Contact Book Management System

Application Architecture

Application Menus:

- Add Contacts
- View Contacts
- Remove Contacts
- Search Contacts
- Update Contacts
- Delete All File Data
- Exit()

Folder Directory

1. Directory Name: ContactManagementSystem
2. Directory File Name:
    a. main.py
    b. AddContacts.py
    c. ViewContacts.py
    d. RemoveContact.py
    e. SearchContact.py
    f. SaveFile.py
    g. UpdateContact.py
    h. DeleteFileData.py
    i. RestoredData.py
3. ContactHistory.csv(CSV file format)

Books Contacts Management System

☐ main.py

Global Variable

```
saveContact=[]
FileName=”ContactHistory.csv”
```

- AddContacts.py
- ViewContacts.py
- RemoveContact.py
- SearchContact.py
- UpdateContact
- SaveFile.py
- DeleteFileData.py
- RestoredData.py
- ContactHistory.csv

All the External files are connected to the main.py file

main.py

```
while True:
        Contact Book   Management
                                System
                  1. Add Contacts
                  2.View Contacts
                3. Remove Contact
                4. Search Contacts
                5. Update Contact
            6. Delete All Data From File
                              0. Exit
                    option=input()
            contactManagement(option)
```

```
contactManagement(option):
   match option:
     case 1:
                          addContact()
                            saveFile()
     case 2:
                        viewContacts()
     case 3:
                      removeContact()
     case 4:
                        searchcontact()
     case 5:
                        updatecontact()
                            saveFile()
     case 6:
                      deleteFileData()
                            saveFile()
```

Books Contacts Management System

☐ AddContacts.py

```
def addContact(savedata,filename):
    lastName=input()
    firstName=input()
    dateOfBirth=input()
    address=input()
    emailAddress=input()
    password=input()
    nationalID=input()
    contactNumber=input()
```

Note: all the logic (Prevent Duplicate Numbers, Add all data to file, Error Handling, Modular Code, No External Libraries) are implemented in addContact.py file

All the inputs are added to the

SaveContact=[]
FileName=”ContactHistory.csv”

Finally, Save all Data in the **“ContactHistory.csv”** file

☐ ViewContacts.py

```
def viewContacts(fileName):

        with open(fileName,'r') as f:
                readData=f.read()
                print(readData)
```

Note: All data has been read from the **“ContactHistory.csv”** file

Books Contacts Management System

☐ RemoveContact.py

```
def removeContact(savedata,filename):
    email=input("Enter Your Email-Address: ")
    password=input("Enter Your Password: ")
```

Using email, and password , firstly you are LogIn the system

If Yes →

Enter Your Removing Contact Number.

contact=input()

If (your contact number are match to the file Contact data then)= program are executed successfully and removed data Successfully

If No ↓

Break the program

Finally ↓

Update file data “ContactHistory.csv”

Books Contacts Management System

☐ SearchContact.py

```
def removeContact(savedata,filename):
        email=input("Enter Your Email-Address: ")
        password=input("Enter Your Password: ")
```

Using email, and password , firstly you are LogIn the system

If Yes →

Enter Your Searching Contact Number.

contact=input()

If (your contact number match to the file Contact data then)= program are executed successfully and Show all data Successfully

If No ↓

Break the program

☐ SaveFile.py

```
def saveFile(ContactFileName,savedata):
    with open(ContactFileName,'w') as fileName:
        for data in savedata:
                fileName.write(data[].....)
```

Note: Save all data successfully in “ContactHistory.csv”

Books Contacts Management System

☐ UpdateContact.py

```
def removeContact(savedata,filename):
    email=input("Enter Your Email-Address: ")
    password=input("Enter Your Password: ")
```

Using email, and password , firstly you are LogIn the system

If Yes

Enter Your Removing Contact Number.

contact=input()

If (your contact number are match to the file Contact data then)= program are executed successfully

If No

Break the program

Updating

Updating all data

Update file data “ContactHistory.csv”

Books Contacts Management System

☐ DeleteFileData.py

```
def removeContact(savedata,filename):
    email=input("Enter Your Email-Address: ")
    password=input("Enter Your Password: ")
```

Using email, and password, firstly you are LogIn the system

If Yes →

Enter Your Deleting Contact Number.

contact=input()

If (your contact number match to the file Contact data then)= program are executed successfully and Delete data Successfully

If No ↓

Break the program

☐ RestoredData.py

```
def restoredData(savecontact,fileData):
    with open('ContactHistory.csv','r') as fp:
        for line in fp.readlines():
            coloumData = line.strip().split(",")
            read the file data ……
```

↳

restoredData(savecontact,fileData) call from main.py file ……..

Then restored all data successfully