Fundamentals of ISTQB

What is Software Testing?

Software testing is the process of evaluating a software product to detect differences between existing and required conditions (defects) and to assess the features of the software.

According to ISTQB: *"Testing is the process consisting of all life cycle activities, both static and dynamic, concerned with planning, preparation, and evaluation of software products."*

Seven Principles of Testing (ISTQB)

1. Testing shows the presence of defects.

2. Exhaustive testing is impossible.

3. Early testing.

4. Defect clustering.

5. Pesticide paradox.

6. Testing is context dependent.

7. Absence-of-errors fallacy.

SDLC vs STLC

- **SDLC** (Software Development Life Cycle): Focuses on requirement analysis, design, development, deployment, and maintenance.

- **STLC** (Software Testing Life Cycle): Involves requirement analysis, test planning, design, execution, closure, and reporting.

Test Levels

- Unit Testing

- Integration Testing

- System Testing

- Acceptance Testing