COMP9323 Software as a Service Project

Term 3 2019

Course Details

Course Code: COMP9323

Course Title: Software as a Service Project

Units of Credit: 6

Course Website: https://webcms3.cse.unsw.edu.au/COMP9323/19T3//

Handbook Entry:
https://www.handbook.unsw.edu.au/undergraduate/courses/2019/COMP9323/

Course Summary

This course is the third instalment of the three-part series of the service-oriented systems engineering stream. It aims at allowing students to pursue a group-based and practical project related to the topics covered service oriented software engineering in an identified area of interests such as cognitive services (messaging bots), crowdsourcing, data analytics, Internet of Things.

Student groups will be supervised by a mentor throughout the project design/implementation/testing/demonstration. Student will be asked to participate in peer reviews for the purpose of learning assessment processes in project-based learning and teaching. The project demonstration will be exhibited to all members of the class at the end of the session.

In this course, we will follow a product-based framework to the project-based learning. Students are expected to engage themselves in research and self-study of the materials required for this course.

The main features of the course are:

- Group-based project related to engineering service-oriented systems
- Learning to develop complex systems through projects
- Learning software as a service engineering methods
- Projects may focus on an identified area of interests (e.g., messaging bots,

crowdsourcing, data analytics, Internet of Things)
- Guest lectures on topics related to project-based software development

Course Staff

- Boualem Benatallah (Lecturer in charge), mentors
- **Email:** b.benatallah at unsw.edu.au
- **Phone:** 93854767

Assumed Knowledge:

- Good knowledge of programming and basic knowledge of Web technologies
- Good knowledge of design concepts and techniques such as UML class diagrams, sequence diagrams, ER diagrams, and service-oriented design

These are assumed to have been acquired in basic computing equivalent (good programming knowledge)

Student Learning Outcomes

After completing this course, students will:

- Learn the process of building a large enterprise system in collaboration with other project members
- Learn the process of developing software in culture of participation
- Learn the process of developing a software as a service
- Learn the process of developing software using agile software engineering methodologies
- Understand peer software artefacts review
- Integrate a number of separate components to build an integrated system
- Develop appropriate testing strategy and methodologies for given projects
- Develop software documentation for various stakeholders
- Present project results to peers and mentors

This course contributes to the development of the following graduate attributes:

Graduate Attribute

- Skills involved in scholarly enquiry
- Capacity for analytical and critical thinking
- Ability to engage in independent and reflective learning
- Skills to locate, evaluate and use relevant information
- Capacity for initiative and creativity
- Appreciation of and respect for, diversity
- Capacity to contribute to, and work within, the international community
- Skills required for collaborative and multidisciplinary work
- Appreciation of, and a responsiveness to, change
- Respect for ethical practice and social responsibility

Course Schedule

It should be noted that this is a project-based course. However, the lecturer will hold project meetings to introduce the main phases of the project. These project meetings include briefs about project deliverables, specific techniques and tools. There will be regular weekly meetings with the project mentors. The course will also have some guest lectures.

Project meetings and mentoring sessions Time:

Wednesday 18h00 – 21h h 00

Location: Tyree Energy Technology G16 (K-H6-G16)

Assessment

There will be no mid-term or final exam in this subject. There will be a large project which consists of the following phases:

- **Phase one:** Requirement analysis & design - Week 2, 3, 4.
- **Phase three:** Implementation - Prototype version 1 - Week 5, 6, 7. A first prototype version is due on week 8. Feedback will be provided by the mentors.
- **Phase four:** Implementation of final version, testing and documenting - Week 9 and 10. A final prototype version is due on week 11. Demonstration of projects will be organized during week 11.

Detailed marking schemes for the various deliverables will be provided in due time. Assessment takes in consideration both individual and group contributions. A late penalty of 10% per day applies to late submissions. The penalty applies to the assessed value of the deliverable; individual marks will then be calculated using the peer assessment formula after the penalty has been applied.

Communication with students

- All contact and announcements will be made via official UNSW email address only; and
- The course online management system will be the other main source of announcements and information. Students who choose to use other email accounts do so at their own risk as they may miss important announcements. You are advised to redirect your UNSW emails to your preferred email account.

Academic Honesty and Plagiarism

UNSW and CSE treat plagiarism as academic misconduct, which means that it carries penalties as severe as being excluded from further study at UNSW. There are several on-line sources to help you understand what plagiarism is and how it is dealt with at UNSW:

- Plagiarism and Academic Integrity: https://student.unsw.edu.au/plagiarism
- MyUNSW: Plagiarism and Academic Misconduct
- CSE Student Conduct: http://webapps.cse.unsw.edu.au/cse/student-conduct.html

Make sure that you read and understand these. Ignorance is not accepted as an excuse for plagiarism.

Course Evaluation and Development

This course is evaluated each session using the standard UNSW course evaluation system.