

# CS231 Haskell Project 1

Winter 2022

## Overview

For this 30 point assignment you will be writing a function, `transformDoc`, (with a number of helper functions). You will be transforming an input file into an output file with the same results as your last C project produced. Note that this is not system code, you are just producing the functionality of the combination of programs `wordGrab`, `lengthCheck`, `reverse`, and `caseWorker`. All your work will be done in functions in the haskell file `DocTransformer.hs`, in which I have written the declaration of function `transformDoc`, which will transform the `String` of all input from the input file, and will produce the `String` to write to the output file after doing the transformation of the input. **Note that none of the functions you write will use the keyword "do".**

## Specifics

Your function, `transformDoc`, will make the following transformations on the input `String`

1. A word is a sequence of alphabetic characters. All words will end with a newline character, `'\n'`. This is the same functionality as provided by `wordGrab`.
2. Any word of any length different from the `Int` argument provided to the `transformDoc` function will be removed from the transformed `String`. This provides the same functionality as `lengthCheck`.
3. The order of the words in the transformed `String` will be in reverse of the order they appeared in the input file. That is, the first word in the input file (of the correct length) will be the last word in the transformed `String` for output. This provides the same functionality as `reverse`.
4. In all words in the transformed `String`, vowels will be in lower case while consonants will be in upper case. This provides the functionality of `caseWorker`.

## Deliverables

Put comments in your program telling me who you are and what each function you have written does. Upload your Haskell code in your `DocTransformer.hs` file to blackboard by 11:59 p.m. on Friday February 25.