

Topic #1 – What is Software Testing?

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TOPIC #1 – WHAT IS SOFTWARE TESTING?

Validation vs. verification

Definitions about Software Testing

Software Testing Objectives and Focuses

Validation vs. Verification

Software Testing Scope





TOPIC #1 – WHAT IS SOFTWARE TESTING?

Definitions:

“Testing is the **process** of establishing **confidence** that a program or system does what it is **supposed to.**” (by Hetzel 1973)

“Testing is the **process** of executing a program or system with the **intent of finding errors.**” (by Myers 1979)

“Testing is any **activity** aimed at **evaluating an attribute** or **capability** of a program or system and determining that it **meets** its **required results.**” (by Hetzel 1983)





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IEEE Definitions:

“Software testing is the process of analyzing a software item to detect the differences between existing and required conditions (that is, bugs) and to evaluate the features of the software item”.

“Reliability is the ability of a system or component to perform its required functions under stated conditions for a specified period of time.”





TOPIC #1 – WHAT IS SOFTWARE TESTING?

Verification: Are we building the product right?

Verification: the process of evaluating a system or component to determine whether the products of a given development phase satisfy the conditions imposed at the start of that phase

Validation: Are we building the right product?

Validation: process of evaluating a system or component during or at the end of the development process to determine whether it satisfies specified requirements





TOPIC #1 – WHAT IS SOFTWARE TESTING?

Major Objectives:

1

Requirement Confirmation



Software Product



Requirements



2

Bug Detection

3

Product Quality Assurance



Software Product



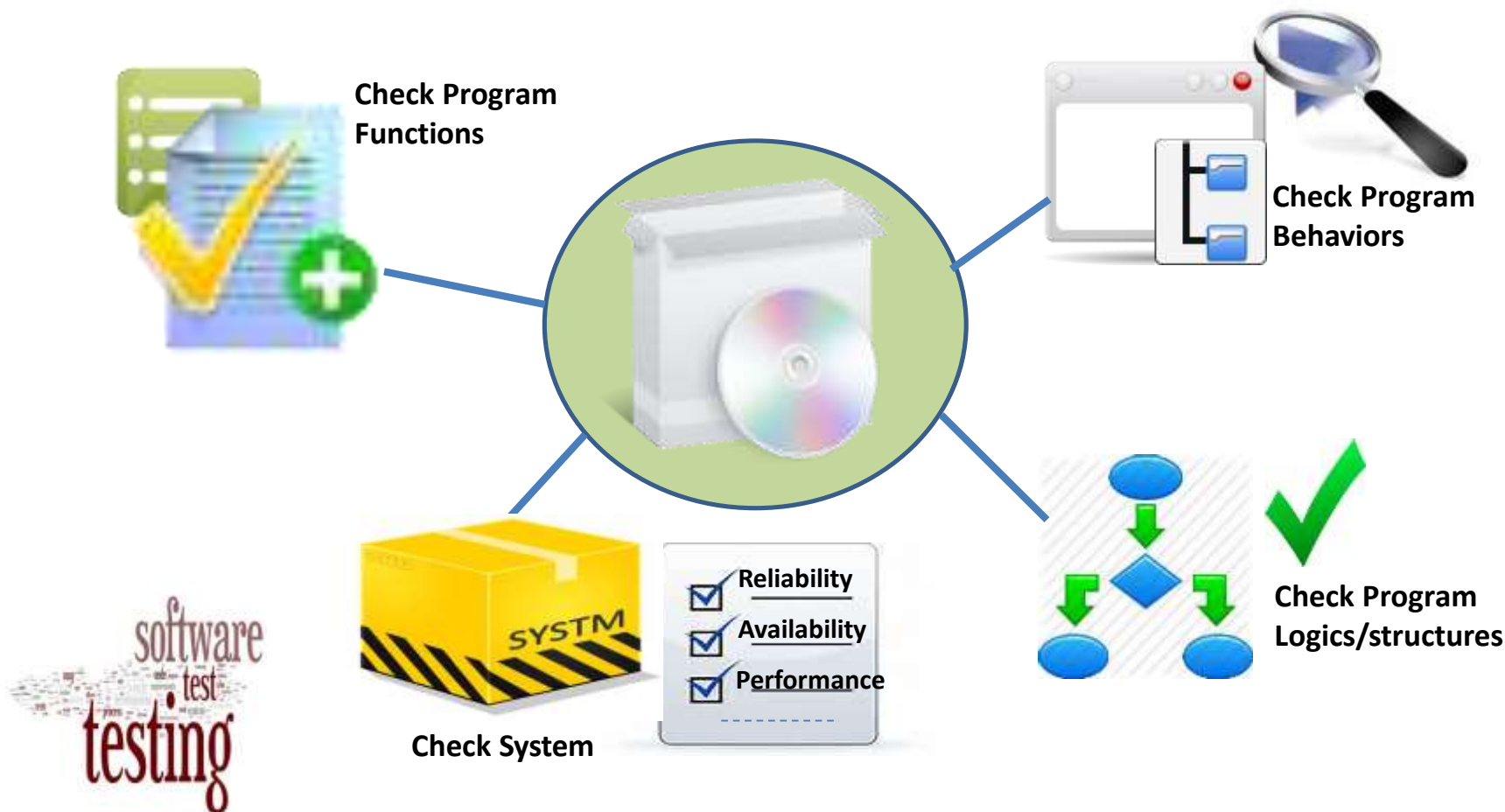
Bug Reports





TOPIC #1 – WHAT IS SOFTWARE TESTING?

Primary Software Testing Focuses:





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Software Testing Scope:

