CS307 PA5 Report

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Firstly, I create a struct which has char *gender, *name, and *surname also a list *next pointer since I will create a linked list to store my data from the database. Next, I try to open my ./database.txt since it will have the data. While reading the ./database.txt the data is put into a linked list. Next recursively all the files in the list is went through if the file is a .txt while we r+ it meanwhile if its not a .txt file we don't go into it. Also, if there are directories, we also go inside them to check whether there is any .txt file to be corrected.

If except ./database.txt is found as a txt file, we iterate over its word by word. And in each word, we check whether it is a word in the database. If the word is in the database names, then we correct its Ms/Mr and its surname. To correct firstly with fseek we take the pointer to the beginning of Mr or Ms and then change it accordingly (with fputs) to the gender which was previously stored in the linked list. Next we fseek to the surname and according to the surname which was in the linkedlist we change it with fputs. And then we continue to iterate word by word to find other names to correct.

Hence, the program works correctly. By firstly reading the ./database.txt and storing it in a linked list and then iterating over each .txt file in every directory and correcting them if there is a mistake.