

MA 151: Homework #9

due Tuesday December 5

Programming problems

- Write a function called `counter` which takes a `Char` and a `FilePath`, and prints out a message like “The letter — appears — times in the file.”
- Write a function called `bigExtension` which take a file name and changes the name of the file so that the extension is all uppercased. So if I have a file called “enemies.txt” and I do `bigExtension "enemies.txt"`, the file’s name will change to “enemies.TXT”. If the file does not exist, print out a message like “file doesn’t exist!”. (Use `splitExtension` from `System.FilePath`. Try `splitExtension "hi.mom"` to see how it works.)
- Write a function called `copier` which copies a text file from one place to another. So
`copier "enemies.txt" "enemiescopy.txt"`
will make a duplicate of the file `enemies.txt` and save it as `enemiescopy.txt`. (Just use the file-handling functions that we talked about in class- don’t use `copyFile`, which trivializes things.)
Your code should check to see if the original file exists. If it doesn’t exist, (like in the above example if there is no file called “enemies.txt”) then your function should print out a message like “original file doesn’t exist!”.
- Use our code from class on 11/29 to make an interactive front-end to the enemies list. Make an interaction called `enemies` which prints out the whole enemies list, then asks the user if they want to add or remove. Based on what they say, ask for the name of the enemy and either add or remove them. Then print out the list of enemies again and ask for more input. There should be an option to quit, which ends the interaction. If the interaction starts up and there’s no file called “enemies.txt”, that file should be created the first time the user tries to add an enemy. If the user types something invalid, there should be a message like “I don’t understand”, and then the enemies should display again with a prompt for more input. You do not need to check if an enemy actually exists in the list before removing it.