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What are Test Oracles

BY DINESH THAKUR Category: [Software Engineering](#)Ad closed by
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Prototyping**Model in****Software****Engineering****What is SRS?****List & Describe****Various****Characteristics****of an SRS****What is****Feasibility****Study? Types of****Feasibility.****Explain****Feasibility****Study Process****Discuss in****Detail Coupling
and Cohesion****Basic Courses**

Computer
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Java Script
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C Programming
(Theory)
C Programming
(Practical)
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Java
Programming
Java Servlet
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Graphics

A test oracle is a mechanism; different from the program itself that can be used to check the correctness of the

output of the program for the test cases. Conceptually, we can consider testing a process in which the test cases are given to the test oracle and the program under testing.



The output of the two is then compared to determine if the program behaved correctly for test cases. To help the oracle determine the correct behavior, it is important that the behavior of the system or component be unambiguously specified and that the specification itself is error free.

There are some systems where oracles are automatically generated from specifications of programs or modules. With such oracles, we are assured that the output of the oracle is consistent with the specifications.

◀ Previous Article

Software Maintenance in

Software Engineering

Next Article ▶

Software Maintenance

Life Cycle

About Dinesh Thakur

Dinesh Thakur holds an B.SC (Computer Science), MCSE, MCDBA, CCNA, CCNP, A+, SCJP

Explain
Software
Process &
Characteristics
Spiral model in
Software
Engineering
What is Process
Model? Explain
Waterfall Model
Along With its
Limitations
What are
Various
Software
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Explain
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: What is
software myth
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Explain
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What is
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Testing?
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Electronic
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 Electronics
 C#
 Programming
 Database
 System

Advance Courses

Website
 Development
 Struts 2 Tutorial
 PHP
 How to
 python
 AngularJS
 Tutorial
 Compiler Design
 Troubleshooting



certifications. Dinesh authors the hugely popular [Computer Notes](#) blog. Where he writes how-to guides around Computer fundamental , computer software, Computer programming, and web apps. For any type of query or something that you think is missing, please feel free to [Contact us](#).

**List & Explain
Various
Components of
an SRS
Software
Engineering -
What is
Software
Engineering?
Write Basic
Objective and
Need for
Software
Engineering
Differentiate
Between Error,
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Failure
Describe
Difference
Between Top-
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Model along
with the
Parameters
Defined in it
Rapid
Application
Development
(RAD) Model
and its
Advantages and
Disadvantages
of RAD Model

Write and Explain Software Development Phases
What is a Test Plan? What should a Test Plan Include Requirements Analysis in Software Engineering
What is Software Requirements Specification? Explain Structure and Characteristics of SRS.
Principles of Software Design & Concepts in Software Engineering
What is build and fix model or ad hoc model? and Explain its Advantages and Disadvantages
Software Crisis in Software

Engineering

What is

Exhaustive

Testing

Incremental

Model or

iterative

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Classification of

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Metrics in

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What is Formal

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Advantages and

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of Formal

Methods Model

Explain

Software

Components

Applications

What is Risk

Management?

Give Brief Ideas

for Risk

Assessment

and Control

**Architectural
Design in
Software
Engineering
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Different
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Project
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Case
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Mean by
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Discuss the
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and Models of
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Engineering and
Software
Engineering
Layers
Object-Oriented
Testing**

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Test Criteria
Software
Metrics in
Software
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Software
Testing
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Types of
Software
Testing
Strategies
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Software Quality
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What is Black
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Explain Object
Oriented
Analysis and
Design Tools
What is V-model
? Advantages
and

**Disadvantages
of V Model.**

**What are the
Different**

Verification

Methods Used

for Detailed

Design

What do you

Mean by

Process

Improvement

and Maturity.

Explain the

CMM Model

Software

Engineering

Phases

What are

Function

Points? How are

they

Computed?

Explain

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Requirement

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Validation in

**Software
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software
engineering
Write a Note on
Software Design
Phases
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Practices with
Top-Down,
Bottom-Up,
Structured
Programming,
and Information
Hiding
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Engineering
Challenges
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Assessment
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Testing – What
is Software
Testing?
Characteristics
of Software
Test.
What is
Mutation
Testing**

**Criteria for
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What are
Various Types
of Errors that
Occur in SRS
Levels of
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Documentation
in Software
Engineering
Write Major
Problems in
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(Software)
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Engineering
What is Static
Analysis? How
is it Performed?
What are its
Uses
Explain Various
Programming
Practices used
in Coding. What**

is meant by
Information
Hiding
Coding
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Write a Short
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Control
Termination
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Emergence of
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Proving the
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Cross-
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Determines
Review of
System
Software
Maintenance
Life Cycle
What are Test
Oracles
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**Software
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(SDD)
Software
Measurement in
Software
Engineering
What are the
Different
Approaches
Used for the
Verification of a
Design
Document
Software
Process and
Life Cycle
Write Role of
Management
Tools for
Software
Maintenance
Apart from
Requirement
Reviews what
are the other
Methods Used**

for the
Validation of
SRS
Test Case
Design |
Software
Testing
Measuring
Software Quality
in Software
Engineering
Object Oriented
Metrics in
Software
Engineering
Coding
Methodology in
Software
Engineering
Techniques for
Maintenance
Software
Testing Tools
Test Plan |
Software
Testing
Software
Requirements
Engineering
Tools
Requirements
Elicitation or
requirements
capture or

requirements
acquisition
Analysis
Patterns in
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Engineering
Quantitative
Process
Management
(QPM)
Designing
Software
Metrics in
Software
Engineering
Features of
Software Code
in Software
Engineering
Responsibilities
of Software
Project Manager
Issues in
Software
Metrics
What is Bottom-
Up Design?
Process Change
Management
(PCM)
Organization
Process
Definition (OPD)

Technology
Change
Management
(TCM)
Coding Tools in
Software
Engineering
Organization
Process Focus
(OPF)

Software Engineering

- Process Change Management (PCM)
- Tools for Software Maintenance
- Discuss the Different Levels of Testing
- Criteria for Selecting Software Process Models
- Write a Note on Software Design Phases
- Requirements Management Process in Software Engineering
- Features of Software Code in Software Engineering

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