ITSE 1302

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from datetime import datetime

import csv

def readFile(employeeInfo):

    with open('employee\_contact\_info.txt', 'r') as f:

        for line in f:

            employeeInfo.append(line.strip().split())

def listDirectory(employeeInfo):

    print(f"{'Name':20} {'Email':30}")

    for index, employee in enumerate(employeeInfo, start=1):

        print(f"{str(index)+'.':4} {employee[0]:20} {employee[1]:30}")

def get\_current\_time():

    return datetime.now().strftime('%m/%d/%y %I:%M:%S %p')

def outputFile(employeeInfo):

    filename = input("Enter your chosen file name (no extension): ")

    with open(f"{filename}.csv", "w", newline="") as f:

        writer = csv.writer(f)

        writer.writerows(employeeInfo)

def createdBy():

    print("Completed by: Travis Doporto")

def deleteItem(employeeInfo):

    listDirectory(employeeInfo)

    while True:

        try:

            userSelection = int(input("Enter the item you would like to edit (-1 to force close): ")) -1

            if userSelection == -1:

                break

            if userSelection < 0 or userSelection > len(employeeInfo)-1:

                raise ValueError ("Value is outside valid range, please select a valid option.")

            print(f"Deleting employee information for user: {employeeInfo[userSelection][0]}")

            del employeeInfo[userSelection]

            break

        except Exception as e:

            print(f"Error has occured: {e}")

def editDirectory(employeeInfo):

    listDirectory(employeeInfo)

    while True:

        try:

            userSelection = int(input("Enter the item you would like to edit (0 to force close): ")) -1

            if userSelection == -1:

                break

            if userSelection < 0 or userSelection > len(employeeInfo)-1:

                raise ValueError ("Value is outside valid range, please select a valid option.")

            print(f"Editing employee information for user: {employeeInfo[userSelection][0]} current email is {employeeInfo[userSelection][1]}")

            newName = input("Enter the new name (or leave blank to not change):")

            newEmail = input("Enter the new email (or leave blank to not change):")

            if newName:

                employeeInfo[userSelection][0] = newName

            if newEmail:

                employeeInfo[userSelection][1] = newEmail

            break

        except Exception as e:

            print(f"Error Occurred: {e}")

def main():

    print("Welcome to the Employee Contact Directory!")

    print(f"Starting time: {get\_current\_time()}")

    employeeInfo = []

    readFile(employeeInfo)

    listDirectory(employeeInfo)

    while True:

        try:

            print()

            print("1. Edit existing employee information")

            print("2. Delete existing employee information")

            print("3. Save the file and quit")

            print("4. Force exit the program without saving")

            userOption = int(input("Select the action you want to perform: "))

            if userOption == 1:

                editDirectory(employeeInfo)

            elif userOption ==2:

                deleteItem(employeeInfo)

            elif userOption == 3:

                outputFile(employeeInfo)

            elif userOption == 4:

                break

            else:

                raise ValueError("Please select a valid option!")

            listDirectory(employeeInfo)

        except Exception as e:

            print(f"Error has Occurred: {e}")

        # outputFile(employeeInfo)

    print(f" Ending time: {get\_current\_time()}")

    createdBy()

if \_\_name\_\_ == "\_\_main\_\_":

    main()