

Codsoft Internship

Python Programming

Task 2- To Create Contact Book

Python Code:

```
class Contact:
    def __init__(self, name, phone, email, address):
        self.name = name
        self.phone = phone
        self.email = email
        self.address = address

    def __str__(self):
        return f"Name: {self.name}, Phone: {self.phone}, Email: {self.email}, Address: {self.address}"

class ContactBook:
    def __init__(self):
        self.contacts = []

    def add_contact(self, contact):
        self.contacts.append(contact)
        print("Contact added successfully!")

    def view_contacts(self):
        if not self.contacts:
            print("No contacts found.")
        else:
            for contact in self.contacts:
                print(contact)

    def search_contact(self, search_term):
        results = [contact for contact in self.contacts if search_term.lower() in contact.name.lower() or
search_term in contact.phone]
        if not results:
            print("No matching contacts found.")
        else:
            for contact in results:
                print(contact)

    def update_contact(self, search_term):
        for contact in self.contacts:
            if search_term.lower() in contact.name.lower() or search_term in contact.phone:
                print("Contact found:")
                print(contact)
                contact.name = input("Enter new name: ")
                contact.phone = input("Enter new phone: ")
                contact.email = input("Enter new email: ")
```

```

        contact.address = input("Enter new address: ")
        print("Contact updated successfully!")
        return
    print("No matching contacts found.")

def delete_contact(self, search_term):
    for contact in self.contacts:
        if search_term.lower() in contact.name.lower() or search_term in contact.phone:
            self.contacts.remove(contact)
            print("Contact deleted successfully!")
            return
    print("No matching contacts found.")

def main():
    contact_book = ContactBook()

    while True:
        print("\nContact Book Menu:")
        print("1. Add Contact")
        print("2. View Contacts")
        print("3. Search Contact")
        print("4. Update Contact")
        print("5. Delete Contact")
        print("6. Exit")

        choice = input("Enter your choice: ")

        if choice == "1":
            name = input("Enter name: ")
            phone = input("Enter phone: ")
            email = input("Enter email: ")
            address = input("Enter address: ")
            contact = Contact(name, phone, email, address)
            contact_book.add_contact(contact)
        elif choice == "2":
            contact_book.view_contacts()
        elif choice == "3":
            search_term = input("Enter name or phone number to search: ")
            contact_book.search_contact(search_term)
        elif choice == "4":
            search_term = input("Enter name or phone number to update: ")
            contact_book.update_contact(search_term)
        elif choice == "5":
            search_term = input("Enter name or phone number to delete: ")
            contact_book.delete_contact(search_term)
        elif choice == "6":
            print("Exiting Contact Book. Goodbye!")
            break
        else:
            print("Invalid choice. Please try again.")

if __name__ == "__main__":
    main()

```

Output:

```
Output
Clear

Contact Book Menu:
1. Add Contact
2. View Contacts
3. Search Contact
4. Update Contact
5. Delete Contact
6. Exit
Enter your choice: |
```