A05 Post Mortem

CS135 Fall 2026

November 3, 2026

Recursion complexity - Q1

- Many students used `add` or `append` in their recursive call for union which is not allowed in the current rules of recursion.

split-at contract - Q3

- Many students wrote the output as a (listof (listof Any)). While this is not entirely wrong, it is more correct to say split-at produces a (list (listof Any) (listof Any)). By writing it this way, we are saying the output will be a list with only two elements, each being a (listof Any).
- Many students wrote a data defintion to use in place of the output mentioned above. While this is allowed, a lot of people did not write their data definitions properly, losing them points.
- Many students did not include the requirement that the consumed number must be less than the length of the consumed list.

Data Definitions - Q4a

- Item
  - A lot of people did not include a requirement stating quantity of an Item must be > 0
  - A lot of people did not include a requirement stating price of an Item must be >= 0
  - Some students wrote an Item as a (list Symbol Num Nat) instead of (list Sym Num Nat)
  - Some students said an Item is a (listof Sym Num Nat) which is not as correct as we'd like. Using listof instead of list loses the structure we want. Using list limits the list to length 3 and ensures that the values are in the correct order.
- Inventory
  - A lot of students missed the requirement that Item names in an Inventory must be unique
  - Some students wrote that an Inventory is a (listof mk-item) which is incorrect. You cannot use functions as data types at this point in the course. An Inventory simply a (listof Item).

- SalesList
  - Some students wrote a SalesList as a (listof Symbol) instead of a (listof Sym)
  - Some students defined a SalesList as a list of of the symbols used in the examples in the assignment PDF. A SalesList should be a list of any symbols, not just those specific symbols.
  - Some students did not capitalize or spell SalesList correctly

adjust-inventory contract - Q4

- Some students did not include the function name in their contract
- Some students did not properly capitalize their inputs
- Some students wrote their inputs in the wrong order

Recursion complexity - Q4

- Many students called a helper function in their recursive call of their `adjust-inventory` function. This counts as accumulative recursion which is not allowed.

Helpers - Q4

- Many students did not write a full design recipe. Make sure you are including purpose, contract, and tests.