31269 Business Requirement Modelling

Course area UTS: Engineering//SSTC

Delivery Autumn 2021; China

Credit points 6cp/3.5cp

Result type Grade and marks

Attendance: 2h lecture week 1-15,2 h pw workshop session week 1 to 14. All tutorial classes will be held online via Zoom internal NEUQ campus.

Subject coordinator

Associate Prof. Asif Gill

Asif.Gill@uts.edu.au

Dr Kuan FAN

Kuan.FAN@uts.edu.au

Teaching schedule

Purpose: to outline details of weekly teaching program so the SSTC co teachers can prepare or support the delivery.

Delivery structure:

- 1hour lecture (UTS) –online to the whole cohort (116 students)
- 2hour workshop (UTS) X 2-group work, students should join zoom breakout rooms.

Timetable:

Session	Beijing	Sydney Time (Summer/Winter)	Mon	Tue	Wed	Thu	Fri
1	8:00-8:50	11:00-11:50/10:00-10:50					Lecture (UTS)
	9:00-9:50	12:00-12:20/11:00-11:50					Recap (SSTC)
2	10:15-11:05	13:15-14:05/12:15-13:05					Workshop 1 Class 1 & 2 (60) Mahira
	11:15-12:05	14:00-15:05/13:15-14:05					
3	14:00-14:50	17:00-18:00/16:00-16:50					Workshop 2 Class 3 & 4(56) Atif
	15:00-15:50	18:00-18:50/17:00-17:50					
4	16:15-17:05	19:00-19:50/18:00-18:50					

	17:05-18:05	20:00-20:50/19:00-19:50					
5	19:00-19:50	22:00-22:50/21:00-21:50/					
	20:00-20:50	23:00-23:50-22:00-22:50					

Teaching learning Subject learning objectives (SLOs)

Upon successful completion of this subject students should be able to:

1. Identify stakeholders, understand their needs, and learn what/how to capture requirements in the system development process.
2. Apply modelling and systems analysis techniques that help understand the working of a business system.
3. Document and specify various requirements via Software Requirements Specification (SRS).
4. Develop various models using a range of systems analysis techniques to analyse and specify system and user requirements.
5. Work effectively in a small team.

Weekly program:

	Teaching details
W1 17 Sep	Subject Outline and Introduction to BRM
W2 24 Sep	Requirements Process
W3 1 Oct	Public holiday in China (non-teaching)
W 4 8 Oct	Requirements Elicitation **(Day Light Saving)**
W5 15 Oct	Requirements Analysis - Process Modelling Quiz 1 Topic: "Requirements Process and Elicitation"
W6 22 Oct	Requirements Analysis - Data Modelling
W7 29 Oct	Software Requirement Specification (SRS) and Agile Development Quiz 2 Topic: " Process Modelling and Data Modelling"
W8 5 Nov	Agile Development and User Stories
W9 12 Nov	Object-Oriented Models with UML- Use Case Modelling Quiz 3 Topic: "SRS and Agile Development, Agile Development and User Stories"
W10 19 Nov	Object-Oriented Models with UML – Class Modelling
W11 26 Nov	Object-Oriented Models with UML – Interaction Modelling Quiz 4 Topic: " Use Case Modelling and Class Modelling"
W12 3 Dec	Object-Oriented Models with UML - State and Event Modelling
W13 10 Dec	Revision Quiz 5 Topic: " "Interaction Modelling, State and Event Modelling"

Assessment

The BRM assignment task 3 and task 4 is a group project. It is an expectation of the subject that you will contribute equally to the research, design, and development of the design solution and your team's assessments. Subject content throughout tutorials will assist you to identify group roles and develop strategies for effective teamwork. Self and Peer evaluation software will be used to evaluate the efficient functioning of the group and individual contribution to the teamwork.

Please see Canvas for a detailed description of the requirements for each assessment task, marking guides (rubrics) and online assignment submission instructions.

Assessment and marking taken by SSTC

Assessment task 1: Pre-Work quizzes

Intent	To increase understanding of key theoretical concepts.
Objective(s)	This assessment task addresses the following Subject Learning Objectives (SLOs): 1, 2, 3, 4 and 5
Type	Quiz/Test
Groupwork	Individual
Weight	15%
Task	A short quiz on the key concepts covered in the pre-class work will be conducted.
Length	10 minutes
Due	Fornight at the end of lecture

Assessment task 2: Weekly Activities

Intent	To produce various models and artifacts of software and business requirements via the traditional and agile approach to software development with attendance and workshop outputs
Objective(s)	This assessment task addresses the following subject learning objectives (SLOs): 1, 2 and 4
Type	Exercises
Groupwork	Individual
Weight	15%
Task	Delivered by weekly workshop activity
Due	Every week after workshop by 11:59pm Sunday

Assessment task 3: Requirements Analysis Report

Intent	To analyse business processes and capture data via the business process and data models.
Objective(s)	This assessment task addresses the following subject learning objectives (SLOs): 1, 2, 3, 4 and 5
Type	Project; Report
Groupwork	Group, individually assessed
Weight	20%
Task	It should be delivered under the case study
Length	1000 words
Due	through online submission by 11:59pm Sunday, 12 Nov.

Assessment task 4: OO Requirements Analysis and Specification Report

Intent	To analyse and capture the functional and non-functional requirements via the SRS, agile artifacts and object-oriented models.
Objective(s)	This assessment task addresses the following subject learning objectives (SLOs): 1, 2, 3, 4 and 5
Type	Report
Groupwork	Group and individually assessed
Weight	30%
Task	It should be delivered under the case study
Length	The recommended word limit for this assignment is maximum 3000 words excluding diagrams, bibliography and appendices. Word limit will be regarded as recommended rather than compulsory, and no student will be disadvantaged by being under or over the recommended word limit.
Due	due through online submission by 11:59pm Friday, 17 Dec.
Other	The role of each individual needs to be identified in the group report.

Assessment task 5: Group oral presentation

Intent	To show the group work and present the whole process in case study, to complicate team member contribution. Showing the software engineering thinking to prove the engineering professional transferable skills.
Objective(s)	This assessment task addresses the following subject learning objectives (SLOs): 1, 2, 3, 4 and 5
Type	Group presentation
Groupwork	Group, individually assessed
Weight	20%
Task	It should be delivered under the case study
Length	30 mins
Due	Presentation would be held in the week 12 Slides through online submission by 11:59pm, 10 Nov.

Minimum requirements: In order to pass the subject, a student must achieve an overall mark of 60% or more.

Textbooks& reference:

- Robertson, S. & Robertson, J. (2013), "Mastering the Requirements Process: getting requirements right", Addison Wesley, 3rd Edition.
- IIBA (2015), "A Guide to the Business Analysis Body of Knowledge", BABOK (any version).
- Bennett, S., McRobb S., & Farmer, R. (2010), "Object-Oriented Systems Analysis and Design Using UML", McGraw Hill, 4th Edition.
- Leffingwell, D. & Widrig, D. (2003), “Managing Software Requirements – A Use Case Approach”, Addison Wesley, Second Edition.
- Brown, D.W. (2002), “An Introduction to Object-Oriented Analysis – Objects and UML in Plain English” Wiley, Second Edition.
- Kendall & Kendall. (2014), “Systems Analysis and Design”, Pearson Education Inc.
- Blaha, M & Rumbaugh, J. (2005), “Object-oriented modeling and design with UML”, Pearson Prentice Hall, 2nd Edition