

The background is a dark blue gradient with a subtle pattern of white dots. Overlaid on the left side is a large, semi-transparent graphic consisting of several concentric circles and a scale. The scale is a circular arc with tick marks and numbers ranging from 140 to 260. Several smaller concentric circles are scattered around the main graphic, some with arrows indicating a clockwise direction.

ALI HASSAN PROGRAMMER PHONE BOOK MANAGEMENT

SEMESTER PROJECT

THIS IS FULL CODE OF PHONE BOOK PROJECT

```
File Edit Selection View Go Run Terminal Help
phone_book_management.cpp - uni-project-phone-book - Visual Studio Code

C++ phone_book_management.cpp > searchByName()
1 #include <iostream>
2 #include <fstream>
3 #include <sstream>
4 using namespace std;
5 void menu();
6 void searchByName()
7 {
8     cout << "Please Enter Contact Name: ";
9     string name;
10    cin >> name;
11    ifstream inFile;
12    inFile.open("directory.txt");
13    string line;
14    bool found = false;
15    while (getline(inFile, line))
16    {
17        int pos = line.find(name);
18        if (pos != string::npos)
19        {
20            cout << line << endl;
21            found = true;
22        }
23    }
24    if (!found)
25    {
26        cout << "No contact found with th";
27    }
28    inFile.close();
29    menu();
30 }
31 void Show_Records()
32 {
33     ifstream fileshow;
34     fileshow.open("directory.txt");
35     string word;
36     while (getline(fileshow, word))
37     {
38         cout << word << endl;
39     }
40     menu();
41 }
42 void Addcontact()
43 {
44     ofstream MyFile;
45     MyFile.open("directory.txt", ios::app);
46     string address;
47     string name, first_name, last_name;
48     string email;
49     string number_str;
50     int number;
51     while (true)

C++ phone_book_management.cpp > Show_Records()
51 while (true)
52 {
53     string word;
54     ifstream inFile;
55     cout << "Enter Your First Name \t";
56     cin >> first_name;
57     cout << "Enter Your Last Name \t";
58     cin >> last_name;
59     name = first_name + " " + last_name;
60     inFile.open("directory.txt");
61     string line;
62     bool found = false;
63     while (getline(inFile, line))
64     {
65         int pos = line.find(name);
66         if (pos != string::npos)
67         {
68             found = true;
69             break;
70         }
71     }
72     if (found)
73     {
74         cout << "Name is already exists";
75         continue;
76     }
77     inFile.close();
78     break;
79 }
80
81 cout << "Enter Your email \t";
82 cin >> email;
83 while (true)
84 {
85     cout << "Enter Your number \t";
86     cin >> number_str;
87     // stringstream ss(number_str);
88     // if (ss >> number)
89     // {
90     // }
91     // else
92     // {
93     //     cout << "Please enter Number";
94     //     continue;
95     // }
96     if (number_str.size() > 11 || number_str[0] != '0')
97     {
98         cout << "Number should be less than 10 digits";
99         continue;
100    }
101    while (true)

C++ phone_book_management.cpp > main()
102
103    break;
104 }
105 cout << "Enter Your address \t";
106 cin >> address;
107 MyFile << name << "\t" << email << "\n";
108
109 MyFile.close();
110 cout << "Contact is Save Successfully";
111 menu();
112 }
113 void menu()
114 {
115     while (true)
116     {
117         int ch;
118         string name;
119         cout << "..... PHONE BOOK MANAGEMENT .....";
120         cout << "..... PROGRAM .....";
121         cout << "0. Exit\n";
122         cout << "1. Add Contact\n";
123         cout << "2. Show all Contacts\n";
124         cout << "3. Search Contact By name\n";
125         cout << "Enter Your Choice : ";
126         cin >> ch;
127         switch (ch)
128         {
129             case 1:
130                 Addcontact();
131                 break;
132             case 2:
133                 Show_Records();
134                 break;
135             case 3:
136                 searchByName();
137                 break;
138             default:
139                 break;
140         }
141     }
142 }
143
144
145
146
147 int main()
148 {
149     menu();
150     return 0;
151 }
152
```

FRONT-END MENU

First Name
Last Name
E-mail
Number
Address

```
.....  
PHONE BOOK MANAGEMENT  
.....  
  
::::::::::::: PROGRAM MENU :::::::::::::::  
0. Exit  
1. Add Contact  
2. Show all Contacts  
3. Search Contact By name  
Enter Your Choice 1  
Enter Your First Name ali  
Enter Your Last Name hassan  
Enter Your email ali hassan@gmail.com  
Enter Your number 03128725200  
Enter Your address twkal_twon_colony_multan  
Contact is Save Successfully!  
.....
```

Chose 1st option in which add contact

BACK-END CODE OF MANU BAR

```
112 }
113 void menu()
114 {
115     while (true)
116     {
117         int ch;
118         string name;
119         cout << ".....\n";
120         cout << "          PHONE BOOK MANAGEMENT\n";
121         cout << ".....\n\n";
122         cout << "::::::::: PROGRAM MENU ::::::::::\n";
123         cout << "0. Exit\n";
124         cout << "1. Add Contact\n";
125         cout << "2. Show all Contacts\n";
126         cout << "3. Search Contact By name\n";
127         cout << "Enter Your Choice ";
128         cin >> ch;
129         switch (ch)
130         {
131             case 1:
132                 Addcontact();
133                 break;
134             case 2:
135                 Show_Records();
136                 break;
137             case 3:
138                 searchByName();
139                 break;
140             default:
141                 break;
142         }
143         break;
144     }
145 }
```


SHOW ALL CONTACTS

Show all
data and
loop is
again
work in
the menu
form

```
.....
PHONE BOOK MANAGEMENT
.....

::::::::::: PROGRAM MENU ::::::::::::::
0. Exit
1. Add Contact
2. Show all Contacts
3. Search Contact By name
Enter Your Choice 2

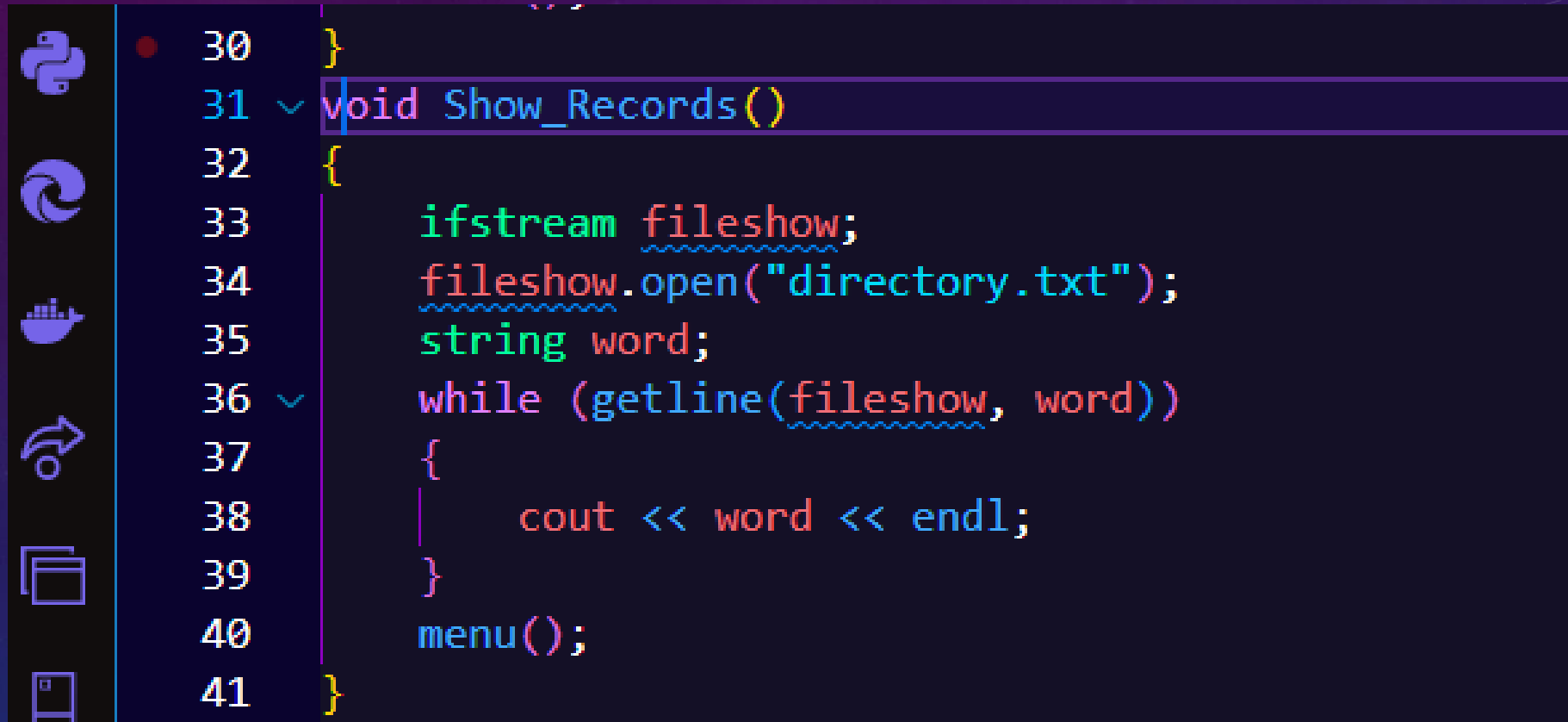
Name | Email | Phone Number | Address
Ali Hassan | hitechcoder.6at@gmail.com | 3259606001 | twkal_town_colony_multan
Shehzad | hitechco5er.54at@gmail.com | 3259606002 | twkal_pown_colony_karachi
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ali hassan | ali hassan@gmail.com | 03128725200 | twkal_twon_colony_multan
Qamar abbas | qamar@gmail.com | 03121723556 | new-multan
Tanveer naeem | tanveer@gmail.com | 03027389792 | city_housing

.....
PHONE BOOK MANAGEMENT
.....

::::::::::: PROGRAM MENU ::::::::::::::
0. Exit
1. Add Contact
2. Show all Contacts
3. Search Contact By name
Enter Your Choice
```

Chose 2nd option in which Show Contacts

BACK-END CODE



```
30 }
31 void Show_Records()
32 {
33     ifstream fileshow;
34     fileshow.open("directory.txt");
35     string word;
36     while (getline(fileshow, word))
37     {
38         cout << word << endl;
39     }
40     menu();
41 }
```

SEARCH CONTACT BY NAME

```
.....
PHONE BOOK MANAGEMENT
.....

::::::::::::: PROGRAM MENU :::::::::::::::
0. Exit
1. Add Contact
2. Show all Contacts
3. Search Contact By name
Enter Your Choice 3
Please Enter Contact Name: Qamar
Qamar abbas      |qamar@gmail.com      |03121723556      |new-multan
```

Chose 3rd option in which Show Contacts

BACK-END CODE OF SEARCHING NAME

```
5 void menu();
6 void searchByName()
7 {
8     cout << "Please Enter Contact Name: ";
9     string name;
10    cin >> name;
11    ifstream inFile;
12    inFile.open("directory.txt");
13    string line;
14    bool found = false;
15    while (getline(inFile, line))
16    {
17        int pos = line.find(name);
18        if (pos != string::npos)
19        {
20            cout << line << endl;
21            found = true;
22        }
23    }
24    if (!found)
25    {
26        cout << "No contact found with that name is " << name << " in phonebook!!!" << endl;
27    }
28    inFile.close();
29    menu();
30 }
```


LOOP-HOLES SOLUTIONS

PHONE BOOK MANAGEMENT

PROGRAM MENU

0. Exit

1. Add Contact

2. Show all Contacts

3. Search Contact By name

Enter Your Choice 1

Enter Your First Name ali

Enter Your Last Name hassan

Name is already exist please Enter Your First Name

Tanveer

Enter Your Last Name naeem

Enter Your email tanveer@gmail.com

Enter Your number 0302738979

Number should be less than or equal to 11 digits.

Enter Your number 03027389792

Enter Your address city_housing

Contact is Save Successfully!