Abstract of the Honor Council Case 7-4, Fall 2017 April 23, 2018

Members Present:

Reece Rosenthal (presiding), Sam Holloway (clerk), Joanne Kim, Grace Coleman, Talia Kramer, Eva Lin

Ombuds: Laura Li, Matthew Archibald (observing)

Letter of Accusation:

The Honor Council received a letter accusing Students A, B, C, and D of using a reference solution to gain an unauthorized advantage for a project in a lower level COMP course. The Chair read the Letter of Accusation aloud in full.

Evidence Submitted:

- Letter of Accusation
- Detailed explanation of class procedures
- Student A's written statement
- Student B's written statement
- Student C's written statement
- Student B's written statement
- Student-selected sample code submission
- Randomly-selected sample code submissions
- Comparison of each student's full code with reference code
- Instructor-provided code resources for the project in question
- Screenshot of one code commit by Student B
- Screenshot of one code commit by Student D
- Video showing unusual behavior in the internet proxy configuration settings of Student D's computer

Plea:

Student A pled "not in violation." Student B pled "not in violation."

Student C pled "not in violation."

Student D pled "not in violation."

Testimony:

Student A:

Student A described his commit history for this project in detail; he noted that he made initial submissions to the code repository early in the week the project was due before flying to another state for an interview, during which time he did not make much progress on the project. After returning, he worked on the project further and consulted a TA for assistance.

Student A then entered into a detailed explanation of his code-writing process, describing which parts of a given function he found challenging to complete. He stated that he went to a TA session to get assistance with this part of the code. When the TA was helping Student A with the code, the TA accessed the reference solution; Student A said the TA looked at this reference solution briefly on a laptop before helping the various students gathered for assistance with this function. After the TA finished rereading this solution, the TA existed the reference code and began assisting the students at a high level. Student A noted that many students were at this TA session, so numerous students heard the TA's explanation for this function and asked subsequent follow-up questions before implementing the methodology the TA suggested. Student A mentioned that any similarity between his solution and Student B's solution resulted from them standing in line at the TA session together and both hearing what the TA said about the project.

Student A noted that each project for this course has only a few syntactically possible ways to produce a functioning solution, possibly causing similarities between the accused students' code. Student A then noted a point at which he showed his code to the TA, who suggested a greatly simplified way to complete one of the functions with which he struggled; Student A implemented this more efficient solution and left a comment at this section of code so that he would remember how to solve such a problem in the future.

Student A said he asked another student at the TA session how to construct one of the required objects necessary for one of the functions; the other student provided a high-level answer for how to solve this problem, which Student A implemented successfully.

Student A again argued that he never collaborated with other students at anything other than a high level, and he said that the most in-depth assistance he received came from TAs at TA sessions. He explained that he communicated verbally with Student C and told her what he had learned at the TA session, without adding in any detail from his own code and without directly sharing any of his own code. He also stated that he had never met Student D.

In his closing statement, Student A reiterated that he did the entire project by himself except for high-level verbal collaboration with a TA and with other students. He denied the course instructor's allegations of hacking, and stated that he never looked at any other student's code or the reference code.

Witness

Student A then introduced a witness, the TA whose session the group of accused students attended.

Student A asked the witness if he remembered seeing Student A at office hours. The witness said he did.

Student A asked the witness to describe how he helped students with their code at his TA session. The witness said he looked at each student's code and told them how to solve the problem without actually showing them any reference code; he helped them conceptually

and gave hints about how to reach the proper solution. The witness said all of his knowledge about the project was based on his rereading of the reference solution, and he used that knowledge to aid the students at his TA session in completing the project in question.

Student A asked the witness if the similarities between his code and that of the other students could have arisen from the help they received at the TA session. The witness stated that all of the lines in question except for some lines arose from standard coding procedure required to complete the project, and he stated that it would not be unlikely for such similarities to arise between students, especially those whom he had helped using the reference solution.

The witness described how he helped Student A; he told Student A how to resolve a small problem that Student A was experiencing with code recursion. Student A resolved this problem in front of the witness, and Student A's code began working.

The witness explained what components of the code would be most open to variance between students.

The witness said he had access to the reference solution at his TA session. He said one student asked a question to which he did not know the answer; he consulted his laptop apart from the students at the TA session to figure out how to answer the question based on the reference code, then closed his laptop and returned to answer the students' questions without having the reference solution in front of him. The witness again confirmed that he saw Student A and Student B at the TA session.

The witness explained that there were no particular guidelines set forth for TAs on how they should assist students, other than that they should not directly show them the code of the reference solution for the project. He said that TAs would commonly give hints to students about specific components of their code that were incorrectly implemented; he said that the advice he gives is normally tailored for the individual student who asks each question, but that he will sometimes answer a question for several people at once by giving more general advice about what the right direction to go would be. He said that the advice he gives all students is fairly general and that students sharing this advice with others in the class generally would not be objectionable.

The witness said he usually advises students based on his own knowledge, but because he had not completed the project in question when he personally took this course, he extensively consulted the reference solution prior to holding his office hours so that he would adequately understand how to answer students' questions.

Student B:

Student B said he never saw any other code for this project, and that he only discussed concepts related to this project at a high level. Student B said he attended the same TA office hours session as Student A. Student B said that the TA provided assistance to him at a high level.

Student B discussed the screenshot of his commit to the course's code repository, noting that the course instructor did not find anything suspicious about his commit times.

Student B then compared the randomly selected sample codes to his own code, arguing that the codes functioned identically and that any similarities were only cosmetic.

Student B also noted that he had never met Student D before being accused of an Honor Council violation in this case.

In his closing statement, Student B reiterated that he never saw any other code for this project; he argued that any similarities between the students' code arose from conversations with the TA and from high-level collaboration with other students and with the TA.

Witness

Student B then called in the same witness interviewed by Student A.

The witness confirmed that he saw Students B and A at his TA session. He said he did not remember the particular questions asked by Student B, but he noted that most students who came to his office hours on that day asked about the same function on which each of the accused students was accused of collaborating.

The witness said that the bug common to the students' code and the reference code could have been transmitted through the high-level advice he provided at his TA session. However, he said that he did not realize the reference solution had a bug, so when looking at students' code, it did not occur to him to advise them that their code was flawed; furthermore, the witness said he did not see any explicit reason why his advice would have transmitted the bug to the students' code. He just said that he could not rule out this possibility.

Student C:

Student C said she did not commit much code to the course code repository in the early stages of the project because she was at a conference out of town. Upon returning, Student C said she attended numerous TA sessions to get help for the project and make up for the work time she had missed by attending the conference.

Student C argued that any unnecessary complexity in her code was not of malicious origin. She also noted that, despite having a small bug in her code which the course instructor argued to be an attempt to obfuscate collaboration, her code passed the course's automated functionality tests; she said, therefore, she had no reason to look for a bug in her code.

Student C noted that she did not attend the same TA session as Students A and B, but that because each TA had access to the reference code, any similarities between her code and

that of Students A and B likely arose because they received similar advice from their respective TAs.

Student C said she had never met Student D prior to being accused of an Honor Code violation.

In her closing statement, Student C said she attended numerous TA sessions for this project and reiterated that the course's automated plagiarism checker only flagged a small amount of her code as suspicious.

Student D:

Student D said he did not know Students A, B, and C. Student D said the course permitted students to drop the grade for one of their projects; Student D said that he wanted to drop this project.

Student D said that the course instructor noted in the course syllabus that the local times on students' computers would not be used as the official time when recording student code submissions; he showed the Council a video of odd internet proxy behavior on his computer to indicate that it may have been compromised in a way that would produce erroneous time stamps on his code submissions to the course's code repository.

Student D noted that, in an attempt to understand the bugs in his code after the deadline to submit code had passed, he substituted portions of the assignment's reference code into his own code and submitted this combination to the course's automated code tester so that he could identify where the bug in his own code was. He directed the Council towards the date stamps on his submissions, which shared code with the reference, observing that these submissions occurred after the deadline for the assignment.

Student D observed that the course's code repository records time stamps in a different way than the course's automated grading system; the code repository uses the time stamp from the student's computer, while the automated grading system uses the time from an Internet server.

In his closing statement, Student D reiterated that he had not violated the Honor Code and it had been an honest mistake, with him submitting after the deadline only to check the code.

Verdict Deliberations:

Council members believed that a preponderance of the evidence supported that a violation occurred because they believed that one student had violated the Honor Code.

Vote #2: Does a preponderance of the evidence support that a violation occurred?

Yes: 6 No: 0 Abstentions: 0 The Council then discussed whether or not Students A through C committed a violation. The Council discussed possible origins of the bug common between the accused students' code and the randomly selected reference codes. After comparing the accused students' code to the randomly selected samples, the Council noticed that numerous randomly selected sample codes did include code that prevented the bug that the accused students were accused of sharing with the sample code; however, the Council saw notable similarities between the code of the accused students and the randomly selected sample codes.

The Council moved on to discuss whether Student D committed a violation. Because Student D's claim that a computer bug caused his computer's timestamps to malfunction and falsify his submission time was not supported by material evidence, the Council determined that a preponderance of the evidence supported that Student D did commit an Honor Code violation. Council members also noted that it was not important to determine exactly how the violation occurred, but solely whether it was more likely than not that a violation had occurred.

Vote #5: Does a preponderance of the evidence support that Student C is "In Violation?"

Yes: 0 No: 6 Abstentions: 0

Vote #6: Does a preponderance of the evidence support that Student D is "In Violation?"

Yes: 6 No: 0 Abstentions: 0

Vote #7: Does a preponderance of the evidence support that Student A is "In Violation?"

Yes: 1 No: 5 Abstentions: 0

Vote #8: Does a preponderance of the evidence support that Student B is "In Violation?"

Yes: 1 No: 5 Abstentions: 0

Penalty Deliberations:

Council members opened by discussing mitigating circumstances for Student D. The Council did not see any reason to mitigate.

Council members then discussed aggravating circumstances for Student D. Several Council members believed Student D to have attempted concealment of an Honor Code violation through submission of evidence inconsistent with the facts of the case.

The CPS penalty for this case, based on the weight of the assignment, is a 1 letter grade reduction. Because a majority of Council members decided to aggravate for the aforementioned evidence, the Council decided that a two letter grade reduction in the course would be the most appropriate penalty for Student D.

Vote #9: What is the appropriate penalty for Student D?	
F in the course and 3 semester suspension:	0
F in the course and 2 semester suspension:	0
F in the course and 1 semester suspension:	0
F in the course:	0
3 letter grade reduction:	0
2 letter grade reduction:	4
1 letter grade reduction:	2
Letter of Reprimand	0
Abstentions:	0

Decision:

The Honor Council thus finds Student A, B, and C "Not In Violation" of the Honor Code.

The Honor Council thus finds Student D "In Violation" of the Honor Code and recommends that he receive a 2 letter grade reduction in the course.

Time of testimony and deliberations: 2 hours, 30 minutes

Respectfully submitted, Sam Holloway Clerk