

1. Course Title (Course Code)

Information System Architecture Special Experiments (2295)

2. Instructor

Teruhiko Hiraishi

3. Term

Spring 1 (M2 students only)

4. Outline and Objectives

Acquire the practical ability for the knowledge and technique of the "Information System Architectures" by practicing through roll playing from acquirer side and supplier side.

5. Goals (Attainment Targets)

- (1). To be able to determine the theme of the requirements as an acquirer.
- (2). To be able to develop RFP(Request for Proposal) as an acquirer.
- (3). To be able to develop the requirement definition documents as a supplier.
- (4). To be able to the system architecture documents as a supplier.

6. Correspondence relationship between Educational goals and Course goals

Educational goals			Course goals
High level ICT skill	Basic academic skills		
	Specialized knowledge and literacy		(1) , (2), (3), (4)
Human skill (Tankyu skill)	Ability to continually improve own strengths		(1) , (2), (3), (4)
	Ability to discover and resolve the problem in society	Problem setting	(1)
		Hypothesis planning	(1), (2), (3)
		Hypothesis testing	(2), (3)
		Practice	(3), (4)
	Fundamental Competencies for Working Persons	Ability to step forward	(1) , (2), (3), (4)
		Ability to think through	(1) , (2), (3)
		Ability to work in a team	(1) , (2), (3), (4)
Professional ethics			

7. Course Requirements

Information System Architectures (achievement of attainment targets is required)

8. Textbooks

None.

9. Reference Books

N.Rozanski,E.Woods,
"Software Systems Architecture: Working with Stakeholders Using Viewpoints and Perspectives",2014

10. Evaluation

Goals	Evaluation method & point					
	term-end exam	quiz	report	presentation	deliverable	other
(1)			○	○	○	
(2)			○	○	○	
(3)			○	○	○	
(4)			○	○	○	
Allocation			30	30	40	

11. Notes

This course is intended to acquire the practical ability by playing both acquirer and supplier side roles,

Course Schedule

(Notice) This schedule is a tentative plan; there might be changes, additions, and revisions etc. at the time of delivering the course.

Lesson 1: Orientation **(lecture & practice , 90 min.)**

Comprehend the outline of the this course.

- (1) Orientation
- (2) Determine the teams, and the roles in the teams.

Lesson 2 - 3: Determining the themes **(practice, 180 min.)**

As an acquirer, after establishing the tasks, determine the theme to order to the supplier.

- (1) Establish the tasks, and determine the theme to order to the supplier.

Lesson 4: Reviewing the theme **(practice, 90 min.)**

Review the theme the team has determined, and check the validity of the theme.

- (1) Make a presentation on the determined theme.
- (2) Strengthen the theme by the given comments from another teams.

Lesson 5: Developing the RFP(1) **(practice, 90 min.)**

As an acquirer, for the determined theme, develop the RFP (Request for Proposal) as an acquirer.

- (1) Develop the RFP for the determined theme.

Lesson 6: Developing the RFP(2) **(practice, 90 min.)**

For the determined theme, develop the RFP (Request for Proposal) as an acquirer.

- (1) Develop the RFP for the determined theme.

Lesson 7: Back up the RFP **(practice, 90 min.)**

As a acquirer, back up the RFP, preparing for the interview from the supplier.

Lesson 8: Organize the requirements(1) **(practice, 90 min.)**

Supplier analyses the stakeholders, through the interview to the acquirer.

- (1) Supplier analyses the stakeholders, through the interview to the acquirer.
- (2) Acquirer responds to the questions from the supplier, if needed.

Lesson 9: Organize the requirements(2) **(practice, 90 min.)**

Supplier extracts the problem of the organization, and the purpose of the system through the interviewing to the acquirer.

- (1) Supplier extracts the problem of the organization.
- (2) Supplier establish the purpose of the system.
- (3) Acquirer responds to the questions from the supplier, if needed.

Lesson 10 - 11: Developing the requirements organize sheet **(practice, 180 min.)**

Supplier develops the requirements organize sheet.

- (1) Supplier develops the requirement organize sheet.
- (2) Acquirer responds to the questions from the supplier, if needed.

Lesson 12 - 13: Modeling the requirements **(practice, 180 min.)**

Supplier models the requirement by using UML(unified Modeling Language) from the requirement organization sheet.

- (1) Supplier develops the use case and activity diagrams.
- (2) Acquirer responds to the questions from the supplier, if supplier needed.

Lesson 14: Making a presentation for the modeled requirements **(practice, 90 min.)**

Supplier makes a presentation for the modeled requirements.

Lesson 15 - 16: Extracting the functional and non-functional requirements **(180 min.)**

Supplier extracts the functional and non-functional requirements using the requirements organize sheet.

- (1) Supplier extracts the functional and non-functional requirements by using requirements organization sheet.
- (2) Acquirer responds to the questions from the supplier, if needed.

Lesson 17 - 18: Developing the requirement definition document **(practice, 90 min.)**

Supplier develops the requirement definition document .by summarizing the purpose, requirement organize sheet, and the modeling document.

- (1) Supplier develops the requirements definition documents.
- (2) Acquirer responds to the questions from the supplier, if needed.

Lesson 19: Presentation on the requirement definition document **(practice, 90 min.)**

Acquirer reviews the requirement organize sheet and requirement definition document, and supplier obtains the acquirer's agreement.

Lesson 20 - 21: Developing the system architecture (1) (2) **(practice, 90 min.)**

Supplier develops the system architecture from the functional and non-functional requirements.

- (1) Supplier develops the system architecture.
- (2) Acquirer responds to the questions from the supplier, if needed.

Lesson 22: Reviewing the system architecture (1) **(practice, 90 min.)**

Acquire reviews the system architecture supplier developed.

- (1) Acquirer reviews the system architecture the supplier developed,
- (2) Supplier responds to the questions from the acquire, if needed.

Lesson 23 - 24: Developing the system architecture (3) (4) **(practice, 90 min.)**

Supplier develops the system architecture from the functional and non-functional requirements.

- (1) Supplier develops the system architecture.
- (2) Acquirer responds to the questions from the supplier, if needed.

Lesson 25: Reviewing the system architecture (2) **(practice, 90 min.)**

Acquire reviews the system architecture supplier developed.

- (1) Supplier fix up the system architecture supplier developed,
- (2) Supplier responds to the questions from the acquire, if needed.

Lesson 26: Wrap up all the outcomes **(practice, 90 min.)**

Supplier wrap up all the outcomes, and prepare for the acquirer's review

- (1) Supplier wrap up the requirement organized sheet,
- (2) Supplier wrap up the requirement definition sheet..
- (3) Supplier wrap up the system architecture.

Lesson 27: Obtain the agreement for the outcomes from the acquirer **(practice, 90 min.)**

Supplier obtains an agreement for the outcomes from the acquirer.

- (1) Supplier obtains an agreement for the outcomes from the acquirer,
- (2) Supplier asks the question from the acquirer.

Lesson 28: Revise the outcomes **(practice, 90 min.)**

Revise the outcomes respond to the acquirer's comment.

- (1) Supplier revises the outcomes respond to the acquirer's comment,
- (2) Acquire confirm the outcomes revised result.

Lesson 29: Summarize the final report **(practice, 90 min.)**

Summarize the final report.

- (1) Team members summarize the report(lessons learned, reflection points, and future tasks.

Lesson 30: Make a presentation for the final report **(practice, 90 min.)**

Make a presentation for the final report.

- (1) Team members make a presentation for the final report.
- (2) Other team members make comment for the presentation.