

Queens College, CUNY, Department of Computer Science
Computational Finance
CSCI 365 / 765
Spring 2019
Instructor: Dr. Sateesh Mane
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Project 1

due Sunday Feb. 17, 2019, 11:59 pm

- **NOTE:** It is the policy of the Computer Science Department to issue a failing grade to any student who either gives or receives help on any test.
- **A student caught cheating on any question in an exam, project or quiz will fail the entire course.**
- This project will be assigned in class but is also partly take home.
- Any problem to which you give two or more (different) answers receives the grade of zero automatically.
- Answers must be written in legible handwriting.
- **A failing grade will be awarded if the examiner is unable to decipher your handwriting.**
- Please submit your solution via email, as a zip archive, to Sateesh.Mane@qc.cuny.edu.
 1. Use the following name for the zip archive (for CS365 or CS765, respectively).
StudentId_first_last_CS365_project1_Spring2019.zip
StudentId_first_last_CS765_project1_Spring2019.zip
 2. Your zip archive should contain documents with answers to all questions.
 3. Acceptable file types are txt, doc/docx, pdf.
 4. Write the question number to identify each file in your zip archive.
 5. **Do not encrypt the zip archive.**
- **Students who submit late solutions to Project 1 (after the due date stated above) will have a grade cap of D placed on their course grade.**

1 Question 1: Academic integrity

- **Write a paragraph (approximately half a page) to state why you have registered for this course.**
 1. In Fall 2018, a student registered for a course I teach, attended one class at the start of term to establish attendance in the VOE roster, and subsequently was a no show for all the midterms and final.
 2. The rules clearly state that the “WU” grade is to be assigned to students who behave this way. I assigned the student a grade of WU.
 3. The student now wishes me to change his grade, because a grade of WU will jeopardize his student visa.
 4. **I will decline to alter student grades in response to conduct in violation of academic integrity.**
- *Explain how you intend to conduct yourself academically in this course.*
- State your commitment to academic integrity in this course, for the following items:
 1. Performance in all graded exams, quizzes and projects.
 2. Submission of solutions to homework assignments.
- **Your response to Question 1 will be kept on file, and will be compared to your subsequent behavior in this course.**
- **Students who decline to answer Question 1, and/or do not submit a satisfactory answer to Question 1, will have a grade cap of *D* placed on their course grade.**

2 Question 2: Plagiarization of homework

- It is stated in the syllabus that homework is not officially graded but good quality homework solutions may be counted for a grade boost.
- In Fall 2018, I counted over 40 students who submitted homework in December 2018 (in some cases after finals were over), and in many cases for HW1 and HW2, which were on material lectured at the start of term.
- Download the following two files.
 1. File submitted by a student in December 2018.
`https://venus.cs.qc.cuny.edu/~smane/cs365/exams/Student_Fall2018_CSCI365_hw2.cpp`
 2. File submitted by a student in Spring 2018 (who scored *A+* in the course).
`https://venus.cs.qc.cuny.edu/~smane/cs365/exams/Student_Spring2018_CS365_HW2.cpp`
- **Compare the two files and state the difference between them.**
- **Note the following:**
 1. Both files are .cpp files containing C++ code.
 2. *You are NOT being asked to comment on the correctness of the code or to debug it.*
 3. *You are NOT being asked to compile and run the code.*
 4. You are asked only to COMPARE the files.
- **FYI:** In Fall 2018, I changed the homework assignment. The Fall 2018 student code DOES NOT ANSWER the question in the Fall 2018 homework assignment.
- **State how you intend to conduct yourself, for submission of solutions to homework assignments.**
 1. Your answer to this question will be compared to your answer in Question 1.
 2. Your response to this question will also be kept on file, and will be compared to your subsequent behavior in this course.
- **New policy:**
Submission of plagiarized homework will result in a loss of grade.

3 Question 3: Interest rates

- Go to a local bank (or credit union, etc.) and ask them to give you a brochure of interest rates for savings accounts.
 1. The brochure may include other types of accounts such as CD (Certificate of Deposit).
 2. The bank may have a general brochure for all types of accounts, e.g. checking accounts and fees, etc. As long as it shows the interest rates for savings accounts, that is satisfactory.
 3. Some banks may not have a brochure and may write the interest rates on a sheet of paper.
- Scan the brochure/paper or take a photo of it and enclose the scan/photo in your zip archive.
- Give the brochure/paper to me in class with your name and student id written on it.
- **Your response to this question will be kept on file, and will be compared to your subsequent answers to exam/quiz questions.**
- All banks/credit unions quote interest rates in percent.
- **Student answers to exam/quiz questions where interest rates or bond yields are written as decimals (when the question states to write the answer as a percentage) will incur a loss of grade.**
- **Students who do not answer Question 3, and/or do not submit a satisfactory brochure/paper will have a grade cap of D placed on their course grade.**

4 Question 4: Crystal ball

- State the value of the Dow Jones Index at the close of trading on the NYSE on May 24, 2019.
- Explain how you arrive at your answer.
- Your response to this question will be kept on file, and will be compared to your subsequent answers to exam/quiz questions.
- Student answers to exam/quiz questions which claim to know the future values of random variables will incur a loss of grade.
- Students who decline to answer Question 4, and/or do not submit a satisfactory answer to Question 4, will have a grade cap of D placed on their course grade.