



CSE3001-Software Engineering

Lab Assessment 3

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Software Crisis

Objective: To identify the problem related to software crisis for a given scenario.

Background:

In the early years of computers applications, the focus of the development and innovation were on hardware. Software was largely views as an afterthought. Computer Programming was an art. Programmers did not follow any disciplined or formalized approaches. This way of doing things was adequate for a while, until the sophisticated of computer applications outgrow. Software soon took over and more functions which were done manually. A software houses begin to develop for widespread distribution. Software development projects produced thousands of source program statement. With the increase in the size and complexity of the software, following situation resulted is collectively termed as software crisis.

1. Time Slippage
2. Cost Slippage
3. Failure at customer Site
4. Intractable Error after delivery

Problem Description:

In the context of this background, for each of the scenario mentioned below, identify the most appropriate problem related to software crisis and mention the same in the table provided.

Scenario A Railways reservation software was delivered to the customer and was installed in one of the metro stations at 12.00 AM (mid-night) as per the plan. The system worked quite fine till the next day 12.00 PM (noon). The system crashed at 12.00 PM and the railways authorities could not continue using software for reservation till 02.00 M. It took two hours to fix the defect in the software in the software.

Scenario B A polar satellite launch vehicle was scheduled for the launch on August 15th. The auto-pilot of the rocket to be delivered for integration of the rocket on May 15th. The design and development of the software for the auto-pilot more effort because of which the auto-pilot was delivered for the integration on June 15th (delayed by a month). The rocket was launched on Sep 15th (delayed by a month).

Scenario C Software for financial systems was delivered to the customer. Customer informed the development team about a mal-function in the system. As the software was huge and complex, the development team could not identify the defect in the software.

Scenario D Due to defect in the software for the baggage handling system, there was a loss of 2M of revenues for the airport authorities.

Scenario	Situation [As Given A to D]	Justification Your situation choice
A	Failure at Customer Site	The system worked fine before the installation in metro station. But then while the customer started using, the system <u>crashed</u> after some time.
B	Time Slippage	The software for auto-pilot delayed the launch by a <u>month</u> as it took more effort for integration.
C	Intractable Error after delivery.	Due to the huge and complex nature of software, the team could not <u>identify the defect</u> in it after delivery.
D	Cost Slippage	There was a <u>loss of revenue</u> due to defect in software for baggage handling system.