Assignment 0

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September 9, 2021

Instructions

• Please do not email me your homework. Please enroll into CS604@Gradescope(check your email for the invitation or via Entry Code: JB224J) and complete this written assignment at the following link:

• You must submit all assignments in this class to Gradescope. If it is not on Gradescope, then it receives zero. You shall receive an email confirmation upon successful submission. Please make sure you receive the confirmation email as a receipt. Your grades will be posted on Gradescope first, then transferred to D2L Classes.

• A pdf template of this document can also be found on the above Gradescope link. You can use any PDF editor to complete the assignment. If you choose to print or use a graphic tablet pen/tablet stylus pen to do free-hand writing, please also make sure your answers are legible. Illegible handwriting could lead to a significant loss of points.

• If you prefer to edit in a google document, please choose “File”-> “Make a copy” to create a copy of this google document under your google account, and then insert your answers into your own copy because you do not have permission to edit this document in place. Once you are ready to submit your homework, choose “File” -> “Download” -> “PDF Document” to save your homework locally as a pdf file. Rename your homework file to "YourFullName_CS604Fall2021_Assign0.pdf” and upload the file through the above link on Gradescope.

• Please write your answers concisely and limit them to the same page of the question, or there could be a loss of points (5 points for formatting). There should be plenty of space for you to write your answers.

Overview

The point of this assignment is to:

• Examine issues of academic integrity and academic dishonesty. You'll write your problem set solutions after reviewing the academic honesty code.

• Help you get familiar with the Gradescope submission. This assignment will be graded and it weighs 3

Review Academic Honesty

It is your responsibility to ensure that you understand what constitutes academic dishonesty. Representing another person's work as your own is always wrong. It is wrong in this course. It is wrong in your profession and can end your career, regardless of your skill level, your educational credentials, or how hard you have worked up until this point. It is academically dishonest to hand in a solution that you don't understand.

These are bullet points from the course syllabus:

• You may discuss assignments in general terms with anyone you like. However, you should not discuss actual steps or code, in any form, with anyone other than course staff. You may not discuss code on a whiteboard.

• You may not help each other debug your code.

• You must write down the names of people with whom you have discussed the assignment and what you discussed with them. If student A gets an idea from student B, both students must write down that fact and also what the idea was.

• You must further acknowledge any other contributions (for example, ideas from Web sites or other sources).

• Take suitable precautions to protect your written work. For instance, do not leave printouts lying around, lest you be suspected as an accessory to cheating.

• You may not look at code from previous years of this course.

• You may not look at code from similar courses at other universities.

• Do not show any non-partners (other than the instructor or TA) your work until after the semester ends. Because of the lateness policy, you should not assume that another student has completed an assignment after the deadline.

• You must follow all exam codes in quizzes, midterm, and final exams.

If you are in doubt about whether or not you are permitted to use particular source materials, you should obtain written permission from the professor, in advance of your submission. Such permission is best requested and obtained by E-mail.

Question 1

Explain why it is important to your professional development to struggling with a problem that you cannot solve quickly? In other words, the instructor deliberately assigns homework he knows you will likely have to think about for days or possibly weeks to solve, possibly with multiple implementation attempts. What do you expect to learn from this experience?

Answer: It is important to struggle, not only within a professional sense but to some degree in a life sense because it teaches us lessons that we may have not learned without it. One of these lessons is the importance of resilience; sure we may not be able to solve all of the problems that we may encounter, but we can do our best to try and come up with solutions even if they aren't the best or the most optimal. We can still continue to try and reach the solution because out of the 100 times that we do try, we only need one out of that 100 to be correct. However, if we still can't reach the best solution to our problem, this gives way to the second lesson, being humble. Speaking for myself, I know that I will not easily give up when it comes to trying to solve a problem, but at the same time I'm not that dense to continue trying after the 100th time. Instead, I suck up my ego and ask for help, maybe one of my solutions was almost right, maybe I need someone to brainstorm with a follow me to the path of the right solution, whatever it may be humility in accepting defeat and learning from that defeat will always be better than thinking your solution is the best solution, and there are other solutions that are eons better.

Question 2

Imagine that you are employed at a major software company, say Microsoft, and commit code into a product that you copied from a website. Explain the potential risks to both you and the company if this action is discovered by the owners of the code.

Answer: Firstly, you are doing yourself a disservice because instead of learning and understanding how and why the code works the way it works, and implementing it yourself, you decided to commit plagiarism. Now, if a major company like Microsoft were to see that you copied code from a website, and you work for Microsoft, then that is automatic grounds for termination or some type of reparation. If you use someone else's code, and claim it as your own, and your boss finds out, then you have proved yourself distrustful, and now they have to question if your value as a worker is necessary or are you a risk for a big lawsuit to happen. Now, in the case of the latter, and the owner of the code knows that you essentially stolen his work, then he has every right to not only sue you for taking his intellectual property, but also Microsoft for using said property.

Question 3

Imagine that you are a scientist evaluating the safety of a new drug for use on humans. You are under time pressure to meet a deadline and have worked hard on experiments, but you don't understand the data. Moreover, you are about to come up for tenure, and whether you publish this result can have a major impact on a career you have spent over 10 years building. Describe how arguing for the drug's safety in your article based on work you do not fully understand could harm others.

Answer: If you don't understand the work, or in this case the data that you are using, how does one expect to understand the underlying mechanisms of that data well enough to argue something as important as drug safety? In essence, its impossible, and could wind up not only putting the lives of the public at risk, but also the integrity of all of your research into question. This question reminds me of the scientist who made the bogus claim that vaccines cause autism, and well look at where that got us, a public afraid of well documented vaccinations, a cult-like following via the Anti-Vax movement, and now a new variant of an already extremely deadly disease.

Question 4

Explain why copying (or approximately copying) solutions from the web (or another source) are plagiarism, even if you cite your source.

Answer: It is not your own independent intellectual idea, even if it is slightly modified. If it hasn't been agreed on that this certain thing is common knowledge, then even still you should cite because whoever is reviewing your code may not know that. Back on topic, plagiarizing code, even if the code is cited, is not demonstrating a mindset that truly understands the code and what it does. If it is a variation of the code that is cited, and shows an understanding of the mechanisms of the code you cited and is demonstrated through your own independent thought, then it would be appropriate to cite the code used to understand whatever it is you were trying to accomplish. However, if you just copy-paste something you found online, it just shows that you know how to copy-paste, and that you aren't dependable to some degree.

Question 5

Explain why it is academically dishonest to share your solution set with another student. Explain how you could be harmed from just sharing your code even if you hand in your own work.

Answer: It is academically dishonest to share your solution set, because you are basically giving that person the means to take your answers and to use them as their own. This would cause a myriad of consequences, such as plagiarism, said student not truly understanding the work for their own, and most likely both parties to end up with a failing grade or worse; terms of expulsion from the class or university.

Question 6

Explain why we let students work together to solve problems, as long as the students cite their collaborators. Explain why it is plagiarism to share and/or copy other code.

Answer: Professors and educators let students work together to solve problems, as long as the students cite their collaborators to foster a learning environment where we learn from each other. Let's say a person in my group has an understanding of a certain topic in one questions, but not so much on another. Then that student can ask his fellow class/group-mate if they can explain to him how to go about understanding that other topic. The student can then gain an understanding towards that new topic and can implement a way to solve it based on the explanation given by their class/group-mate. If the class/group-mate just gave them the answer to the problem, or the student just copied someone else's code, then they are stealing the intellectual property of whoever came up with the answer first. By doing this, that student is actively engaging in plagiarism.

Question 7

Explain why it is better for your grade to hand in homework late or leave a portion empty, rather than search for answers on the web. (Hint: calculate approximately how much a homework problem is worth to your raw score versus an exam question.) Explain why this is true regardless of whether you are actually caught plagiarizing.

Answer: Well, I can argue that it's never a good thing to leave a portion empty because even if you tried and your answer is blatantly wrong, at least it shows the grader that an attempt was made and they could probably help you understand where in your answer you went wrong. Though, it is better to hand in homework late, rather than search for answers on the web because it shows that not only you tried to answer all the problems in the homework, but that the homework is truly a work of your own. It shows to the grader that you take pride in your work and that even though it may be wrong, it is still your own thoughts that you put into those answers, and if any of those answers are wrong the grader would be better suited to help you. If you just plagiarise homework, you aren't learning anything other than you can use copy and paste. Sure, you may get the answer right, but more than likely you don't understand the underlying concepts and when they do appear in a test (because they almost always do), then the only person you fooled is yourself because instead of being humble and seeking the help necessary, you let your ego get in the way of your learning.

Question 8

How much time did this write-up take you?

Answer: Around an hour and a half to two hours; give or take.