

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202311038677 A

(19) INDIA

(22) Date of filing of Application :05/06/2023

(43) Publication Date : 07/07/2023

(54) Title of the invention : SYSTEM AND METHOD FOR NON-EXECUTION BASED SOURCE CODE ANALYSIS

(51) International classification :B01J 311800, F02N 111000, G06F 087500, G06F 113600, H04M 017245

(86) International Application No :NA
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA
Filing Date :NA

(62) Divisional to Application Number :NA
Filing Date :NA

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(57) Abstract :

The present invention discloses a system (100) for non-execution based source code analysis. The system includes a processor that searches a plurality of codes in a project and detects vulnerabilities without executing the code, verifies the codes against conventional code guidelines and preset rules, determines whether any of the codes comply with the preset rules and identifies false positives in the analysis result. Additionally, the processor detects errors that are corrected based on the analysis result which also facilitates code testing after correction through code execution. Further, the system generates comprehensive reports presenting the analysis result, including recommendations for improvements, and ensures efficient and reliable non-execution based source code analysis, aiding software development and quality assurance teams in improving code quality and security.

No. of Pages : 28 No. of Claims : 8