

Table 8 Defect Causes Classification.

Primary Cause	Secondary Causes
Coding Errors	Logical errors, Syntax errors, Interface misuse
Design Flaws	Architectural issues, Misunderstanding requirements, Security vulnerabilities
Insufficient Testing	Incomplete coverage, Lack of automation, Insufficient performance testing
Human Errors	Poor communication, Missing or outdated documentation, Configuration mistakes
Tools and Environment Issues	Development tool bugs, Environmental differences