 3rd to Feb 2nd, both included).

Project authors one year

ID: PROJECT_AUTHORS_1Y

Value:

Description: Total number of identities found as authors of commits in source code management repositories dated during the last year. Source code management repositories are those considered as such in the project documentation. Date used for each commit is 'author date' (when there is a difference between author date and committer date). Time range is measured as a one year period starting the day before the data retrieval (example: if retrieval is on Feb 3rd 2016, period is from Feb 3rd 2015 to Feb 3rd 2016, both included).

User ML Threads

ID: MLS_USR_THREADS_1Y

Value: 70

Description: The total number of threads (one question followed by zero or more answers) found in the User mailing list during last year. Having many threads shows the mailing list is active. It encourages people to participate, ask and answer questions.

ITS issues updated last month

ID: ITS_UPDATED_1M

Value: 0 (1 / 5)

Description: Number of issues updated during last month. If today is 2017-02-01 then the range is from 2017-01-01 to 2017-02-01.

ITS Late issues

ID: ITS_LATE

Value:

Description: Number of issues with a past due date. It is considered good practice to keep this number low. Either fix it or maintain its due date.

ITS Authors

ID: ITS_AUTHORS

Value: 137

Description: Number of different authors who created issues during the lifetime of the project. A high number of authors shows diversity and improves the bus factor of the project.

Ratio of green jobs

ID: CI_JOBS_GREEN_RATIO

Value: 83 (4 / 5)

Description: The number of green (successful) jobs on the Hudson engine, divided by the total number of jobs. Green (or blue) jobs in Hudson define successful builds.

Number of forks

ID: PROJECT_FORKS

Value:

Description: The number of forks for this project. More forks usually mean a greater activity.

Project committers one week

ID: PROJECT_COMMITTERS_1W

Value:

Description: Total number of identities found as committers of commits in source code management repositories dated during the last week. Source code management repositories are those considered as such in the project documentation. Date used for each commit is 'committer date' (when there is a difference between author date and committer date). Time range is measured as a one week period starting the day before the data retrieval.

ITS authors last month

ID: ITS_AUTHORS_1M

Value: 0 (1 / 5)

Description: Number of authors who created issues during last month. If today is 2017-02-01 then the range is from 2017-01-01 to 2017-02-01.

ITS issues updated last year

ID: ITS_UPDATED_1Y

Value: 22

Description: Number of issues updated during last year. If today is 2017-02-01 then the range is from 2016-02-01 to 2017-02-01.

Open issues

ID: PROJECT_ISSUES_OPEN

Value:

Description: The number of issues opened at the time of analysis on the GitLab project. This information is retrieved from GitLab itself, and may differ from numbers gathered from the actual issue tracking system used.

User ML Posts

ID: MLS_USR_POSTS_1W

Value: 0

Description: The total number of posts found in the User mailing list during last week. Having many posts shows the mailing list is active. It encourages people to participate, ask and answer questions.

Number of comment lines

ID: SQ_COMMENT_LINES

Value:

Description: Number of lines containing either comment or commented-out code. Non-significant comment lines (empty comment lines, comment lines containing only special characters, etc.) do not increase the number of comment lines. For Java, file headers are not counted as comment lines (as they usually define the license). Lines containing the following instructions are counted both as comments and lines of code: AUTHOR, INSTALLATION, DATE-COMPILED, DATE-WRITTEN, SECURITY.

Comment lines density

ID: SQ_COMR

Value:

Description: Density of comment lines = Comment lines / (Lines of code + Comment lines) * 100. With such a formula, 50% means that the number of lines of code equals the number of comment lines and 100% means that the file only contains comment lines

Access information

ID: PROJECT_ACCESS_INFO

Value: 1 (3 / 5)

Description: Is the access info (downloads, update sites..) correctly filled in the PMI records? The project management infrastructure file holds information about how to access binaries of the project. This test checks the number of access-related entries defined in the PMI: download_url, downloads, update_sites.

Project authors

ID: PROJECT_AUTHORS

Value:

Description: Total number of identities found as authors of commits in source code management repository. Source code management repositories are those considered as such in the project documentation. Commits in all branches are considered. Date used for each commit is 'author date' (when there is a difference between author date and committer date). An identity is considered as author if it appears as such in the commit record (for systems logging several identities related to the commit, authoring identity will be considered).

Branch coverage

ID: SQ_COVERAGE_BRANCH

Value:

Description: Branch test coverage.

SCM Still Open Pull requests one week

ID: SCM_PRS_OPENED_STILL_1W

Value:

Description: Total number of Pull Requests (PRs) or Merge Requests (MRs) that have been opened more than one week ago and are still in the opened state in source code management repositories. Source code management repositories are those considered as such in the project documentation. Date used for each commit is 'author date' (when there is a difference between author date and committer date). Time range is measured as a one week period starting the day before the data retrieval.

ITS issues updated last week

ID: ITS_UPDATED_1W

Value: 0

Description: Number of issues updated during last week. If today is Wed. 2017-02-01 then the range is from Wed. 2017-01-25 to Wed. 2017-02-01.

Commented code

ID: SQ_COM_CODE

Value:

Description: Commented lines of code See more information about commented code on SonarQube doc web site. There is a well-documented debate on Stack Overflow as well.

SCM Pull requests

ID: SCM_PRS

Value:

Description: Total number of Pull Requests (PRs) or Merge Requests (MRs) in source code management repositories. Source code management repositories are those considered as such in the project documentation.

SCM authors one month

ID: SCM_AUTHORS_1M

Value: 3 (4 / 5)

Description: Total number of identities found as authors of commits in source code management repositories dated during the last month. Source code management repositories are those considered as such in the project documentation. Date used for each commit is 'author date' (when there is a difference between author date and committer date). Time range is measured as a one month period starting the day before the data retrieval (example: if retrieval is on Feb 3rd, period is from Jan 3rd to Feb 2nd, both included).

SCM Changed Lines one year

ID: SCM_MOD_LINES_1Y

Value: 414051

Description: Total number of changed lines (added, removed, changed) in source code management repositories dated during the last year. Source code management repositories are those considered as such in the project documentation. Date used for each commit is 'author date' (when there is a difference between author date and committer date). Time range is measured as a one year period starting the day before the data retrieval (example: if retrieval is on Feb 3rd 2016, period is from Feb 3rd 2015 to Feb 3rd 2016, both included).

Number of major issues

ID: SQ_VIOLATIONS_MAJOR

Value:

Description: The total number of issues (violations) found by SonarQube with a severity equal to MAJOR.

Number of releases

ID: PROJECT_REL_VOL

Value: 5 (4 / 5)

Description: The number of releases recorded in the PMI. Milestones are retrieved from the PMI file and are counted whatever their target release is. Milestones are useful to assess the maturity of the release and improves predictability of the project's output, in terms of quality and time.

Number of lines of code

ID: SQ_NCLOC

Value:

Description: Number of physical lines that contain at least one character which is neither a whitespace or a tabulation or part of a comment. For Cobol, generated lines of code and pre-processing instructions (SKIP1, SKIP2, SKIP3, COPY, EJECT, REPLACE) are not counted as lines of code.

SCM Commits

ID: SCM_COMMITS

Value: 3280

Description: Total number of commits in source code management repositories. Source code management repositories are those considered as such in the project documentation. Date used for each commit is 'author date' (when there is a difference between author date and committer date).

SCM committers one week

ID: SCM_COMMITTERS_1W

Value: 2

Description: Total number of identities found as committers of commits in source code management repositories dated during the last week. Source code management repositories are those considered as such in the project documentation. Date used for each commit is 'committer date' (when there is a difference between author date and committer date). Time range is measured as a one week period starting the day before the data retrieval.

Number of info issues

ID: SQ_VIOLATIONS_INFO

Value:

Description: The total number of issues (violations) found by SonarQube with a severity equal to INFO.

Stack Overflow Answer rate (5Y)

ID: SO_ANSWER_RATE_5Y

Value:

Description: The average number of answers per questions related to the project's tag on Stack Overflow during the last 5 years. Having many answers posted about the project indicates a strong interest from the community, and a good support. The list of questions and their answers associated to the tag can be browsed on the Stack Overflow web site.

SCM Open Pull requests

ID: SCM_PRS_OPENED

Value:

Description: Total number of Pull Requests (PRs) or Merge Requests (MRs) in the opened state in source code management repositories.

Number of files

ID: SQ_FILES

Value:

Description: The total number of files analysed.

ITS Total issues

ID: ITS_ISSUES_ALL

Value: 609

Description: Number of issues registered in the database, whatever their state is.

SCM Changed Lines one month

ID: SCM_MOD_LINES_1M

Value: 4304 (5 / 5)

Description: Total number of changed lines (added, removed, changed) in source code management repositories dated during the last month. Source code management repositories are those considered as such in the project documentation. Date used for each commit is 'author date' (when there is a difference between author date and committer date). Time range is measured as a one month period starting the day before the data retrieval (example: if retrieval is on Feb 3rd, period is from Jan 3rd to Feb 2nd, both included).

SCM Commits one week

ID: SCM_COMMITS_1W

Value: 4

Description: Total number of commits in source code management repositories dated during the last week. Source code management repositories are those considered as such in the project documentation. Date used

for each commit is 'author date' (when there is a difference between author date and committer date). Time range is measured as a one week period starting the day before the data retrieval.

Project Commits one month

ID: PROJECT_COMMITS_1M

Value:

Description: Total number of commits in source code management repositories dated during the last month. Source code management repositories are those considered as such in the project documentation. Date used for each commit is 'author date' (when there is a difference between author date and committer date). Time range is measured as a one month period starting the day before the data retrieval (example: if retrieval is on Feb 3rd, period is from Jan 3rd to Feb 2nd, both included).

Project Commits one week

ID: PROJECT_COMMITS_1W

Value:

Description: Total number of commits in source code management repositories dated during the last week. Source code management repositories are those considered as such in the project documentation. Date used for each commit is 'author date' (when there is a difference between author date and committer date). Time range is measured as a one week period starting the day before the data retrieval.

SCM Still Open Pull requests one month

ID: SCM_PRS_OPENED_STILL_1M

Value:

Description: Total number of Pull Requests (PRs) or Merge Requests (MRs) that have been opened more than one month ago and are still in the opened state in source code management repositories. Source code management repositories are those considered as such in the project documentation. Date used for each commit is 'author date' (when there is a difference between author date and committer date). Time range is measured as a one month period starting the day before the data retrieval (example: if retrieval is on Feb 3rd, period is from Jan 3rd to Feb 2nd, both included).

Number of releases

ID: PMI_REL_VOL

Value:

Description: The number of releases recorded in the PMI. Milestones are retrieved from the PMI file and are counted whatever their target release is. Milestones are useful to assess the maturity of the release and improves predictability of the project's output, in terms of quality and time.

Stack Overflow Answers (5Y)

ID: SO_ANSWERS_VOL_5Y

Value:

Description: The number of answers to questions related to the project's tag posted on Stack Overflow during the last 5 years. Having many answers posted about the project indicates a strong interest from the community, and a good support. The list of questions and their answers associated to the tag can be browsed on the Stack Overflow web site.

User ML Posts

ID: MLS_USR_POSTS_1Y

Value: 327

Description: The total number of posts found in the User mailing list during last year. Having many posts shows the mailing list is active. It encourages people to participate, ask and answer questions.

Line coverage

ID: SQ_COVERAGE_LINE

Value:

Description: Line test coverage.

Number of statements

ID: SQ_STATEMENTS

Value:

Description: Number of statements. For Java, it is the number of statements as defined in the Java Language Specification but without block definitions. Statements counter gets incremented by one each time a following keyword is encountered: if, else, while, do, for, switch, break, continue, return, throw, synchronized, catch, finally.. Statements counter is not incremented by a class, method, field, annotation definition, package declaration and import declaration. For Cobol, a statement is one of move, if, accept, add, alter, call, cancel, close, compute, continue, delete, display, divide, entry, evaluate, exitProgram, goback, goto, initialize, inspect, merge, multiply, open, perform, read, release, return, rewrite, search, set, sort, start, stop, string, subtract, unstring, write, exec, ibmXmlParse, ibmXmlGenerate, readyReset, mfCommit, mfRollback.

Number of blocker issues

ID: SQ_VIOLATIONS_BLOCKER

Value:

Description: The total number of issues (violations) found by SonarQube with a severity equal to BLOCKER.

SCM committers one month

ID: SCM_COMMITTERS_1M

Value: 3

Description: Total number of identities found as committers of commits in source code management repositories dated during the last month. Source code management repositories are those considered as such in the project documentation. Date used for each commit is 'committer date' (when there is a difference between author

date and committer date). Time range is measured as a one month period starting the day before the data retrieval (example: if retrieval is on Feb 3rd, period is from Jan 3rd to Feb 2nd, both included).

User ML Authors

ID: MLS_USR_AUTHORS_1M

Value: 6 (4 / 5)

Description: The total number of different identities found in the User mailing list during last month. Having many different authors is a sign of diversity and activity. It makes the support more reliable (i.e. increased presence of people) and more complete (i.e. more eyes to solve a problem).

SCM Open Pull requests one month

ID: SCM_PRS_OPENED_1M

Value:

Description: Total number of Pull Requests (PRs) or Merge Requests (MRs)that have been opened within the last month in source code management repositories. Source code management repositories are those considered as such in the project documentation. Date used for each commit is 'author date' (when there is a difference between author date and committer date). Time range is measured as a one month period starting the day before the data retrieval (example: if retrieval is on Feb 3rd, period is from Jan 3rd to Feb 2nd, both included).

Total complexity

ID: SQ_CPX

Value:

Description: It is the complexity calculated based on the number of paths through the code. Whenever the control flow of a function splits, the complexity counter gets incremented by one. Each function has a minimum complexity of 1. This calculation varies slightly by language because keywords and functionalities do. For more information on line counting for each language, see https://docs.sonarqube.org/display/SONAR/Metrics+-+Complexity.

ITS authors last week

ID: ITS_AUTHORS_1W

Value: 0

Description: Number of authors who created issues during last week. If today is Wed. 2017-02-01 then the range is from Wed. 2017-01-25 to Wed. 2017-02-01.

Attributes

Mnemo	Value
QM_ACTIVITY	3.00
QM_DIVERSITY	3.00
QM_DOC	3.80
QM_ECOSYSTEM	2.90
QM_PROCESS	3.80
QM_PRODUCT	5.00
QM_QUALITY	3.90
QM_RELIABILITY	5.00
QM_REL_ENG	4.00
QM_SCM	3.70
QM_SUPPORT	2.70

Activity

ID: QM_ACTIVITY

Value: 3 / 5

Description: The activity of the project's ecosystem, as measured on the mailing lists and configuration management system. An active project will provide a lot of information on the mailing lists, so when an user encounters an issue she will quickly find the information she needs, and has more chances to get answers if she asks. Fixes and improvements are added regularly.

Diversity

ID: QM_DIVERSITY

Value: 3 / 5

Description: The diversity of the project's ecosystem, as measured on the mailing lists and configuration management system. If many different actors from different companies are involved in the project, then it improves its sustainability (by eliminating a single point of failure) and adaptability to different situations. Having developers and users with different contexts and perspectives on the project helps widening its scope and provide a more generic support.

Documentation

ID: QM_DOC

Value: 3.8 / 5

Description: The maturity of code. Good code is vital for maintenance and evolution. It will encourage people to contribute, lower the number of bugs, and make a better product for the end-user as well as for the maintainers.

Ecosystem

ID: QM_ECOSYSTEM

Value: 2.9 / 5

Description: The sustainability of the ecosystem evolving around the project. Sustainability is a key point for long term support. If there is a lot of activity, if people can get fast and complete answers, if many people from different companies contribute to the project, then it will have more chance to still be there in a few years, and to continue providing fixes and improvements. Ecosystem requirements have been discussed on the mailing list and during meetings, and have been further described on the Polarsys wiki.

Process

ID: QM_PROCESS

Value: 3.8 / 5

Description: The maturity of the process used to run the project. A sound process helps people to do things right and ease collaborative work. If the process is documented, has predictable output, helps enforcing good development practices, etc. then new comers will easily find the information to collaborate, test or change code, or participate in the community. A good process also helps producing a good product [< href="/documentation/references.html#Ing2003">Ing2003] – although it is agreed that the process is not enough by itself. Process requirements have been discussed on the mailing list and during meetings, and have been further described on the Polarsys wiki. Some may also recognise CMMi Key Process Areas among the attributes.

Product

ID: QM_PRODUCT

Value: 5 / 5

Description: The maturity of the product itself, from the code perspective. Considering the vast amount and diversity of the projects under the Eclipse umbrella, there must be no single definition of quality to fit them all. However, Eclipse has some recommended practices and concerns about product quality. Projects are then expected to extend this foundation. Major concerns identified for Eclipse products quality are linked to the development context of the foundation (open source, very large code base and thousands of contributor worldwide), and its architecture (modular stacks of components). It must be highlighted that product quality is not clearly defined on the public wiki, neither for its definition nor for how it may be assessed. Furthermore, almost all product-related rules (with a few exceptions, like for packages naming) are optional guidelines. . Ecosystem requirements have been discussed on the mailing list and during meetings, and have been further described on the Polarsys wiki.

Eclipse Maturity

ID: QM_QUALITY

Value: 3.9 / 5

Description: The overall Maturity of the project. In the context of embedded software, Maturity is usually associated with some kind of reliability (most bugs have been already found) and functionality of code, sustainability of the project (will it still deliver fixes and improvements in a few years), and process predictability. Maturity in the PolarSys context has been further described on the wiki, and is actually precisely defined by the decomposition of this quality model.

Reliability

ID: QM_RELIABILITY

Value: 5 / 5

Description: The Reliability of code, as defined in ISO-9126.

Build and Release Management

ID: QM_REL_ENG

Value: 4 / 5

Description: Does the project apply best practices regarding Build and Release management?

Configuration Management

ID: QM_SCM

Value: 3.7 / 5

Description: The maturity of the project regarding access and usage of the configuration management system. Configuration management is an essential part of the collaboration in the project. Access to the source should be documented and facilitated for new comers to easily come in.

Support

ID: QM_SUPPORT

Value: 2.7 / 5

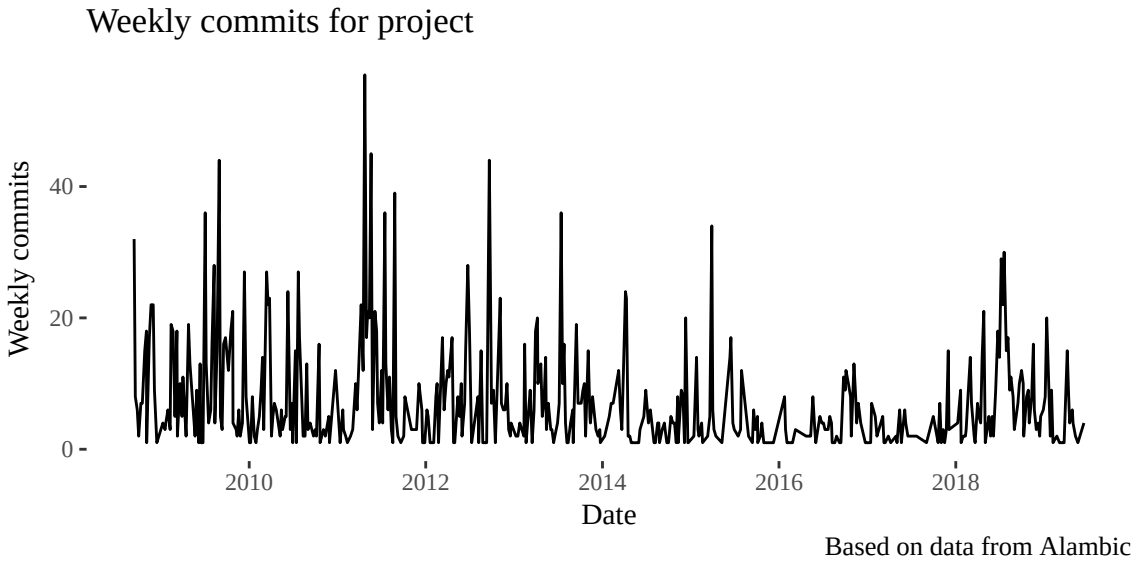
Description: The amount of knowledge provided when someone asks for support. Having many answers on a single question helps better understand how the product works in different conditions, and also provides help for people looking for a similar information later on, since mailing lists are archived and public.

Git analysis

The repository contains a total of `3280` commits made by `18` authors. The first commit was made on the `2008-09-11` and the last analysed commits was made on `2019-06-15`.

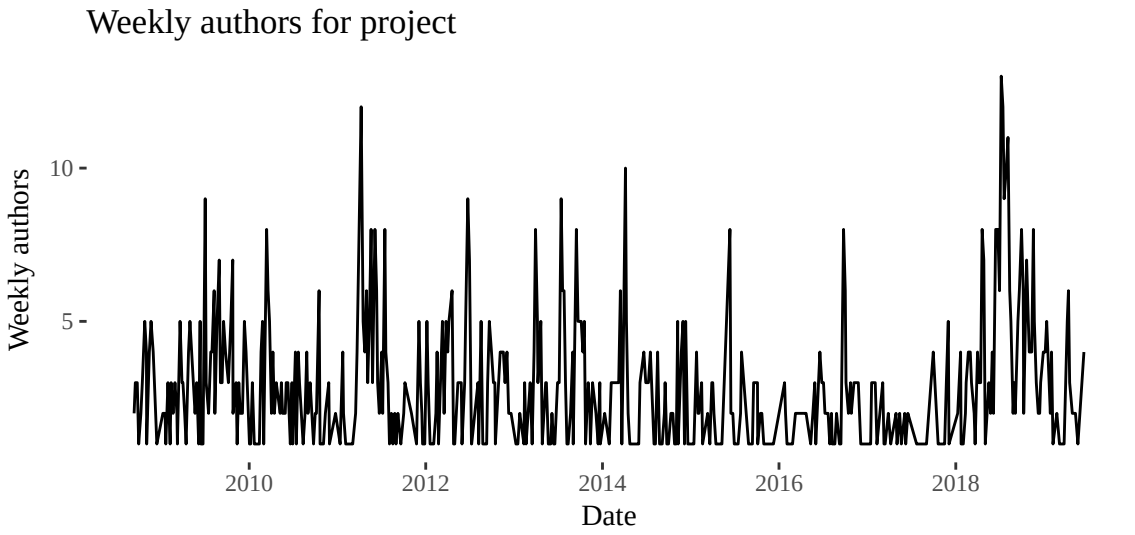
During the last month, there has been `5` commits made by `3` authors.

Weekly commits



Based on data from Alambic

Weekly authors



Based on data from Alambic