Introduction to Software Engineering
Course Information

General Information:
Instructor: **David Jorjani**

LEC 5101:
Classes: Mondays & Thursdays 18:00 – 20:00
Tutorials: Mondays & Thursdays 20:00 – 21:00
https://utoronto.zoom.us/j/83888595339
Passcode: 887759

Office Hours: after Thursday lectures or by appointment (please send an email)

Emails:

csc301-2022-09@cs.toronto.edu to general requests related to the course

csc301-2022-09-assignment@cs.toronto.edu for emails related to assignments

csc301-2022-09-project@cs.toronto.edu for emails related to projects and tutorials

Project TAs:

- TBD

Assignment TAs:
- TBD

Course Description:
Introduction to software development methodologies with an emphasis on agile development methods appropriate for rapidly-moving projects. Topics include basic software development infrastructure; requirements elicitation and tracking; estimation and prioritization; prototyping; basic project management; introduction to software architecture; testing; teamwork skills; design patterns and refactoring; professional responsibility.

Textbook and references:
Given the vast areas of the course, there is **no one textbook** that would cover everything. After every lecture, I will provide recommended readings and suggest you read them for a deeper understanding of the topics.

One of our key references throughout the term will be the Developer Roadmap Repository, which we will refer to with specific topics in relevant classes.

Online resources:

Course information, lecture notes, tutorial material, important announcements, etc. will be posted on the course website on Quercus. It is your responsibility to visit it frequently. You are encouraged to use the discussion board to discuss the course material, pose questions on the assignments, etc. The discussion board will be monitored by your instructor and the TAs.

> Course Website: Quercus
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> Discussion Board: TBA
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> GitHub Classroom TBA

Online Delivery

The course is scheduled to be delivered online. The course, including your participation, will be recorded on video and will be available to students in the course for viewing after each session. All of the lectures will have an activity component and it is strongly advised to attend them so you can apply the learnings.

Warning: Watching a recording 2x after the lectures will reduce your learning by more than 2x. So plan to attend and participate.

Course videos and materials belong to your instructor, the University, and/or other source depending on the specific facts of each situation, and are protected by copyright. In this course, you are permitted to download session videos and materials for your own academic use, but you should not copy, share, or use them for any other purpose without the explicit permission of the instructor.

For questions about recording and use of videos in which you appear please contact your instructor.

Accessibility Statement:

Students with diverse learning styles and needs are welcome in this course. In particular, if you have a disability/health consideration that may require accommodations, please feel free to approach the instructors and/or the Accessibility Services as soon as possible. We will work with you and Accessibility Services to ensure you can achieve your learning goals in this course. Enquiries are confidential.

Contacting the Instructor:

Please use email for personal issues and use the discussion board to ask general course-related questions. Always use the **email addresses provided above** so you get your response in time. We receive a large quantity of emails over the term, but we try to respond within 48 hours. However, it may take longer, especially on weekends and near due dates. Note that questions about the assignment asked the day before it's due may not be answered before the deadline, whether it is asked on the discussion board, by email, or in person.

Always send emails from your official UofT email address and begin email subject lines with "[CSC301]" lest your message accidentally be filed as spam.

Prerequisites and Exclusions:
Prerequisites: CSC209H1, CSC263H1/CSC265H1

It is **your responsibility** to ensure you have all the prerequisites for the course. If you don't have the prerequisites, please email the instructor(s) with information about your missing prerequisites and **specify why you qualify for being granted a waiver** to stay in the course. Otherwise, you will be dropped from the course.

Evaluation:
There will be two assignments, worth a total of 20%.

The **team project** (you will work in teams of 6-7 students) will be worth 70%, based on four deliverables.

The ability to work in a team effectively is a large part of the course. It is important that you are working with your team and pulling your weight on all aspects of the team project. **Your individual contribution is important, and individual marks will vary depending on your contribution, which will be assessed primarily by your peers (through evaluations) throughout the term.** Contributions in tutorials, work in deliverables, Git logs assessed through TA analysis and TA evaluations may also impact your grade based on the teaching team's discretion. **Every member of the team must contribute to the code. You may get zero for a deliverable if you do not contribute.**

There is no midterm or final exam.

Active Participation will be assessed through your participation in classes and tutorials using the following components:

1. Contribution to class activities and questions (2%)
2. 3 survey responses throughout the term (3%)
3. Active participation in tutorials and team meetings (captured through deliverables) (5%)

Special Consideration for lateness, illness, and emergencies:
We recognize that each of you may face unique challenges of varying degrees of adversity that can impact your ability to complete coursework on time to a high degree of quality and meet your academic commitments. **Every student (for assignment) and every team (for deliverables other than presentation) will be granted a grace period of up to 48 hours** if they are experiencing illness or other emergencies that prevent them from being able to complete any homework on time (without the need for documentation). Accessing the grace period requires only the completion of this online form (~2 mins). **If you are a student registered with Accessibility Services, your accommodations apply in addition to this grace period.**

If you require additional time or further consideration beyond what is granted above (e.g. more time on one coursework item or extensions for additional coursework items), please contact us through the course **assignment and project emails** listed above from your UofT email address with the following information:

- Your UTORid and student number.
- The coursework you are applying for special consideration on.
- The date when you will be able to complete coursework again.

- Your marking TA will assess your request and respond. The only exception is for the presentation, which you need to coordinate directly with the instructor(s)

While this does not guarantee that you will be granted special consideration, we will use our discretion to support your ability to learn and succeed within the course including:

- Cancelling a deliverable and re-weighting other coursework
- Creating 'make-up' assessments
- Modifying the requirements for existing assessments to enable completion

IMPORTANT: Notify the instructors or your TA as soon as possible if you find yourself in a difficult situation. It is always easier to resolve situations earlier rather than later and you will save yourself days of extra stress. If your emergency will affect your ability to complete coursework for more than a few days, or in multiple courses, we recommend you also talk to your registrar.

We will default to trust and generosity and will act with absolute fairness and within the bounds defined by the university.

Academic Integrity

You must cite your work properly. This includes project work, assignments, and reports you submit including your code. Please review the material suggested in the lectures and consult the University's site on Academic Integrity http://academicintegrity.utoronto.ca/. The University has a zero-tolerance policy on plagiarism as defined in section B.I.1.(d) of the University's Code of Behaviour on Academic Matters http://www.governingcouncil.utoronto.ca/Assets/Governing+Council+Digital+Assets/Policies/PDF/ppjun011995.pdf. You should acquaint yourself with the Code. Please review the material in Cite it Right and if you require further clarification, consult the site How Not to Plagiarize http://advice.writing.utoronto.ca/wp-content/uploads/sites/2/how-not-to-plagiarize.pdf.
Cite it Right covers relevant parts of the U of T *Code of Behaviour on Academic Matters* (1995).

The University of Toronto is committed to equity, human rights and respect for diversity. All members of the learning environment in this course should strive to create an atmosphere of mutual respect where all members of our community can express themselves, engage with each other, and respect one another's differences. U of T does not condone discrimination or harassment against any persons or communities.

Policy on collaboration:

You must only submit and present your own work or your team's work or cite your external sources properly as mentioned above. Do not use another team's work. As a precaution, I suggest that you only discuss high-level ideas with other teams' members. You are not permitted to consult other teams' work. Sharing your team's work with other teams is a violation of this policy. If challenged by either a TA or the instructor, you must be able to reproduce and explain any work you submit in an oral exam. Failure to observe this policy is an academic offence, carrying a penalty ranging from a zero on an assignment to suspension from the university.

Tentative Course Calendar:

Week	Week of	Topic	Deadlines (estimates)	Weight	Notes
1	Sep 8	Introduction + Intro to Tech Stacks			Partner Proposals announced
2	Sep 15	Product Management	Assignment 1	5%	Project partner selected;
3	Sep 22	Git/GitHub			Project partners matched and confirmed
4	Sep 29	Working with Data	Team Deliverable 1	15%	
5	Oct 6	Agile Methodologies			
6	Oct 13	APIs + Automation	Assignment 2 (Hello world)	15%	
	Oct 20	Automated Testing			No Class
7	Oct 27	Teamwork			
8	Nov 3	Industry Panel	Team Deliverable 2	15%	
9	Nov 7-11	Reading Week			
10	Nov 17	Crafting Software & Professionalism			
11	Nov 24	Team Presentations	Team Deliverable 3 - Presentation	20%	
12	Dec 1	Accessibility & Design Patterns			
13	Dec 8	No Classes	Team Deliverable 4 Active Participation	20% 10%	