

A03 Post-Mortem

CS 135 Fall 2026

Contracts

- As a reminder, a contract should contain the exact name of the function, a colon, the consumed data type(s), the arrow " $\rightarrow$ ", and the produced data type. Data types should be capitalized accordingly. E.g. `;; mk-rgb: Nat Nat Nat -> RGB`. For details, see [the Style Guide](#).
- Many students did not include a "requires" statement after their contract when one was needed. As a reminder, if there is an extra restriction on what a function can consume (other than having to belong to a specific data type), there should be a requires statement underneath the contract. This should be a comment that begins with `;; Requires:` and proceeds to describe a restriction for your parameters. For example, if you were writing the function `mult-inverse` that can consume any number other than 0, under the contract you would write `;; Requires: x is not equal to 0` (or an equivalent requires statement that describes the same thing).
- Some students misused `listof`. (`listof Type`) describes the set of lists where every element is of that type. This includes lists of any length. If you're describing the set of lists of type `Type` with length 2, you would use `(cons Type (cons Type empty))`. Also, if you are describing the set of lists where every element is either `Type1` or `Type2` (of any length), you would use `(listof (anyof Type1 Type2))` rather than `(listof Type1 Type2)`.

Question 2: recursion.rkt

- Many students did not implement a recursive solution for `ss-recursive`, and instead used the closed form.
- Many students did not test the correctness of `ss-recursive`, nor `ss-closed`, and only checked they were equal to each other.

Question 4: robot.rkt

- Many students did not capitalize the data types `Direction` and `State`.
- Many students did not know the format to write a data definition
- Many students did not include a requires statement for their data definition of `State`.
- Many students did not write or use function `mk-state`.

Question 5: list-recursion.rkt

- Some students used accumulators for part e, which are not allowed in our current rules of recursion.