Course Outline

Contents

- Course Details
- Course Summary
- Assumed Knowledge
- Student Learning Outcomes
- Teaching Strategies
- Teaching Rationale
- Student Conduct
- Assessment
- Course Schedule
- Resources for Students
- Course Evaluation and Development

Course Details

Course Code	COMP9323
Course Title	Software as a Service Project
Convenor	Boualem Benatallah (/users/z3005191)
Admin	Morty Al-Banna (/users/z3445371)
Classes	Project phase briefings/project mentoring sessions Thursdays 6:00PM Timetable for all classes (/COMP9323/20T2/timetable)
Consultations	Contact LiC via e-mail to schedule consultation
Units of Credit	6
Course Website	http://cse.unsw.edu.au/~cs9323/20T2/ (http://cse.unsw.edu.au/~cs9323/20T2/)
Handbook Entry	http://www.handbook.unsw.edu.au/postgraduate/courses/current/COMP9323.html (http://www.handbook.unsw.edu.au/postgraduate/courses/current/COMP9323.html)

Course Summary

This course aims at allowing students to pursue a group-based and practical projects practicing Software as a Service (SaaS), service oriented architectures and agile software engineering methods in an identified area of interests such as learning, development, e-commerce, health, customer support, project management, online communities, online Q&A, entertainment, social and family interactions.

During this term proposed projects will focus on supporting people, communities, businesses and stakeholders during the COVID-19 crisis and beyond. Groups are also encouraged to suggest project proposals in their areas of interests. On the technical front the projects will be an opportunity to learn by doing: learning emerging concepts, techniques and technologies, such as conversation Artificial Intelligence (AI) / conversational bots, crowdsourcing services, data analytics, Internet of Things.

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, entity relationship 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 SaaS product in collaboration with other project members
- Acquire project based learning attributes including collaboration, critical thinking, and authentic learning
- 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
- Develop software documentation for various stakeholders
- Present project results to peers and mentors

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

Graduate Capability	**Acquired in**
Skills involved in scholarly inquiry	Project Work
Capacity for analytical and critical thinking	Project Work
Ability to engage in independent and reflective learning	Project work/Peer Review
Skills to locate, evaluate and use relevant information	Project work/Peer Review
Capacity for initiative and creativity	Project Work
Appreciation of and respect for, diversity	Group Activities
Capacity to contribute to, and work within, the international community	Project Work and activities
Skills required for collaborative and multidisciplinary work	Group Work
Appreciation of, and a responsiveness to, change	Project Work/Peer Review
Respect for ethical practice and social responsibility	Project Work

Teaching Strategies

Student groups will be supervised by a mentor throughout the project phases: features elicitation/design/implementation/testing/demonstration. Students will be required to participate in peer reviews for the purpose of learning assessment processes in project-based learning and teaching. Project demonstrations will be exhibited to all members of the class at the end of the session.

The main features of the course are:

- Group-based project related to engineering SaaS solutions
- Learning to develop complex systems through projects
- Learning software as a service and agile software engineering methods
- Projects may focus on an identified area of interests (e.g., technology enabled solutions for education, health and safety, advice, elderly care, remove work, wellbeing)
- Guest lectures on topics related to topics that are relevant to software prototyping, software development, agile software engineering, messaging bots development.

Teaching Rationale

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

Student Conduct

The **Student Code of Conduct** (Information (https://student.unsw.edu.au/conduct) , Policy (https://www.gs.unsw.edu.au/policy/documents/studentcodepolicy.pdf)) sets out what the University expects from students as members of the UNSW community. As well as the learning, teaching and research environment, the University aims to provide an environment that enables students to achieve their full potential and to provide an experience consistent with the University's values and guiding principles. A condition of enrolment is that students *inform themselves* of the University's rules and policies affecting them, and conduct themselves accordingly.

In particular, students have the responsibility to observe standards of equity and respect in dealing with every member of the University community. This applies to all activities on UNSW premises and all external activities related to study and research. This includes behaviour in person as well as behaviour on social media, for example Facebook groups set up for the purpose of discussing UNSW courses or course work. Behaviour that is considered in breach of the Student Code Policy as discriminatory, sexually inappropriate, bullying, harassing, invading another's privacy or causing any person to fear for their personal safety is serious misconduct and can lead to severe penalties, including suspension or exclusion from UNSW.

If you have any concerns, you may raise them with your lecturer, or approach the School Ethics Officer (mailto:ethics-officer@cse.unsw.edu.au) , Grievance Officer (mailto:grievance-officer@cse.unsw.edu.au) , or one of the student representatives.

Plagiarism is defined as (https://student.unsw.edu.au/plagiarism) using the words or ideas of others and presenting them as your own. 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)
- UNSW Plagiarism Procedure (https://www.gs.unsw.edu.au/policy/documents/plagiarismprocedure.pdf)

Make sure that you read and understand these. Ignorance is not accepted as an excuse for plagiarism. In particular, you are also responsible that your assignment files are not accessible by anyone but you by setting the correct permissions in your CSE directory and code repository, if using. Note also that plagiarism includes paying or asking another person to do a piece of work for you and then submitting it as your own work.

UNSW has an ongoing commitment to fostering a culture of learning informed by academic integrity. All UNSW staff and students have a responsibility to adhere to this principle of academic integrity. Plagiarism undermines academic integrity and is not tolerated at UNSW. Plagiarism at UNSW is defined as using the words or ideas of others and passing them off as your own.

If you haven't done so yet, please take the time to read the full text of

- UNSW's policy regarding academic honesty and plagiarism (https://student.unsw.edu.au/plagiarism)

The pages below describe the policies and procedures in more detail:

- Student Code Policy (https://www.gs.unsw.edu.au/policy/documents/studentcodepolicy.pdf)
- Student Misconduct Procedure (https://www.gs.unsw.edu.au/policy/documents/studentmisconductprocedures.pdf)
- Plagiarism Policy Statement (https://www.gs.unsw.edu.au/policy/documents/plagiarismpolicy.pdf)
- Plagiarism Procedure (https://www.gs.unsw.edu.au/policy/documents/plagiarismprocedure.pdf)

You should also read the following page which describes your rights and responsibilities in the CSE context:

- Essential Advice for CSE Students (https://www.engineering.unsw.edu.au/computer-science-engineering/about-us/organisational-structure/student-services/policies/essential-advice-for-cse-students)

Assessment

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

Item	Topics	Due	Marks
Project Phase 1 Deliverable	Project scoping and features (requirements)	Week 4	25%
Project Phase 2 Deliverable	Software prototype (Version 1) (presentation, data model, software architecture, and peer review)	Week 8	25%
Project Phase 3 Deliverable	Final software prototype (demo, project artifacts, and documentation)	Week 11	50%

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.

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 phases and deliverables, specific techniques and tools. There will be regular weekly meetings with the project mentors. The course will also have some guest lectures.

the project consist of the following Phases:

Phase	Description	Weeks
Phase 0	Groups formation	Week 0,1
Phase 1	Project scoping and features (requirements)	Weeks 2-4
Phase 2	Software prototype (Version 1) (presentation, data model, software architecture, and peer review)	Weeks 5,7,8

Phase 3	Final software prototype (demo, project artifacts, and documentation)	Weeks 9,10,11

Project meetings and mentoring sessions Time:

During 20T2,students will be able to complete the course online. We will inform students if and when UNSW resumes face-to-face teaching, due relaxing restrictions. While groups may agree with their mentors on mentoring sessions time, we booked the following time for project weekly meetings (i.e, briefs about project phases and deliverables, guest lectures)and mentoring session time. Attendance of the online mentoring sessions is required for all group members:

Thursday: 18h00 – 21h00

Resources for Students

This is a project based learning course. During the project phase briefings, relevant references will be recommended to students. Examples references include:

Berkun, Scott. The art of project management. O'Reilly 2005

Fox, Armando, David A. Patterson, and Samuel Joseph. *Engineering software as a service: an agile approach using cloud computing* . Strawberry Canyon LLC, 2013.

Course Evaluation and Development

This course is evaluated each session using the myExperience system.

In the previous offering of this courses, students noted ...

Based on their comments, we have ...

Resource created about a year ago (Tuesday 28 April 2020, 01:51:59 AM), last modified about a year ago (Thursday 04 June 2020, 04:33:35 AM).

Comments

(/COMP9323/20T2/forums/search?forum_choice=resource/44868)

(/COMP9323/20T2/forums/resource/44868)

There are no comments yet.