Introduction to Databases and Web Applications – Winter 2021

Course Description

A practical introduction to databases and Web app development. Databases: terminology and applications; creating, querying, and updating databases; the entity-relationship model for database design. Web documents and applications: static and interactive documents; Web servers and dynamic server-generated content; Web application development and interface with databases.

Required background

Some experience with programming in an imperative language such as Python, Java, or C. You may not take this course after - or concurrently with - any C- or D-level CSC course.

Course Information and Schedule

- Instructor: P.Gawde, A. Attarwala
- Lecture: Asynchronous. Lecture for the week will be available by Friday, 5pm on Quercus.
- Tutorials: Online synchronous tutorials. Tutorials begin in the 2nd week.
- Email: purva.gawde@utoronto.ca, abbas.attarwala@utoronto.ca
- Class website: Quercus. (If the course website is not up yet on Quercus, it should be available soon, sometime in the first week)

Text Books

- For a course like this, no single textbook will represent the course expectations well. However, we will provide you weekly reading material (some of which will be mandatory) from other universities and other places on the web. This material will supplement well with what is taught in the class.

Lecture Notes

- Lecture notes will be available on Quercus. You are EXPECTED to read the assigned readings before coming to the lecture. The instructors will release the pre-recorded lecture for the week before 5 pm Friday.

Grading Scheme and Policies

Assignments	30%	(There are total of 3 Assignments. See schedule below)
Bi-Weekly Quizzes	20%	We will announce more details on this sometime in lecture.
Final Exam	50%	TBD

Assignment	Weight	Due Date
Assignment 1	6%	February 12th @11:59pm
Assignment 2	8%	March 14th @11:59pm
Assignment 3	16%	April 5th @11:59pm

Quiz	Weight	Due Date
Quiz 1	5%	Sometime in the week of 25th January
Quiz 2	5%	Sometime in the week of 22nd February
Quiz 3	5%	Sometime in the week of 15th March
Quiz 4	5%	Sometime in the week of 5th April

Assignments

There are three assignments. You may be asked to work in pairs on some of these assignments. Please check the assignment handout for more details on whether working in pairs is permitted or not; other details such as the exact due date will also be mentioned on the assignment handout. DO NOT EMAIL YOUR ASSIGNMENT SUBMISSIONS TO US. We will use MARKUS for the submission of all assignments. A STRICT silent policy takes effect 12 hours before an ASSIGNMENT or EXAM is due. This means that the teaching staff will answer no questions about the assignment. We will follow the due dates mentioned in the course syllabus. However, if the due dates on the assignment handout differ from this course syllabus handout, the assignment handout's due dates will supersede.

Re-marks

If a piece of work has been mismarked or if you believe the rubric used to evaluate the work is not appropriate, you may request a remark. For a re-mark to succeed, you must clearly and concisely express what you believe was mis-marked or unfairly marked. To request a remark, set up an appointment with the instructor and the TA that has marked your assignment/exam. PLEASE DO NOT USE THE DISCUSSION BOARD REQUESTING FOR REMARKS. Be prepared for the entire work to be re-evaluated and for the mark to be adjusted up *or* down after the re-evaluation. Remark requests MUST be made in three regular days after the mark is made available. No remark request will be accepted after three regular days.

Tutorials

During tutorials, attendance is not mandatory. However, we do encourage you to attend as many tutorials as you can. We will use tutorials to go over assignments or work on problems similar to what you may see on your assignment in the lecture. TAs will record tutorials. Tutorials are a great way for you to get some hands-on practice at programming. There is no labs/tutorial scheduled in the first week. All tutorials begin from the 2nd week of the semester.

Final Exam

There is a 2hrs (or maybe 3hrs) final exam. The final exam is comprehensive, and you must obtain a mark of at least 40% to pass the course; otherwise, a grade of no higher than 47% will be assigned.

Late policy

There are no grace days; all due dates are firm. In case of illness, please have a doctor complete an official U of T medical certificate. For other emergencies, be prepared for us to request some documentation.
If you submit an assignment late or miss a quiz due to illness or a personal issue, first contact the instructor as soon as possible. Then, please follow the procedure described at `https://www.utsc.utoronto.ca/aacc/petitions`. For coursework petitions, a *Petition Form for Term Work* form needs to be filled and given to the course instructor. This will not be accepted if submitted two days after the due date.

Plagiarism and cheating will <u>not</u> be tolerated. These are serious academic offenses with severe consequences that you should be aware of; for details, please read the information in *Chapter 6: Academic Regulations* available at `http://www.utsc.utoronto.ca/aacc/academic-integrity` . You can also visit `http://www.utsc.utoronto.ca/aacc/academic-integrity`. If you any questions about cheating or plagiarism, ask your instructor.

Accessibility Needs

The University of Toronto is committed to accessibility. If you require accommodations for a disability, or have any accessibility concerns about the course, the classroom or course materials, please contact Accessibility Services as soon as possible: `disability.services@utoronto.ca` or `http://www.utsc.utoronto.ca/~ability/`.

Rough Semester Plan

Please check on Blackboard for the actual weekly schedule. Changes to the schedule will be announced in class as well. The main topics that we will cover in this course are:

- Databases: Terminology and applications, Creating, querying and updating databases, The E-R model for database design

- Web Applications: Static and Interactive Documents, Web servers and dynamic server-generated content; Web application development and integration with databases.