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#!/bin/bash

clear

flag=0
MultiNumber=0
check_numerical=0
input_name=0

# create the directory for the database file if not exist
mkdir -p "/home/$USER/linux/lectures/Assignments"

# database file path
FilePath="/home/$USER/linux/lectures/Assignments/phonebookDB.txt"

# check if the file exist or not
if [ ! -f "$FilePath" ];then # not exist
    touch $FilePath # create file
fi

#check if running the script without choosing any option
if [[ -z $1 ]];then
    flag=1
else
    choice=$1
fi

while :
do

    # Display all options
    if [ $flag -eq 1 ];then
        echo -e "\n"
        echo "_____ "
        echo "Enter '-i' to insert new contact"
        echo "Enter '-v' to display all saved contacts"
        echo "Enter '-s' to search by contact name"
        echo "Enter '-e' to Delete all Records"
        echo "Enter '-d' to Delete one name"
        echo "Enter '-E' to Exit"
        echo "_____ "
        echo "Enter your option"
        read choice
    fi

    MultiNumber=0
    input_name=0
    # switch case
    case $choice in
        '-i')
            echo "Enter the name"
            echo "please enter the name without any space"
            read name
            count=$(grep -c "$name" $FilePath ) # count the matching

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name
    #check if the name is already exist
    if [ $count != 0 ];then
        echo "Sorry the name is exist already"
    else
        echo "Enter the phone number"
        read PhoneNumber

        while [ $MultiNumber -eq 0 ]
        do
            # check if the phone number not numerical
            echo $PhoneNumber | grep -q "[0-9]*$" &&

check_numerical=1 ||
check_numerical=0

            # if phone number isnot numerical enter it
again
            while [ $check_numerical -eq 0 ]
            do
                echo " Your input is wrong "
                echo " Please enter the phone number again"
                read PhoneNumber
                echo $PhoneNumber | grep -q "[0-
9]*$" && check_numerical=1 ||
check_numerical=0

            done
            if [ $input_name != 1 ];then
                # create newline
                echo -e "\n" >> $FilePath
                # update database with your entry
                echo $name $PhoneNumber >> $FilePath
                input_name=1
            fi

            #check if it has multiple number
            echo "Do you want to Enter another phone
number? Y/N"

            read MultiNumber_choice

            if [ $MultiNumber_choice = 'Y' ];then
                echo "Enter the another phone number"
                read PhoneNumber2
                truncate -s-1 $FilePath
                echo -n " $PhoneNumber2" >> $FilePath
            else
                MultiNumber=1
            fi
        done
        flag=1
    fi
;;

'-v')
    echo "All your contacts "
    #Display all Database and remove space line
    cat $FilePath | grep '\S'
    flag=1
;;

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'-s')
    echo "Enter the name for search to get the telephone number "
    read search_name
    count=$(grep -c "$search_name" $FilePath ) # count the matching
name
    if [ $count != 0 ];then
        cat $FilePath | grep -w $search_name

    else
        echo "The name you enter isn't exist in your database"
    fi

    flag=1
;;

'-e')
    # > to write the (null) input from echo -n to the file.
    echo -n "" > $FilePath
    echo "ALL contents of your DataBase is deleted"
    flag=1

;;

'-d')
    echo "Enter the contact name to delete it"
    read deleted_name
    #check if the contact in your database
    if grep -q "$deleted_name" "$FilePath" && echo $? > 0 ;then
        sed -i "/$deleted_name/d" $FilePath # delete the name from
database
        echo "the contact name is deleted successfully"
    else
        echo "The name you enter isn't exist in your database"
    fi

    flag=1
;;

'-E') exit
;;

esac
done

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