

# Post-Mortem

Assignment 05

March 2, 2020

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 5.

## Style and Spacing

- Data definitions should not interrupt a function's design recipe. For example, the data definition of a `Book` should not be written in between the purpose and the contract of a function. A good place to put your data definitions would be at the top of your file, or before the function you're using the data definition for.
- Lines should be less than 80 characters long: excessively long lines should be broken up into multiple shorter lines, and make use of DrRacket's auto-indenting features.

## General

- Some students code did not run at all, hence they lost all correctness marks. You are advised to make sure your code runs.
- Helper functions should be defined **before** the functions that use them, and their definition should not interrupt the main function's design recipe.

## Design Recipe

- **Purposes should meaningfully use each parameter name in the description of the function, and these references to the parameter names should be written exactly as they appear in the function header.**
- If restrictions are already implied in a data type, they do not need to be included in the `requires:` section. For example, if a function consumes a `Nat`, there is no need to specify that the consumed `Nat` should be greater than or equal to 0.
- Some students forgot to capitalize the type names in their contract (e.g. using `nat` instead of `Nat`).

## Question 1

- A lot of students did not rename the parameters meaningfully.
- The number of times to be removed has to be a `Nat`

### Question 3

- Template functions require a contract, and their produced type should be `Any`. For example, a template for a type called 'Yeet' should have the contract `;; yeet-template: Yeet -> Any`.
- A lot of students commented out their templates, which they should not.
- Many students used recursion in the movie-template. Recursion should not be used since `Movie` is a fixed-length list and does not have a recursive definition. Template functions should always strictly follow data definitions.