## Test 1

02 October, 2023

## Multiple choice questionnaire – key terms

A question might have several correct answers. Answer is answered correctly, if all correct answers are marked.

- 1. How is the development of cost-effective solutions to practical problems through the application of scientific knowledge, called?
  - o Live-cycle
  - o Building
  - o Engineering
  - Application
- 2. What are the major stakeholder interests?
  - Development interests
  - Usage interests
  - o Financial interests
  - Observational interests
- 3. During which activities requirements inconsistencies can be found?
  - o Requirements validation
  - o Requirements elicitation
  - o Requirements documentation
  - o Requirements management
- 4. During which activity does requirement engineer establish requirements traceability, prioritise requirements, and manage changes of requirements artefacts?
  - o Requirements management
  - o Requirements representation
  - o Requirements validation
  - Requirements documentation
- 5. What concerns should be included to requirement specification (document)?
  - o Performance
  - Attributes
  - Design constraints imposed on and implementation
  - Functionality
- 6. Why is it important to resolve requirements conflicts?
  - o For the interdependence and clarity
  - o For the complete specification of the requirements
  - o For the acceptance of the system by stakeholders
  - o For the successful (i.e., timely, within the budget, and etc.) completion of the project

## 测试1

02 2023 年 10 月

## 多项选择问卷 - 关键术语

- 一个问题可能有多个正确答案。如果所有正确答案均被标记,则答案已正确回答。
  - 1. 通过应用科学知识为实际问题开发具有成本效益的解决方案,这叫什么?
    - o 生命周期
    - Ø建筑
    - Ø工程
    - Ø 应用
  - 2. 主要利益相关者的利益是什么?
    - o 发展利益
    - o 使用兴趣
    - o 经济利益
    - o 观察兴趣
  - 3. 在哪些活动中可以发现需求不一致的情况?
    - o 需求验证
    - o 需求获取
    - 0 需求文档
    - Ø 需求管理
  - 4. 需求工程师在哪些活动中建立需求可追溯性、确定需求优先级并管理需求工件的变更?
    - Ø需求管理
    - 0 需求表示
    - o 需求验证
    - ο 需求文档
  - 5. 需求规范 (文档) 中应包含哪些问题?
    - Ø性能
    - 。属性。施加和实现的设计约束。功能
  - 6. 为什么解决需求冲突很重要?
    - 。相互依赖性和清晰度。要求的完整规范。利益相关者对系统的接受。成功(即及时、在预算范围内等)完成项目

- 7. How are aspects which concern the operational or technical environment where the system is deployed, called?
  - Subject facet
  - Usage facet
  - o Development facet
  - o IT system facet
- 8. How are systems that are useful in the context of some human activities supported by the software, which is run on some hardware, called?
  - Computer systems
  - o Information systems
  - o Software-intensive systems
  - Software systems
- 9. What type of conflict does exist if stakeholders are wrongly or incompletely informed about the requirements?
  - Values conflict
  - Data conflict
  - Interest conflict
  - Analysis conflict
- 10. Which requirements negotiation activity might include decision (by authority) making?
  - o Conflict identification
  - Conflict analysis
  - Conflict resolution
  - Conflict documentation
- 11. Which requirements engineering activity does help to achieve progress in the content dimension by detailing information about existing requirements?
  - o Requirements validation
  - o Requirements elicitation
  - o Requirements management
  - o Requirements specification
- 12. What is the part of the system environment relevant for defining, understanding and interpreting the system requirements?
  - System boundary
  - o Requirement engineering
  - o Requirements specification
  - System context

- 7. ) 项目的完成 涉及系统部署的操作或技术环境的方面如何称呼?
  - o 主题方面
  - o 使用方面
  - o 发展方面
  - IT系统方面
- 8. 在某些人类活动的背景下有用的由在某些硬件上运行的软件支持的系统如何称呼?
  - Ø计算机系统
  - Ø信息系统
  - o 软件密集型系统
  - 软件系统
- 9. 如果利益相关者错误地或不完全地了解需求,会存在什么类型的冲突?
  - o 价值观冲突
  - o 数据冲突
  - o 利益冲突
  - o 分析冲突
- 10. 哪些需求谈判活动可能包括(权威机构)决策?
  - o 冲突识别
  - o 冲突分析
  - o 冲突解决
  - o 冲突文档
- 11. 哪些需求工程活动通过详细介绍现有需求的信息有助于在内容维度上取得进展?
  - o 需求验证
  - o 需求获取
  - Ø 需求管理
  - o 需求规范
- 12. 系统环境中与定义、理解和解释系统需求相关的部分是什么?
  - o 系统边界
  - o 需求工程
  - o 需求规范 o 系统上下文

Exercise 1: These requirements are extracted from solutions of your colleagues. Do they correspond to the "criteria of good requirements"?

If not, please refine them so that they would correspond to the "criteria of good requirements".

**SecReq.1**: The football federation employee, Bob, may remove the league secretary at any time and it should be available.

**SecReq.2:** After match team representatives sign the report and optionally provide comments.

**SecReq.3:** Confirmation of game results by the team shall be allowed only for team representative which represents team under action

**SecReq.4:** Football Federation Employee should be identified before having access to use the functions related to the creation of the game report to prevent unauthorized people to create fake game reports.

SecReq.5: ERIS shall allow all Users to view all Data in the Game Report.

**SecReq.6:** Football Federation Employee (legal secretary) needs authorization to insert the initial data, Final confirmation in the game report.

**SecReq.7:** Security Criteria: Integrity of creating Team Composition Security Control: Implementing authorization policy for team representatives' roles.

**SecReq.8:** User must be logged in and have a role of "League Secretary" to confirm game report and "Team Representative" must have submitted Game Report

练习 1: 这些要求是从同事的解决方案中提取的。它们是否符合"良好要求的标准"?如果没有,请对其进行改进,使其符合"良好要求的标准"。

SecReq 1: 足协雇员鲍勃可以随时罢免联赛秘书,并且该秘书应该可用。

SecReq .2: 赛后球队代表在报告上签名并可选择提供评论。

SecReq 3: 仅允许代表参赛球队的球队代表确认球队的比赛结果

SecReq .4: 足协员工在使用与创建比赛报告相关的功能之前应进行身份验证,以防止未经授权的人员创建虚假比赛报告。

SecReq .5: ERIS 应允许所有用户查看游戏报告中的所有数据。

SecReq .6: 足协员工(法定秘书)需要授权才能在比赛报告中插入初始数据、最终确认。

SecReq 7:安全标准:创建团队组成的完整性安全控制:实施团队代表角色的授权策略。

SecReq .8: 用户必须登录并具有"联赛秘书"角色才能确认比赛报告,并且"战队代表"必须已提交比赛报告

**Exercise 2:** Think of the Universities OIS system <a href="https://ois2.ut.ee/">https://ois2.ut.ee/</a>. Describe the four facets of this system context:

Exercise 3: Analyse the given accounting document and elicit at least five requirements (written requirements must respect criteria of good requirements!).

Mary's Design Service Balance Sheet September 30, 2018					
ASSETS		LIABILITIES			
Cash	\$ 300	Notes payable	\$ 1,000		
Accounts receivable	1,000	Accounts payable	325		
Supplies	160	Wages payable	75		
Prepaid insurance	90	Unearned revenues	100		
Land	10,000	Total liabilities	1,500		
		OWNER'S EQUITY			
		M.Smith, Capital	10,050		
Total assets	\$ 11,550	Total liabilities & owner's equity	\$ 11,550		

		M.Smith, Capital	10,050
Total assets	\$ 11,550	Total liabilities & owner's equity	\$ 11,550
ReqFF.1:			
ReqFF.2:			
ReqFF.3:			
ReqFF.4:			
ReqFF.5:			

练习 2: 想想大学 OIS 系统 https://ois2.ut.ee/。描述该系统上下文的四个方面:

练习 3: 分析给定的会计凭证并得出至少五个要求 (书面要求必须遵守良好要求的标 准!)。

		Balance	ign Service e Sheet er 30, 2018	
ASSETS			LIABILITIES	
Cash	\$	300	Notes payable	\$ 1,000
Accounts receivable		1,000	Accounts payable	325
Supplies		160	Wages payable	75
Prepaid insurance		90	Unearned revenues	100
Land	10	0,000	Total liabilities	1,500
			OWNER'S EQUITY	
			M.Smith, Capital	10,050
Total assets	\$ 1	1,550	Total liabilities & owner's equity	\$ 11,550

1,000 160 90 10,000	Accounts payable Wages payable Unearned revenues Total liabilities  OWNER'S EQUITY	325 75 100 1,500
\$ 11,550	Total liabilities & owner's equity	10,050 \$ 11,550
	160 90 10,000	160 Wages payable 90 Unearned revenues 10,000 Total liabilities  OWNER'S EQUITY  M.Smith, Capital