Final Review Program

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Source Code:

#Final Review Program

import csv

import os

from datetime import datetime

# Function to read info from .txt file

def read\_employee\_contact\_info(filename):

    with open(filename, 'r') as file:

        lines = file.readlines()

    contacts = []

    for line in lines:

        line = line.strip()

        if line:

            name, email = line.split(',')

            contacts.append([name.strip(), email.strip()])

    return contacts

# Function to list contact info

def list\_contacts(contacts):

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

    print("-" \* 50)

    for idx, contact in enumerate(contacts):

        print(f"{idx+1:<3} {contact[0]:<20} {contact[1]:<30}")

# Function to write info to CSV file

def write\_to\_csv(contacts, filename):

    with open(filename, 'w', newline='') as file:

        writer = csv.writer(file)

        writer.writerow(['Name', 'Email'])

        writer.writerows(contacts)

    print(f"Written by Your Name")

# Function to edit a contact, -1 to exit, with error handling

def edit\_contact(contacts):

    list\_contacts(contacts)

    try:

        choice = int(input("Enter the number of the contact to edit (or -1 to exit): "))

        if choice == -1:

            return

        if 1 <= choice <= len(contacts):

            name = input("Enter new name: ")

            email = input("Enter new email: ")

            contacts[choice-1] = [name.strip(), email.strip()]

        else:

            print("Invalid selection.")

    except ValueError:

        print("Invalid input. Please enter a number.")

    except Exception as e:

        print(f"An error occurred: {e}")

# Function to delete a contact, with error handling

def delete\_contact(contacts):

    list\_contacts(contacts)

    try:

        choice = int(input("Enter the number of the contact to delete (or -1 to exit): "))

        if choice == -1:

            return

        if 1 <= choice <= len(contacts):

            del contacts[choice-1]

            print("Contact deleted.")

        else:

            print("Invalid selection.")

    except ValueError:

        print("Invalid input. Please enter a number.")

    except Exception as e:

        print(f"An error occurred: {e}")

def main():

    print("Welcome to the Employee Contact Directory")

    start\_time = datetime.now()

    print(f"Program started at: {start\_time.strftime('%m/%d/%Y %I:%M:%S %p')}")

    contacts = read\_employee\_contact\_info(r'C:\Users\nyred\OneDrive\Desktop\programming\_final\_rev\employee\_contact\_info.txt')

    while True:

        list\_contacts(contacts)

        print("\nOptions:\n1. Edit contact\n2. Delete contact\n3. Write to CSV file\n4. Exit")

        try:

            choice = int(input("Select an option: "))

            if choice == 1:

                edit\_contact(contacts)

            elif choice == 2:

                delete\_contact(contacts)

            elif choice == 3:

                filename = input("Choose file name (e.g., contacts.csv): ")

                write\_to\_csv(contacts, filename)

            elif choice == 4:

                break

            else:

                print("Invalid option. Please choose again.")

        except ValueError:

            print("Invalid input. Please enter a number.")

        except Exception as e:

            print(f"An error occurred: {e}")

    end\_time = datetime.now()

    print(f"Program ended at: {end\_time.strftime('%m/%d/%Y %I:%M:%S %p')}")

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

    main()

print("Completed by Laura Bartlett")

Screenshots:

A screenshot of a computer

Description automatically generated

A screenshot of a computer

Description automatically generated

A screenshot of a computer program

Description automatically generatedA black screen with white text

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A screenshot of a computer screen

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