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| **Class** | **Attributes** | **Operations** |
| User | -name: String  -phoneNumber: String  -address: String  -email: String  -photo: String | +manageContacts(): void  +manageContactgroups(): void |
| ContactsDB | +contact: dictionary | +getContactInfo(ContactID: String): list |
| ContactGroupsDB | -groupName: String  -groupMembers: list | +getContacts(): void  +manageContactGroups(): void  +updateContactGroupProfile(): void |
| AppPage | -contactList: list  -contactGroupList: list | +searchContact(): void  +viewContacts(): void  +viewContactGroups(): void |
| Search | -search: String | +searchContactName(): void  +searchContactGroupName(): void  +showResult(): void |
| ExportContacts | -contactList: list | +getContactList(): ContactDB  +openFile(): boolean  +writeToFile(): boolean  +closeFile(): boolean |
| ImportContacts | -contactList: list | +openFile(): boolean  +parseIntoContactList(): void  +closeFile(): boolean |
| SortContacts | -contactList: list | +sortAscending(): void  +sortDescending(): void  +sortByContactType(): void  +sortByZipCode(): void  +sortByAreaCode(): void  +sortByOccupation(): void  +sortByEmail(): void  +shareSortedList(): void  +printSortedList(): void |
| Add | -contactID: String | +addPhoneNumber(): void  +addName(): void  +addAddress(): void  +addEmail(): void  +addPhoto(): void  +addContactToGroup(): void  +verifyContactNotBlank(): void |
| ContactPage | -name: String  -mobileNumber: String  -homeNumber: String  -workNumber: String  -email: String  -address: String  -photo: String  -contactID: String |  |
| Edit | -contactID: String | +editPhoneNumber(): void  +editName(): void  +editAddress(): void  +editEmail(): void  +editPhoto(): void  +editContactGroupFeatures(): void  +verifyContactNotBlank(): void |
| Delete | -contactID: String | +deletePhoneNumber(): void  +deleteName(): void  +deleteAddress(): void  +deleteEmail(): void  +deletePhoto(): void  +deleteContact(contactID: String): void  +deleteContactGroup(): void  +deleteContactFromGroup(): void |
| Blacklist | -blacklisted: boolean  -phoneNumber: String  -contactID: String | +isNumBlocked(contactID: String): boolean  +blockNum(phoneNumber: String): void  +unblockNum(phoneNumber: String): void |
| TextApp | phoneNumber: String | +openSMSApp(phoneNumber: String): void |
| CallApp | phoneNumber: String | +openCallApp(phoneNumber: String): void |

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| Dictionary<contactID, contactInfo> | +contactID: String  +contactInfo: list |  |