**A survey on the effectiveness of methods for evaluating the maintainability of SOFL specifications**

Response ID:17

\* 1. What is your current occupation?

Developer/Maintainer

\* 2. Please rate the following aspects of the Lines of Expressions (LOE) metric

  (1)The definition of this metric is clear and easy to understand

  Strongly Agree  （5）

  (2)This metric effectively captures an important aspect of maintainability

  Strongly Agree  （5）

  (3)This metric is theoretically and practically justifiable

  Strongly Agree  （5）

\* 3. Please rate the following aspects of the Number of Processes (NOP) metric

  (1)The definition of this metric is clear and easy to understand

  Strongly Agree  （5）

  (2)This metric effectively captures an important aspect of maintainability

  Strongly Agree  （5）

  (3)This metric is theoretically and practically justifiable

  Strongly Agree  （5）

\* 4. Please rate the following aspects of the Number of Control Data Flows (NOCDF) metric

  (1)The definition of this metric is clear and easy to understand

  Strongly Agree  （5）

  (2)This metric effectively captures an important aspect of maintainability

  Strongly Agree  （5）

  (3)This metric is theoretically and practically justifiable

  Strongly Agree  （5）

\* 5. Please rate the following aspects of the Cyclomatic Complexity (CC) metric

  (1)The definition of this metric is clear and easy to understand

  Strongly Agree  （5）

  (2)This metric effectively captures an important aspect of maintainability

  Strongly Agree  （5）

  (3)This metric is theoretically and practically justifiable

  Strongly Agree  （5）

\* 6. Please rate the following aspects of the Module Halstead Volume (MHV) metric

  (1)The definition of this metric is clear and easy to understand

  Strongly Agree  （5）

  (2)This metric effectively captures an important aspect of maintainability

  Strongly Agree  （5）

  (3)This metric is theoretically and practically justifiable

  Strongly Agree  （5）

\* 7. Please rate the following aspects of the Number of Data Stores Used (NODSU) metric

  (1)The definition of this metric is clear and easy to understand

  Strongly Agree  （5）

  (2)This metric effectively captures an important aspect of maintainability

  Strongly Agree  （5）

  (3)This metric is theoretically and practically justifiable

  Strongly Agree  （5）

\* 8. Please rate the following aspects of the Extensiveness of Comments (EOC) metric

  (1)The definition of this metric is clear and easy to understand

  Strongly Agree  （5）

  (2)This metric effectively captures an important aspect of maintainability

  Strongly Agree  （5）

  (3)This metric is theoretically and practically justifiable

  Strongly Agree  （5）

\* 9. Please rate the following aspects of the Extensiveness of Blank Lines (EOBL) metric

  (1)The definition of this metric is clear and easy to understand

  Strongly Agree  （5）

  (2)This metric effectively captures an important aspect of maintainability

  Strongly Agree  （5）

  (3)This metric is theoretically and practically justifiable

  Strongly Agree  （5）

\* 10. Does the complete set of metrics collectively address the main facets of maintainability

Agree（4）

\* 11. Case1-Random Scenarios

SYSTEM\_ATM

\* 12. Case 1 — Please indicate your level of agreement with the following statements

  (1)The tool-generated overall maintainability rating accurately reflects the maintainability of this module

  Strongly Agree  （5）

  (2)The LOE score produced by the tool is appropriate for this module

  Strongly Agree  （5）

  (3)The NOP score produced by the tool is appropriate for this module

  Strongly Agree  （5）

  (4)The NOCDF score produced by the tool is appropriate for this module

  Strongly Agree  （5）

  (5)The CC score produced by the tool is appropriate for this module

  Strongly Agree  （5）

  (6)The MHV score produced by the tool is appropriate for this module

  Strongly Agree  （5）

  (7)The NODSU score produced by the tool is appropriate for this module

  Strongly Agree  （5）

  (8)The EOC score produced by the tool is appropriate for this module

  Strongly Agree  （5）

  (9)The EOBL score produced by the tool is appropriate for this module

  Strongly Agree  （5）

\* 13. Case2-Random Scenarios

Manage\_Ticket\_Operations\_Decom

\* 14. Case 2 — Please indicate your level of agreement with the following statements

  (1)The tool-generated overall maintainability rating accurately reflects the maintainability of this module

  Strongly Agree  （5）

  (2)The LOE score produced by the tool is appropriate for this module

  Strongly Agree  （5）

  (3)The NOP score produced by the tool is appropriate for this module

  Strongly Agree  （5）

  (4)The NOCDF score produced by the tool is appropriate for this module

  Strongly Agree  （5）

  (5)The CC score produced by the tool is appropriate for this module

  Strongly Agree  （5）

  (6)The MHV score produced by the tool is appropriate for this module

  Strongly Agree  （5）

  (7)The NODSU score produced by the tool is appropriate for this module

  Strongly Agree  （5）

  (8)The EOC score produced by the tool is appropriate for this module

  Strongly Agree  （5）

  (9)The EOBL score produced by the tool is appropriate for this module

  Strongly Agree  （5）

\* 15. Case3-Random Scenarios

SYSTEM\_VENDING\_MACHINE

\* 16. Case 3 — Please indicate your level of agreement with the following statements [矩阵量表题]

  (1)The tool-generated overall maintainability rating accurately reflects the maintainability of this module

  Strongly Agree  （5）

  (2)The LOE score produced by the tool is appropriate for this module

  Strongly Agree  （5）

  (3)The NOP score produced by the tool is appropriate for this module

  Strongly Agree  （5）

  (4)The NOCDF score produced by the tool is appropriate for this module

  Strongly Agree  （5）

  (5)The CC score produced by the tool is appropriate for this module

  Strongly Agree  （5）

  (6)The MHV score produced by the tool is appropriate for this module

  Strongly Agree  （5）

  (7)The NODSU score produced by the tool is appropriate for this module

  Strongly Agree  （5）

  (8)The EOC score produced by the tool is appropriate for this module

  Strongly Agree  （5）

  (9)The EOBL score produced by the tool is appropriate for this module

  Strongly Agree  （5）

\* 17. Please rank the following metrics by their importance for maintainability assessment, from 1 (most important) to 8 (least important)

Cyclomatic Complexity (CC)→Number of Processes (NOP)→Number of Data Stores Used (NODSU)→Module Halstead Volume (MHV)→Extensiveness of Comments (EOC)→Number of Control Data Flows (NOCDF)→Lines of Expressions (LOE)→Extensiveness of Blank Lines (EOBL)