

软件质量保证与测试 · 2020秋冬 · 期末考试

Question 1

Functional TestCase design for ELEVATOR.

对于一个-3楼到20楼的电梯，设计测试用例。用户可以在电梯里选择终点楼层。we suppose a Boolean variable to express an abstract single-use carrying as Y. The start floor is X1, and the destination floor is X2. The function of the elevator should be: $Y=f(x1, x2)$.

根据上面的逻辑设计Test Case:

(下面有Partition of X1, Partition of X2)

根据上面的等价类划分，the test cases are designed and expressed as th following table.

(接下来大概是填一个Test case的表，包括数据和预期结果)

Question 2

Determine coverage

1. Use Venn diagram to elaborate the relationship of 语句覆盖，条件覆盖，判断覆盖，条件判定覆盖
2. 根据一段代码，设计Control flow graph，然后填test case的表

Question 3

Test process

基于敏捷开发（比如SCRUM），考虑一个工作循环中的测试工作，回答下列问题：

1. The test process itself
2. The objective of business analysis task of QA/Test team
3. The cooperation of QA/Test team and the development team (narrowed meaning)
4. The responsibility on the release candidate submission (Deliverables) of QA/Test team

Question 4

V- model

1. Give an outline of the V- model in the form of a diagram including input, output, task and validation.
2. 写出V-model中涉及到的四个文档（对偶的），以及关联的阶段
3. 给出V模型的一个优点和一个缺点
4. 解释集成测试，单元测试，系统测试的不同点

Question 5

Basic Concept

写出QA和test的区别

Question 6

Explain the glossary

解释下列名词（六选三）

- Traceability
- Coverage
- Condition coverage
- Configuration management
- Bug lifecycle
- Debugging