CS307 PA3

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1 Description

In this code, we were asked to implement a program that takes the information about people from the "database.txt" file and iterates through every txt file in the directory and fixes people's name, surname, or gender if it was written incorrectly.

Firstly, I created a struct called people, to keep the information of people from the database.txt. Then I generated a file called getpeoplecount. This function reads the database.txt file and returns the number of people in the file. It does this by counting the number of newline characters in the file.

Secondly, to check if a given file has a .txt extension, I create the check function. It does this by finding the last occurrence of the '.' character in the filename and checking if the characters after it are "txt".

The crucial function, myFunc, is a recursive function that searches the directory and all of its subdirectories for.txt files. It scans the file and looks for the names of the people in the database.txt file if it discovers a txt file. Once it locates a name, it returns to the line's beginning to ensure that the title and last name are correct. If they are wrong, it moves the file pointer to the right place and replaces the inaccurate title and last name with the correct ones using the fseek and fputs functions.

Lastly, the main function opens the database.txt file in read mode using the fopen function. The file pointer is moved to the database.txt file's start using the fseek function. People is an array of struct and is used to read data from the database.txt file and save it in the people array using a loop. While saving it, I am increasing an integer called count to have the number of people in the database.txt, by doing that I will keep that information and use it later when I am calling myFunc. The current working directory, the count variable, and the persons array are passed as arguments when the myFunc function is called. According to the data in the people array, the myFunc function will look for and alter txt files in the current working directory and its subdirectories.