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IEEE Standard Classification for Software Anomalies

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1. Overview

1.1 Scope

This standard provides for the core set of attributes for classification of failures and defects. It is recognized that there are other attributes of failures or defects that are of unique value to specific applications or business requirements. This standard is applicable to any software (including operating systems, database management systems, applications, testware, firmware, and embedded software) and to any phase of the project, product, or system life cycle by which the software is developed, operated, and sustained. Classification attributes are unaffected by the choice of life cycle model, and that choice is outside the scope of this standard. Some tailoring of classification attribute values based on the chosen life cycle is expected and consistent with the intent of this standard.

1.2 Purpose

The purpose of this standard is to define a common vocabulary with which different people and organizations can communicate effectively about software anomalies and to establish a common set of attributes that support industry techniques for analyzing software defect and failure data.

1.3 Field of application

As depicted in Figure 1¹ and Figure 2, problems may be precursors to failure recognition. These are the conditions by which a user recognizes that the software is performing in an undesirable manner. Similarly,

¹ Notes in text, tables, and figures of a standard are given for information only and do not contain requirements needed to implement this standard.