Post-Mortem

CS135 Winter 2022, Assignment 02

February 1, 2022

We normally publish the post-mortem for an assignment after it has been marked and released. Here is a list of common errors provided by the graders for assignment 2.

Parts of Q02, Q03, Q04, and Q05 were chosen to be marked for different style criteria. Thus, it is possible that other questions might have style problems that we did not address. There were also design recipe elements that we chose to give feedback on and not deduct for. You should still improve on these, since we may decide to deduct for them on a later assignment. Please review the posted solutions and style guide to help resolve any questions you may have. If that is insufficient, please raise your questions in 1-1 consulting hours.

Question 2 (cond):

Refactoring

• Many students refactored mostly correctly, but included unnecessary Boolean operations within larger, still useful, question/answer pairs. This error was unmarked.

• Many students included question/answer pairs that were useful by our definition, but still could have been removed and condensed into previous question/answer pairs. This error was unmarked.

Question 3 (airmiles):

Constants, Names

• Many students did not define four constants for the rates of each possible combination of store and card. These rates are arbitrary and should therefore be written as constants in case they change.

Question 4 (grades):

Use of Conditionals, Purposes, Contracts, Examples, Tests

• Many students did not define any helper functions for use in part (a). This resulted in large sections of repeated code that was difficult to understand.

• Of the students who did define helper functions, some did not complete the proper design recipe elements (purpose, contract, examples) for them.

• In part (b), some students wrote in their contract that the only parameter to course-after-cs135 is a Nat. This is incorrect because there is no guarantee that the produced value of final-cs135-grade-all-options is a Nat. This error was unmarked.
• Many students did not place the appropriate requirements on \textit{grade} \((0 \leq \text{grade} \leq 100)\).
• Some students did not include the two requested tests in part (b).

Question 5(a) (blood-cond):

\textbf{Code Complexity}

• Many students did not optimize the number of cases checked in their function as much as was possible. Check the posted solutions for the optimal number of cases.

\textbf{Other:}

• Many students did not submit some files in their entirety. Completing the design recipe is a great way to display some understanding, even if the question has not been solved.