Post-Mortem
Assignment 07
March 20, 2018

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 7.

Question 1

- In part (a), many students simply selected out the contents of the consumed Dir in their dir-template. However, it is important to realize that (dir-contents adir) is an FDList. As a result, (dir-contents adir) should be processed using the fdlist-template.
- In the fdlist-template, many students were missing either the call to file/dir-template when processing the first element of the consumed FDList, or the recursive call to fdlist-template on the rest of the consumed FDList.
- Parts (b), (c), and (d) were generally well done.
- In part (e), some students had issues with producing the paths when the consumed Dir contained multiple levels.
- In part (f), some students did not use mutual recursion to implement backup-fs, which often lead to long and unnecessarily complex solutions.
- In part (f), many students did not correctly account for the cases where empty directories would be removed, after removing files that did not match the consumed format.

Question 2

- Throughout the question, some students introduced extra conditions by looking ahead in the EncodingTree and checking whether the first or second element of the EncodingTree was a Char. This is unnecessarily complex, as each function’s base case will naturally handle this in the next recursive call.
- In part (b), some students did not correctly handle the case where the consumed BinaryCode had exactly one extra character, which should have produced an ‘Error.
- Many students did not complete parts (c) and (d).
- In part (d), some students did not include the requirement that the characters in the consumed string must also appear in the consumed EncodingTree.