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import pickle
import contact
LOOK_UP = 1
ADD = 2
CHANGE = 3
DELETE = 4
QUIT = 5
FILENAME = 'contacts.txt'
def main():
    mycontacts = load_contacts()
    choice = 0
    while choice != QUIT:
        choice = get_menu_choice()
        if choice == LOOK_UP:
            look_up(mycontacts)
        elif choice == ADD:
            add(mycontacts)
        elif choice == CHANGE:
            change(mycontacts)
        elif choice == DELETE:
            delete(mycontacts)
    save_contacts(mycontacts)
def load_contacts():
    try:
        input_file = open(FILENAME, 'rb')
        contact_dct = pickle.load(input_file)
        input_file.close()
    except IOError:
        contact_dct = {}
    return contact_dct
def get_menu_choice():
    print()
    print('MENU')
    print('-----')
    print('1. Look up contact')
    print('2. Add a new contact')
    print('3. Change an existing contact')
    print('4. Delete a contact')
    print('5. Quit the program')
    print()
    choice = int(input('Enter your choice: '))
    while choice < LOOK_UP or choice > QUIT:
        choice = int(input('Enter a valid choice: '))
    return choice
def look_up(mycontacts):
    name = input('Enter a name to find: ')
    print(mycontacts.get(name, 'That name is not found.'))
def add(mycontacts):
    name = input('Name: ')
    phone = input('Phone: ')
    email = input('Email: ')
    entry = contact.Contact(name, phone, email)
    if name not in mycontacts:
        mycontacts[name] = entry

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        print('The entry has been added')
    else:
        print('The entry already exists.')
def change(mycontacts):
    name = input('Enter a name: ')
    if name in mycontacts:
        phone = input('Enter the new phone number: ')
        email = input('Enter the new eail address: ')
        entry = contact.Contact(name, phone, email)
        mycontacts[name] = entry
        print('Contact information updated for: ', name)
    else:
        print('The name %s is not found in the contact list.' %name)
def delete(mycontacts):
    name = input('Enter a name: ')
    if name in mycontacts:
        del mycontacts[name]
        print('%s has been deleted from the contract list.' %name)
    else:
        print("The name %S is not found in the contact list." %name)
def save_contacts(mycontacts):
    output_file = open(FILENAME, 'wb')
    pickle.dump(mycontacts, output_file)
    output_file.close()
main()

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