



ESFP-2 PROJECT

# File Management System

Presentation by: Manthan Panchal.



# Roadmap

- PROJECT DESCRIPTION

- BRIEF ON FILE HANDLING

- PROJECT'S CODE

- HOW PROJECT WORKS



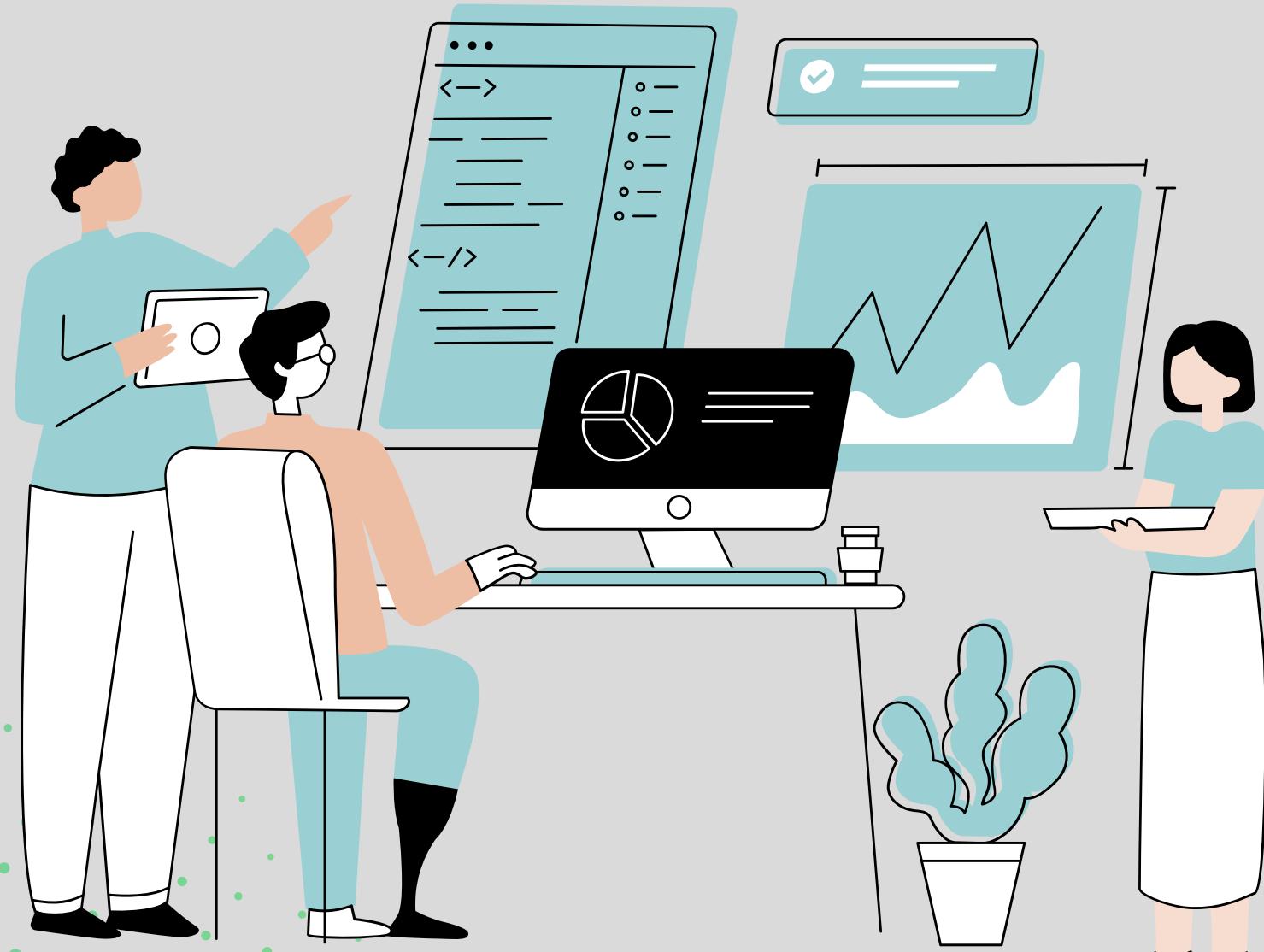
# Project Description

- File Management system is based on File handling and OOP's concepts .
- Used OOP's Class and object concept to reduced reusability of code.

>>>



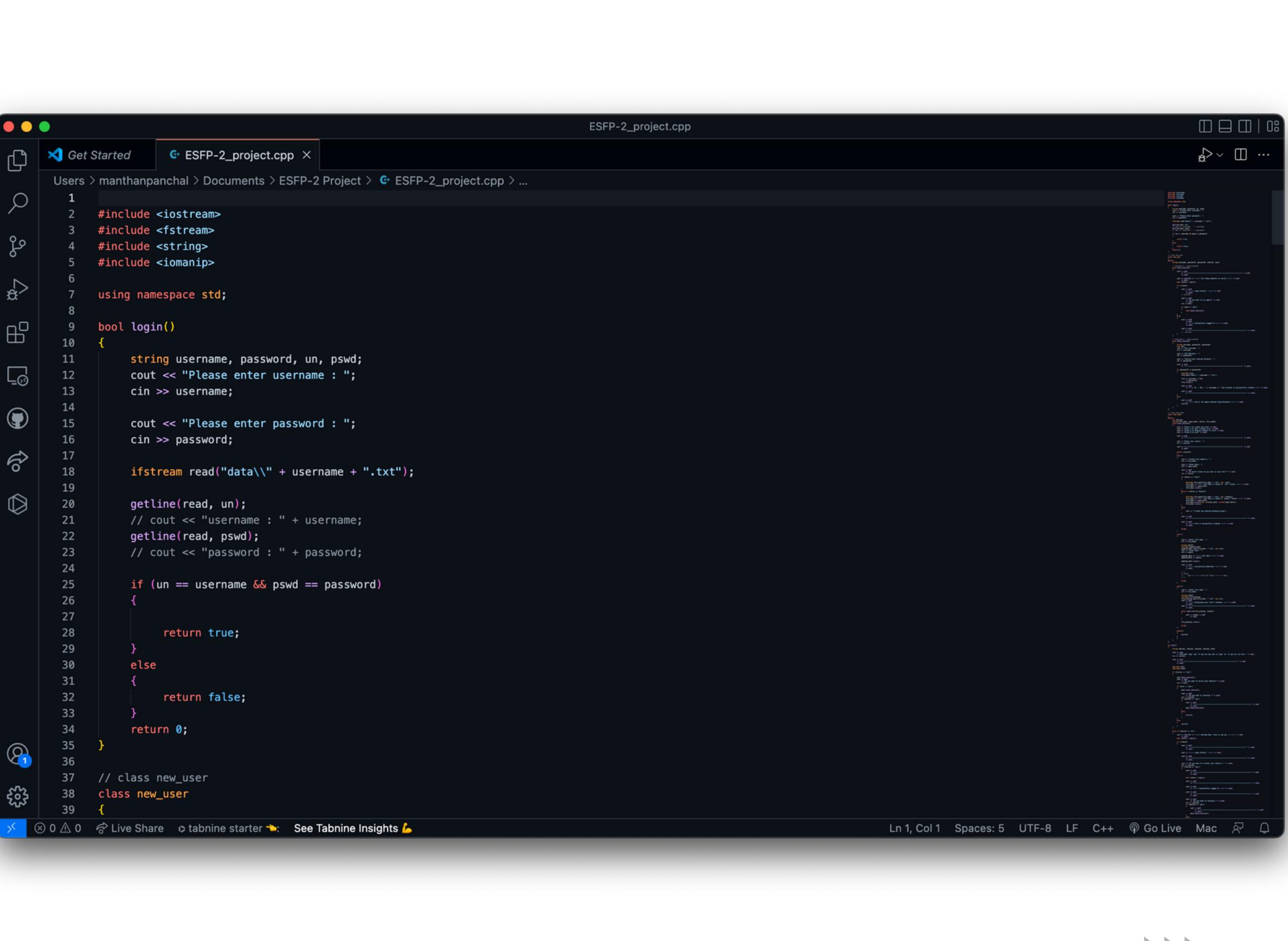
# Brief on File Handling



- File Handling is used to store data in .txt form or .bin form.
- The useful classes for working with files are fstream , ifstream and ofstream.
- fstream is a header file.
- ifstream is used to read contents of file.
- ofstream is used to open or create file.
- Using File Handling we can do things like append any file , update any data in file , display file contents and many more.



# Project Code



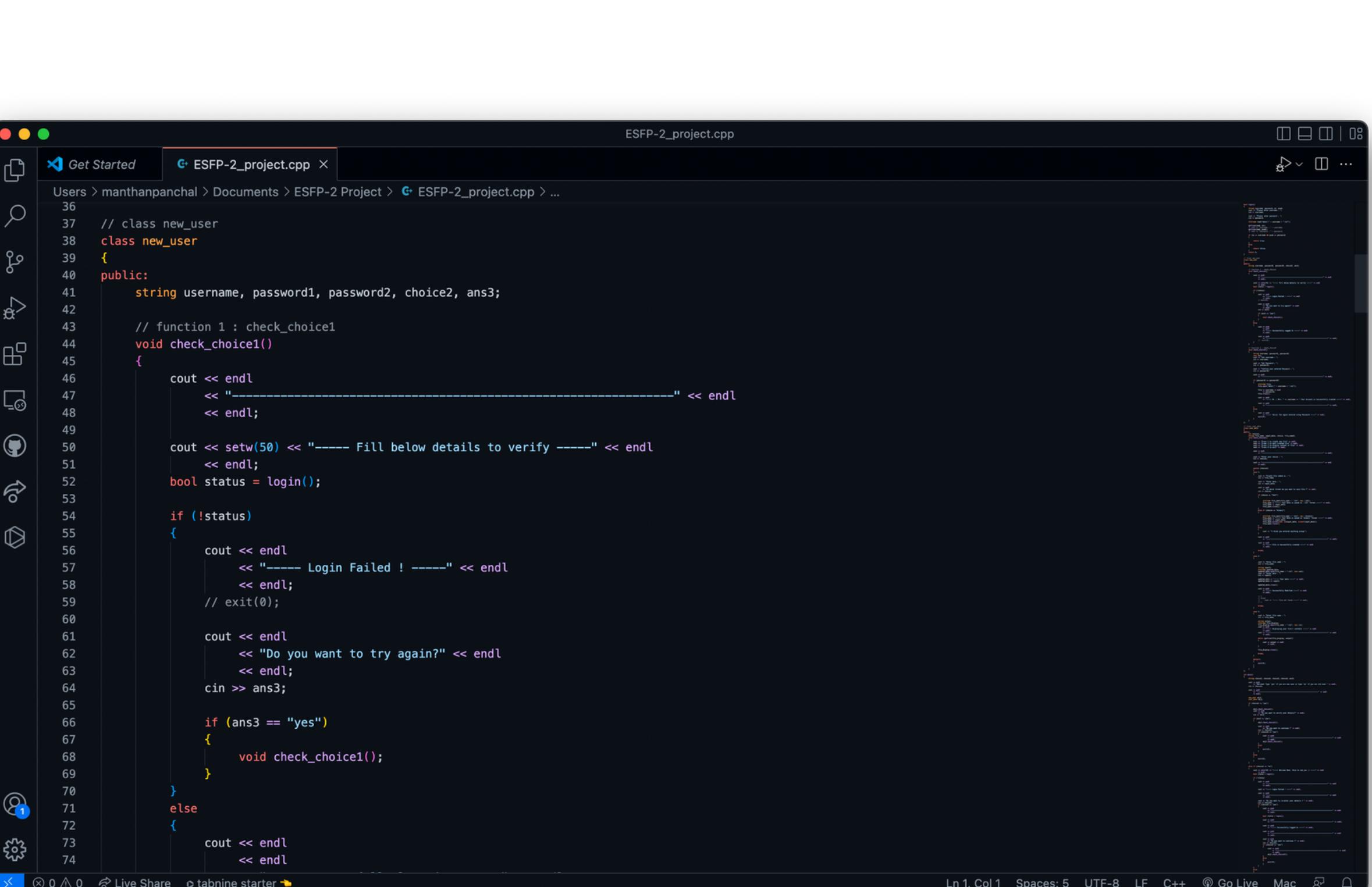
The screenshot shows a code editor window titled "ESFP-2\_project.cpp". The file path is "Users > manthanpanchal > Documents > ESFP-2 Project > ESFP-2\_project.cpp". The code is a C++ program that reads a user's credentials from a file and checks if they match stored data.

```
1 #include <iostream>
2 #include <fstream>
3 #include <string>
4 #include <iomanip>
5
6 using namespace std;
7
8 bool login()
9 {
10     string username, password, un, pswd;
11     cout << "Please enter username : ";
12     cin >> username;
13
14     cout << "Please enter password : ";
15     cin >> password;
16
17     ifstream read("data\\" + username + ".txt");
18
19     getline(read, un);
20     // cout << "username : " + username;
21     getline(read, pswd);
22     // cout << "password : " + password;
23
24     if (un == username && pswd == password)
25     {
26
27         return true;
28     }
29     else
30     {
31
32         return false;
33     }
34
35 }
36
37 // class new_user
38 class new_user
39 {
```

The status bar at the bottom indicates: Ln 1, Col 1, Spaces: 5, UTF-8, LF, C++, Go Live, Mac.



# Project Code

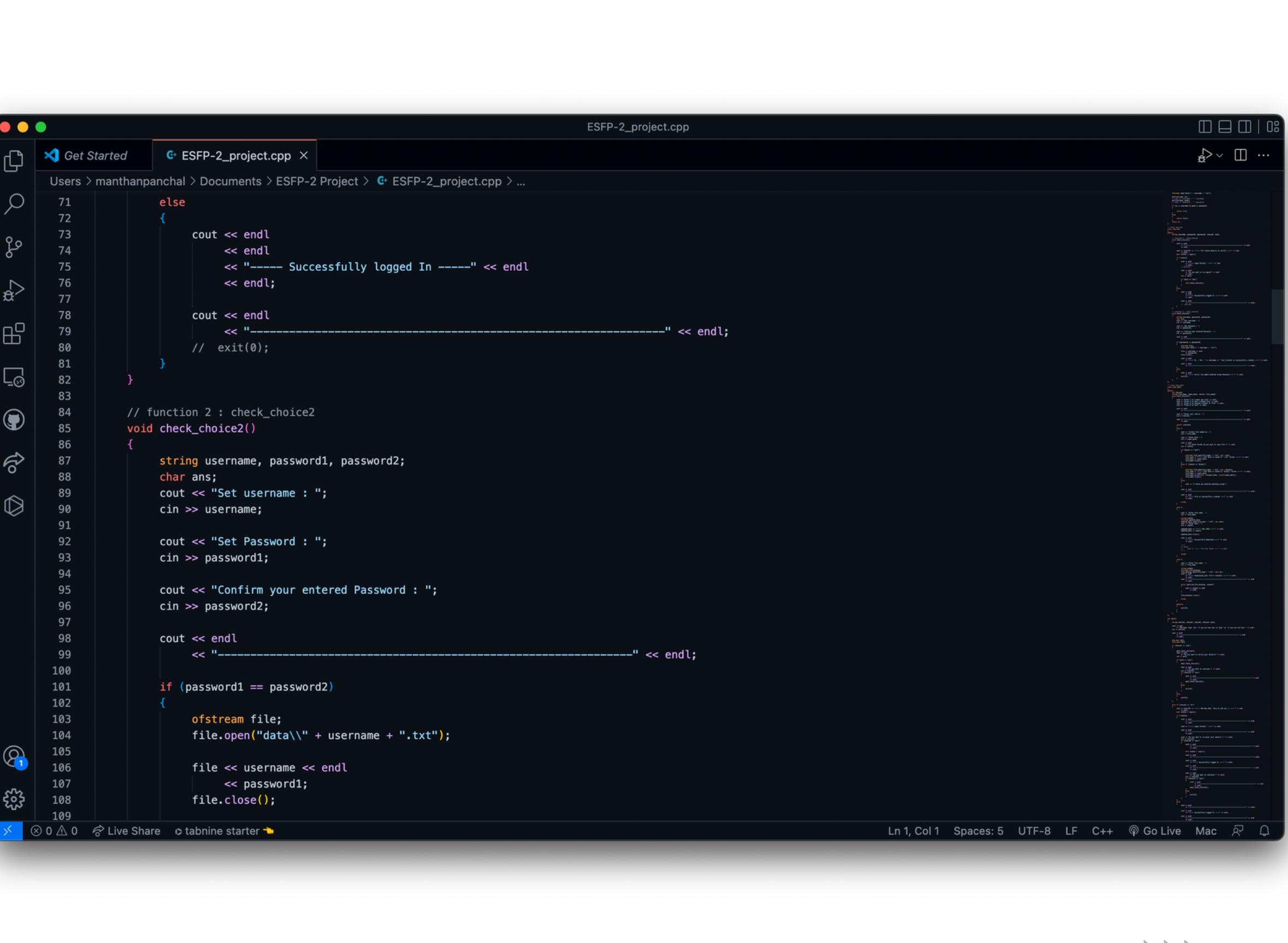


The screenshot shows a code editor window titled "ESFP-2\_project.cpp". The file path is "Users > manthanpanchal > Documents > ESFP-2 Project > ESFP-2\_project.cpp". The code is written in C++ and defines a class "new\_user" with a public member function "check\_choice1". The function handles user login and provides an option to try again if login fails.

```
36
37 // class new_user
38 class new_user
39 {
40 public:
41     string username, password1, password2, choice2, ans3;
42
43     // function 1 : check_choice1
44     void check_choice1()
45     {
46         cout << endl
47             << "-----" << endl
48             << endl;
49
50         cout << setw(50) << "---- Fill below details to verify ----" << endl
51             << endl;
52         bool status = login();
53
54         if (!status)
55         {
56             cout << endl
57                 << "---- Login Failed ! ----" << endl
58                 << endl;
59             // exit(0);
60
61             cout << endl
62                 << "Do you want to try again?" << endl
63                 << endl;
64             cin >> ans3;
65
66             if (ans3 == "yes")
67             {
68                 void check_choice1();
69             }
70             else
71             {
72                 cout << endl
73                     << endl
74             }
75         }
76     }
77 }
```



# Project Code



The screenshot shows a code editor window titled "ESFP-2\_project.cpp". The file path is "Users > manthanpanchal > Documents > ESFP-2 Project > ESFP-2\_project.cpp". The code is written in C++ and includes functions for logging in and checking password confirmation.

```
else
{
    cout << endl
        << endl
        << "----- Successfully logged In -----" << endl
        << endl;

    cout << endl
        << "-----" << endl;
    // exit(0);
}

// function 2 : check_choice2
void check_choice2()
{
    string username, password1, password2;
    char ans;
    cout << "Set username : ";
    cin >> username;

    cout << "Set Password : ";
    cin >> password1;

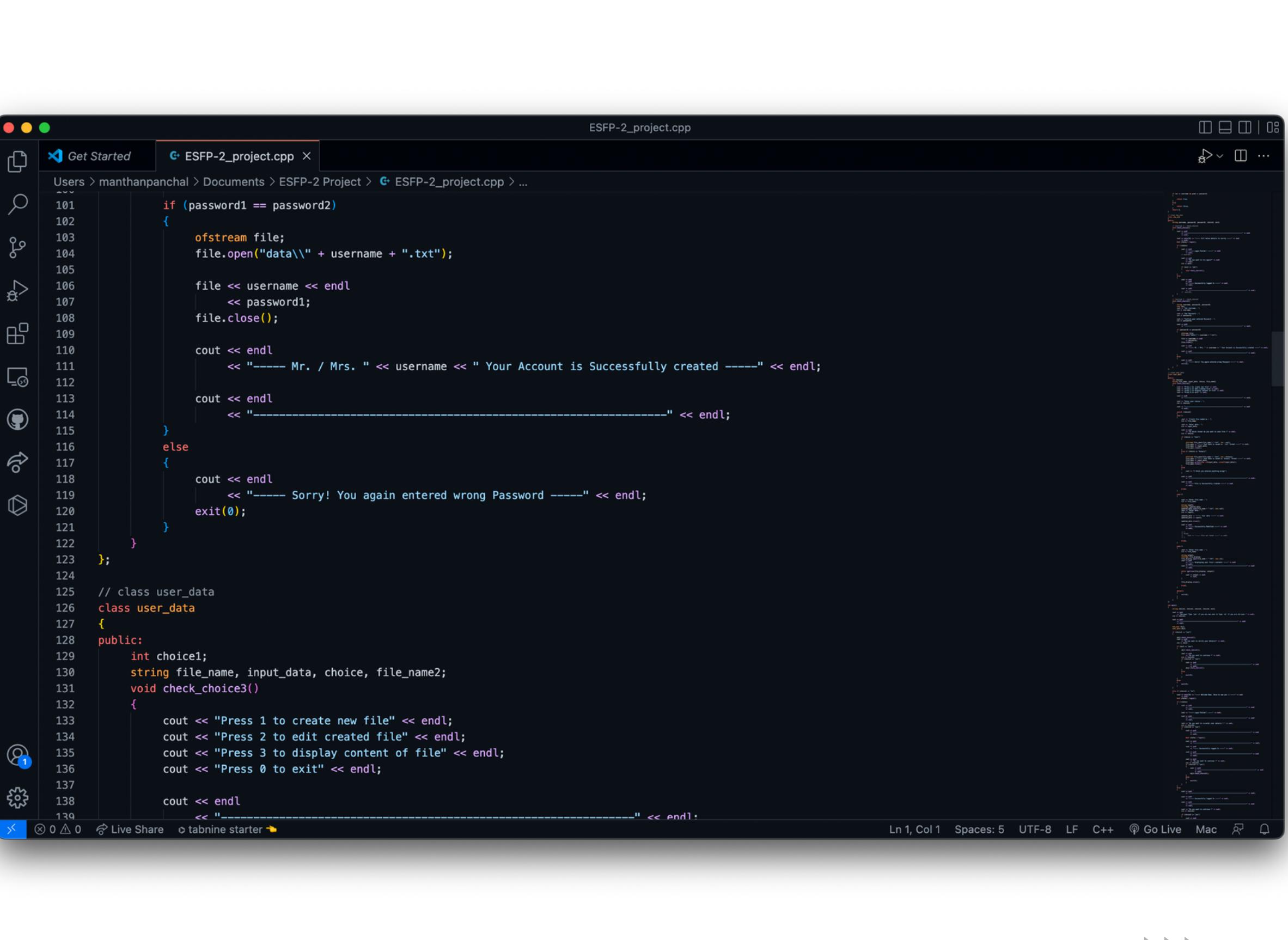
    cout << "Confirm your entered Password : ";
    cin >> password2;

    cout << endl
        << "-----" << endl;

    if (password1 == password2)
    {
        ofstream file;
        file.open("data\\" + username + ".txt");

        file << username << endl
            << password1;
        file.close();
    }
}
```

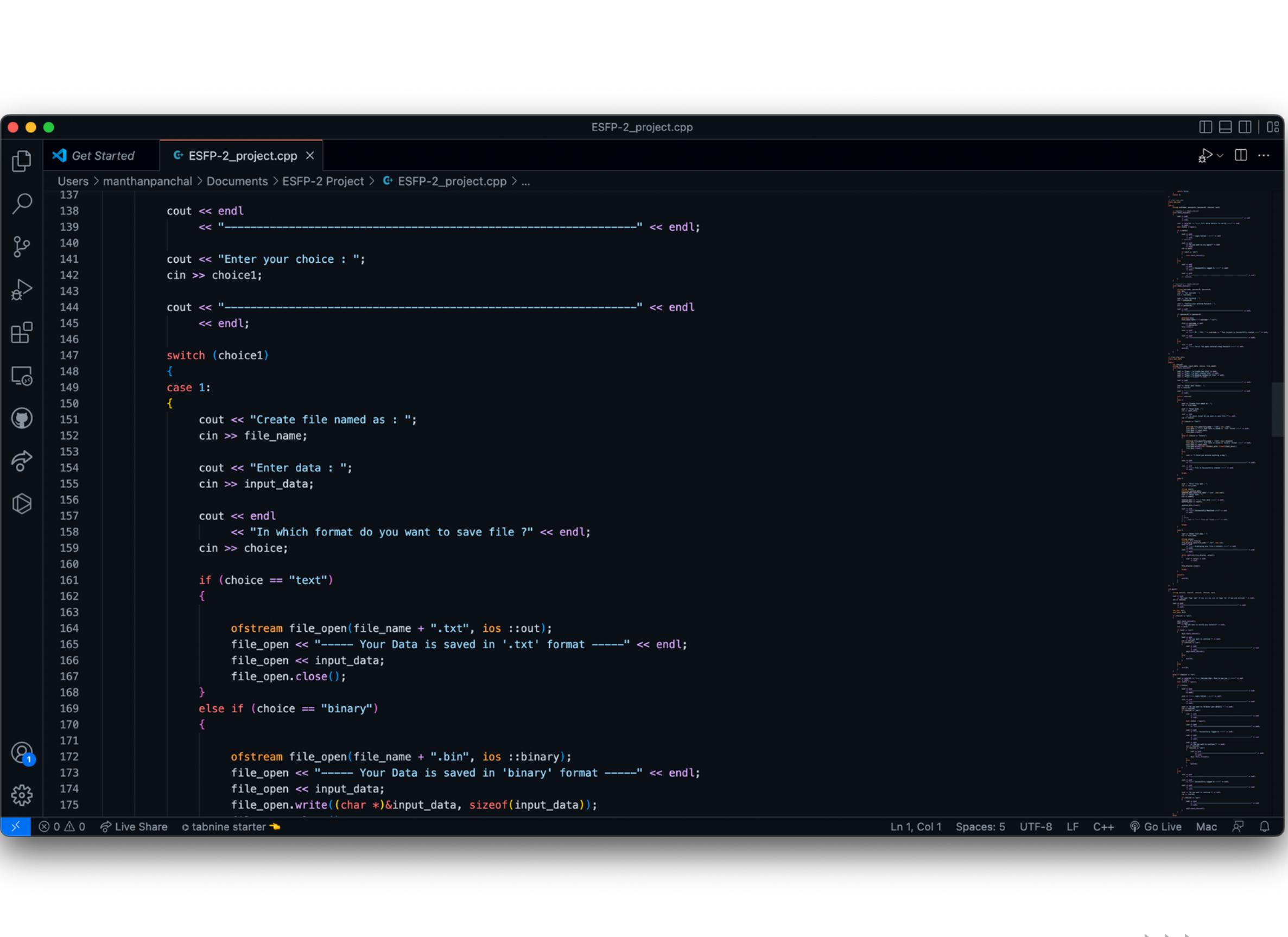
# Project Code



The screenshot shows a code editor window titled "ESFP-2\_project.cpp". The code is written in C++ and performs account creation or modification. It includes a class definition for "user\_data" with a member function "check\_choice3" that prints menu options to the console. The code uses file streams to interact with a file named "data\\username.txt". Error handling is included for password mismatch and wrong password entry.

```
ESFP-2_project.cpp
101     if (password1 == password2)
102     {
103         ofstream file;
104         file.open("data\\" + username + ".txt");
105
106         file << username << endl
107             << password1;
108         file.close();
109
110         cout << endl
111             << "----- Mr. / Mrs. " << username << " Your Account is Successfully created ----" << endl;
112
113         cout << endl
114             << "-----" << endl;
115     }
116     else
117     {
118         cout << endl
119             << "----- Sorry! You again entered wrong Password ----" << endl;
120         exit(0);
121     }
122 }
123
124 // class user_data
125 class user_data
126 {
127 public:
128     int choice1;
129     string file_name, input_data, choice, file_name2;
130     void check_choice3()
131     {
132         cout << "Press 1 to create new file" << endl;
133         cout << "Press 2 to edit created file" << endl;
134         cout << "Press 3 to display content of file" << endl;
135         cout << "Press 0 to exit" << endl;
136
137         cout << endl
138             << "-----" << endl;
139     }
}
```

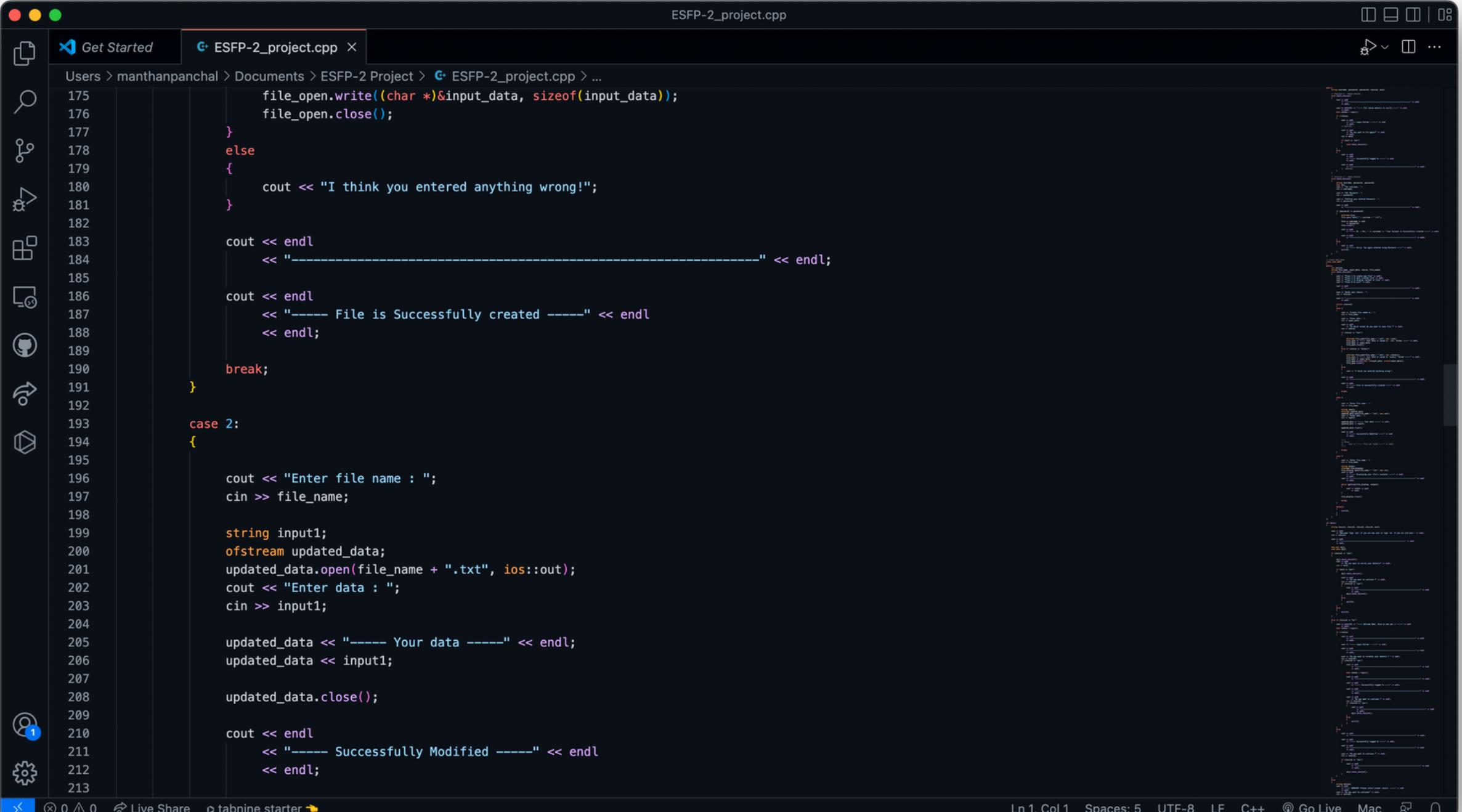
# Project Code



The screenshot shows a code editor window titled "ESFP-2\_project.cpp". The code is a C++ program that prompts the user for a choice (1 or 2) and then performs different actions based on the selection. If choice 1 is made, it asks for a file name and input data, then saves the data in either text or binary format. If choice 2 is made, it prints a message and exits.

```
ESFP-2_project.cpp
Users > manthanpanchal > Documents > ESFP-2 Project > ESFP-2_project.cpp > ...
137 cout << endl
138     << "-----" << endl;
139
140 cout << "Enter your choice : ";
141 cin >> choice1;
142
143 cout << "-----" << endl;
144     << endl;
145
146 switch (choice1)
147 {
148 case 1:
149 {
150     cout << "Create file named as : ";
151     cin >> file_name;
152
153     cout << "Enter data : ";
154     cin >> input_data;
155
156     cout << endl
157         << "In which format do you want to save file ?" << endl;
158     cin >> choice;
159
160     if (choice == "text")
161     {
162
163         ofstream file_open(file_name + ".txt", ios ::out);
164         file_open << "----- Your Data is saved in '.txt' format -----" << endl;
165         file_open << input_data;
166         file_open.close();
167     }
168     else if (choice == "binary")
169     {
170
171         ofstream file_open(file_name + ".bin", ios ::binary);
172         file_open << "----- Your Data is saved in 'binary' format -----" << endl;
173         file_open << input_data;
174         file_open.write((char *)&input_data, sizeof(input_data));
175     }
}
Ln 1, Col 1  Spaces: 5  UTF-8  LF  C++  Go Live  Mac
```

# Project Code

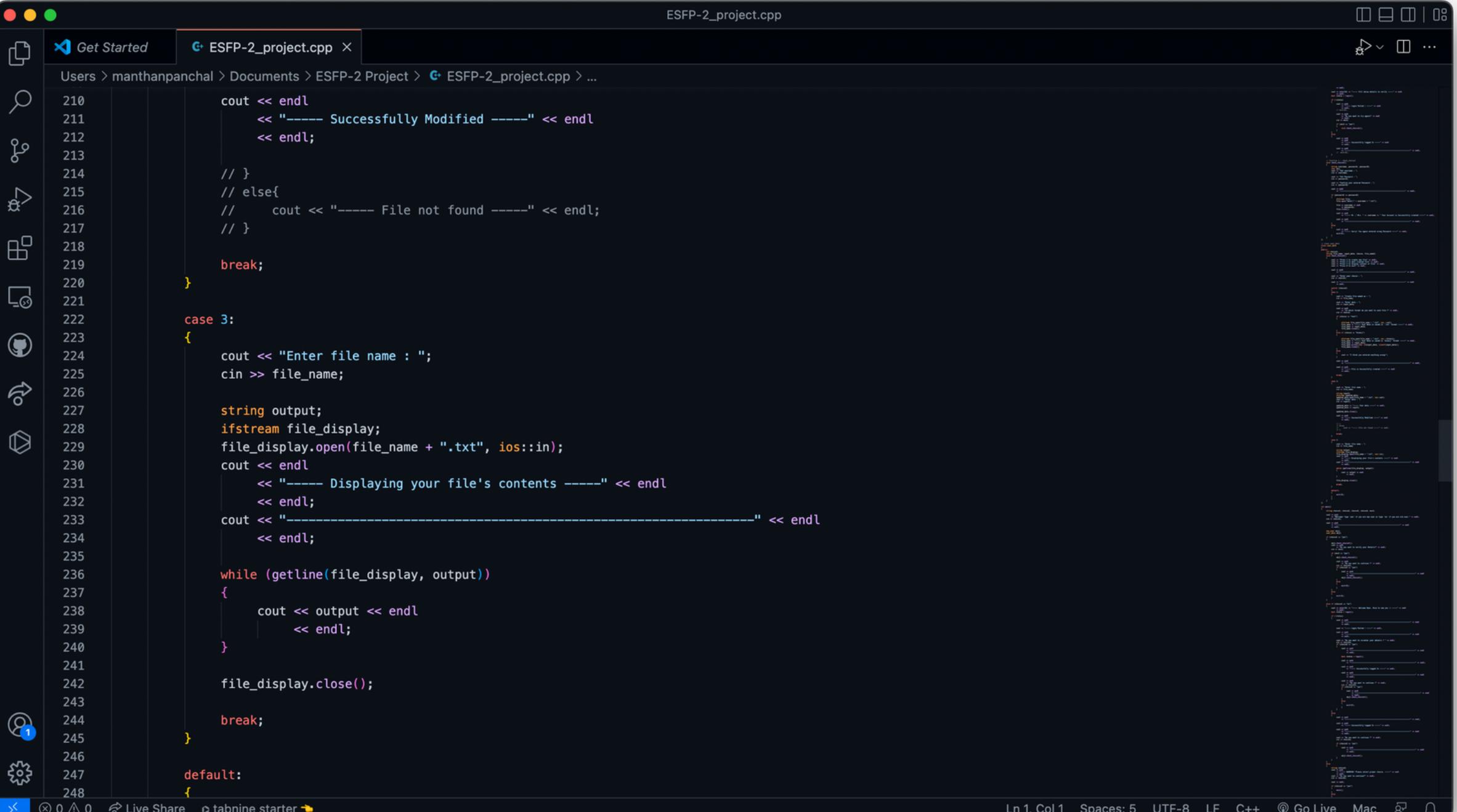


The screenshot shows a code editor window titled "ESFP-2\_project.cpp". The file path is "Users > manthanpanchal > Documents > ESFP-2 Project > ESFP-2\_project.cpp". The code is written in C++ and performs file operations. It includes logic to handle file creation and modification. The code editor has a dark theme with syntax highlighting. A sidebar on the left contains icons for file operations like Open, Save, Find, and Run. The bottom status bar shows "Ln 1, Col 1" and other settings.

```
175     file_open.write((char *)&input_data, sizeof(input_data));
176     file_open.close();
177 }
178 else
179 {
180     cout << "I think you entered anything wrong!";
181 }
182
183 cout << endl
184     << "-----" << endl;
185
186 cout << endl
187     << "---- File is Successfully created ----" << endl
188     << endl;
189
190 break;
191
192 case 2:
193 {
194
195     cout << "Enter file name : ";
196     cin >> file_name;
197
198     string input1;
199     ofstream updated_data;
200     updated_data.open(file_name + ".txt", ios::out);
201     cout << "Enter data : ";
202     cin >> input1;
203
204     updated_data << "---- Your data ----" << endl;
205     updated_data << input1;
206
207     updated_data.close();
208
209     cout << endl
210         << "---- Successfully Modified ----" << endl
211         << endl;
212
213 }
```



# Project Code



The screenshot shows a code editor window titled "ESFP-2\_project.cpp". The file path is "Users > manthanpanchal > Documents > ESFP-2 Project > ESFP-2\_project.cpp". The code is a C++ program with the following structure:

```
cout << endl
    << "----- Successfully Modified -----" << endl
    << endl;
}

// else{
//     cout << "----- File not found -----" << endl;
// }

break;

case 3:
{
    cout << "Enter file name : ";
    cin >> file_name;

    string output;
    ifstream file_display;
    file_display.open(file_name + ".txt", ios::in);
    cout << endl
        << "----- Displaying your file's contents -----" << endl
        << endl;
    cout << "-----" << endl
        << endl;

    while (getline(file_display, output))
    {
        cout << output << endl
            << endl;
    }

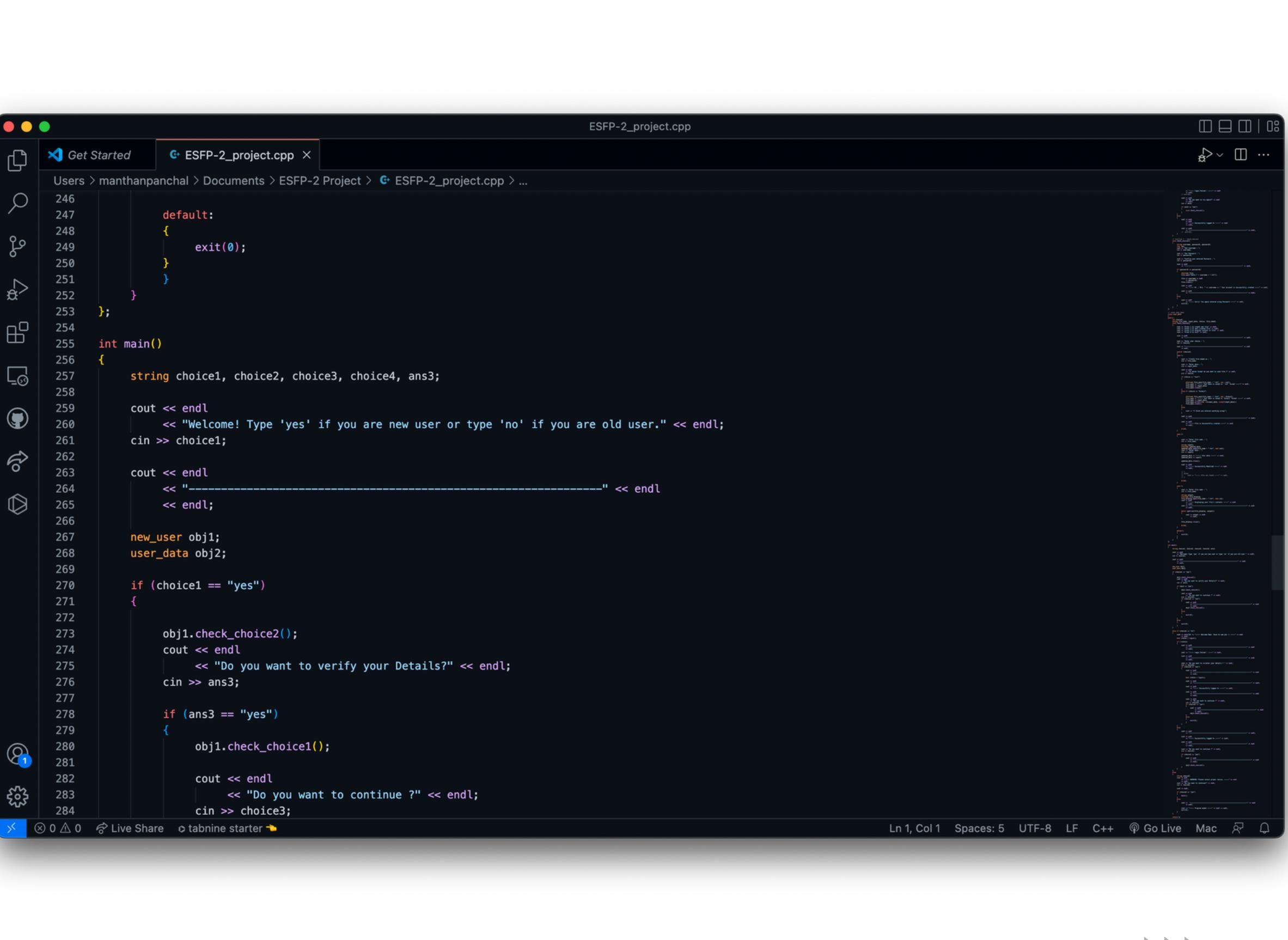
    file_display.close();

    break;
}

default:
{
```

The code handles user input for modifying or displaying files. It includes error handling for file non-existence and a case for displaying file contents.

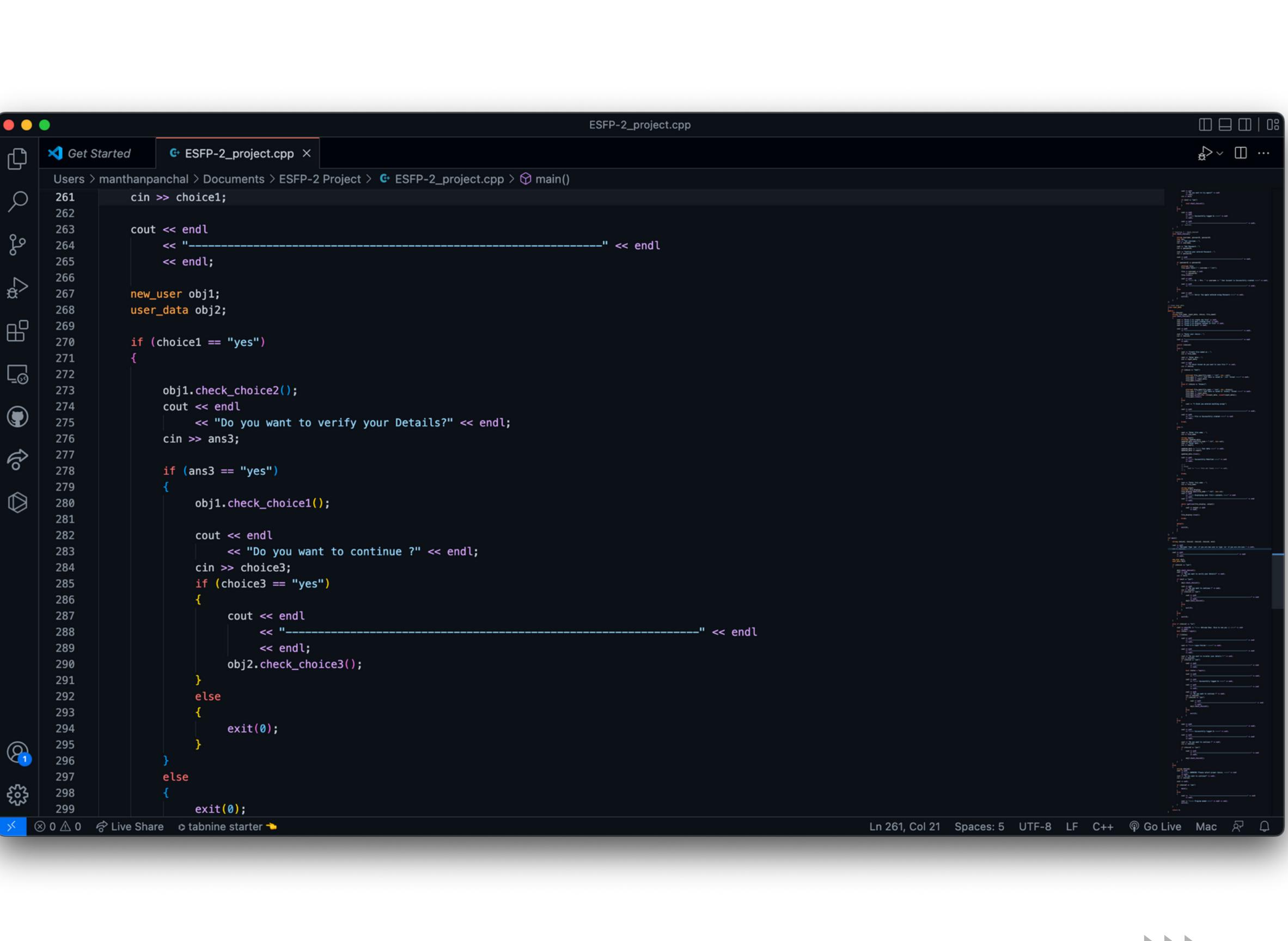
# Project Code



The screenshot shows a code editor window titled "ESFP-2\_project.cpp". The file path is "Users > manthanpanchal > Documents > ESFP-2 Project > ESFP-2\_project.cpp". The code is a C++ program that prompts the user for their choice (new or old user) and then performs some operations based on that choice. The code includes several cout statements for output and cin statements for input. There are also if statements and function calls like "obj1.check\_choice2()". A status bar at the bottom shows "Ln 1, Col 1" and other settings.

```
246     default:
247     {
248         exit(0);
249     }
250 }
251 }
252 };
253 };
254 int main()
255 {
256     string choice1, choice2, choice3, choice4, ans3;
257
258     cout << endl
259     << "Welcome! Type 'yes' if you are new user or type 'no' if you are old user." << endl;
260     cin >> choice1;
261
262     cout << endl
263     << "-----" << endl
264     << endl;
265
266     new_user obj1;
267     user_data obj2;
268
269
270     if (choice1 == "yes")
271     {
272
273         obj1.check_choice2();
274         cout << endl
275         << "Do you want to verify your Details?" << endl;
276         cin >> ans3;
277
278         if (ans3 == "yes")
279         {
280             obj1.check_choice1();
281
282             cout << endl
283             << "Do you want to continue ?" << endl;
284             cin >> choice3;
285         }
286     }
287 }
```

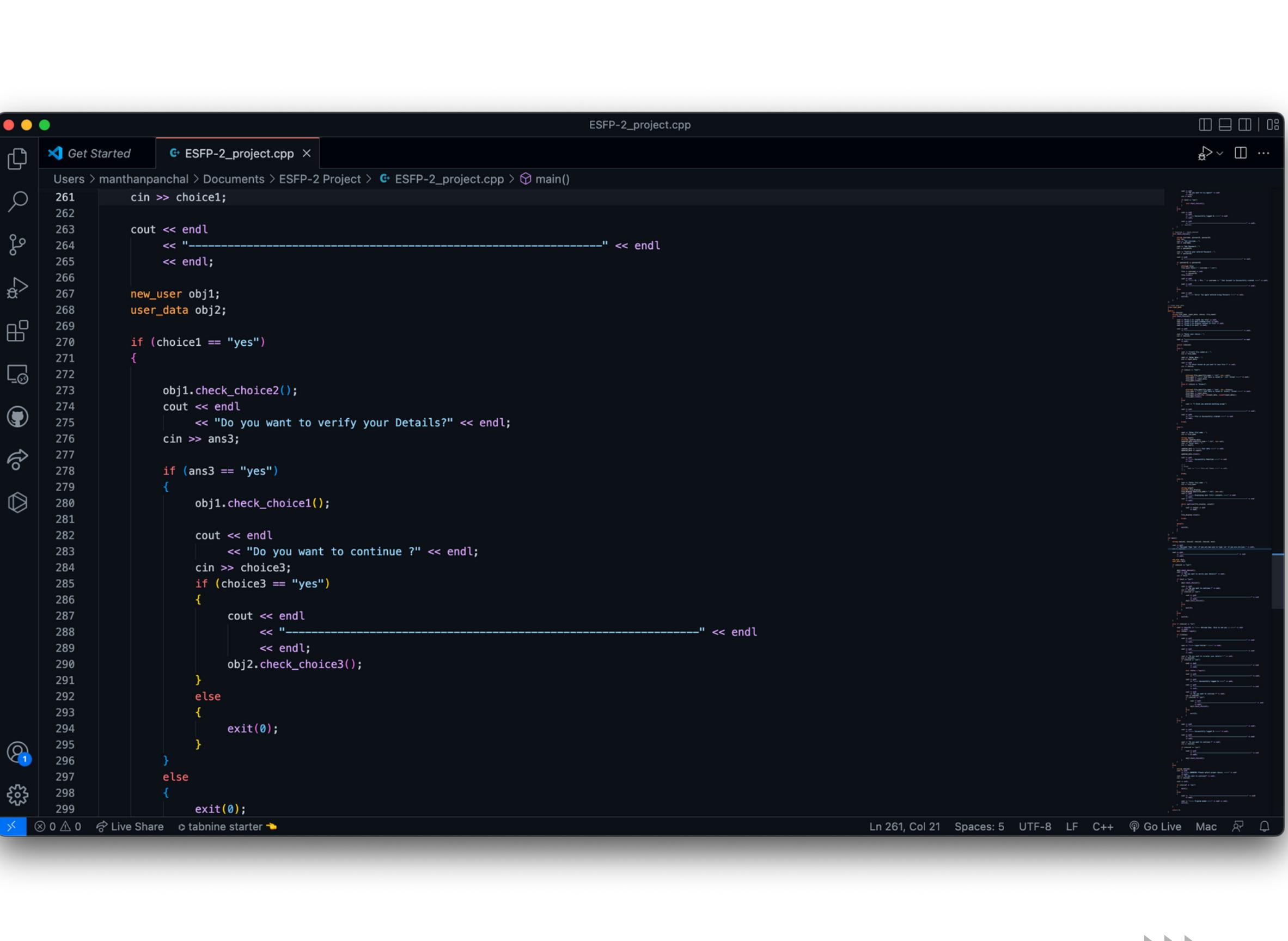
# Project Code



The screenshot shows a code editor window titled "ESFP-2\_project.cpp". The file path is "Users > manthanpanchal > Documents > ESFP-2 Project > ESFP-2\_project.cpp > main()". The code is written in C++ and contains several conditional statements and function calls. The code editor has a dark theme with syntax highlighting. The status bar at the bottom shows "Ln 261, Col 21" and other system information.

```
261     cin >> choice1;
262
263     cout << endl
264     << "-----" << endl
265     << endl;
266
267     new_user obj1;
268     user_data obj2;
269
270     if (choice1 == "yes")
271     {
272
273         obj1.check_choice2();
274         cout << endl
275         << "Do you want to verify your Details?" << endl;
276         cin >> ans3;
277
278         if (ans3 == "yes")
279         {
280
281             obj1.check_choice1();
282
283             cout << endl
284             << "Do you want to continue ?" << endl;
285             cin >> choice3;
286             if (choice3 == "yes")
287             {
288
289                 cout << endl
290                 << "-----" << endl
291                 << endl;
292                 obj2.check_choice3();
293             }
294             else
295             {
296                 exit(0);
297             }
298         }
299         else
299         {
299             exit(0);
299         }
299     }
```

# Project Code

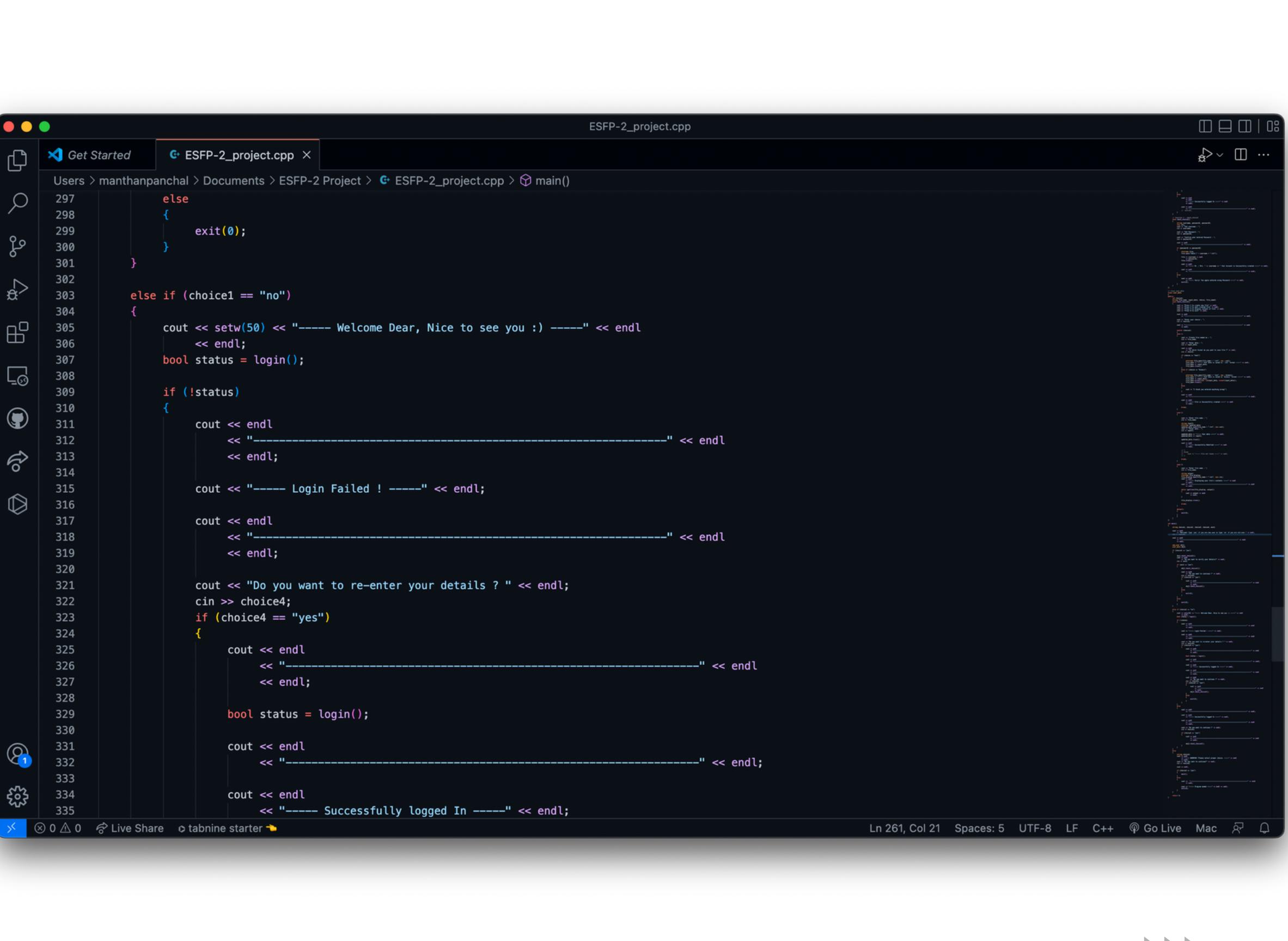


The screenshot shows a code editor window titled "ESFP-2\_project.cpp". The file path is "Users > manthanpanchal > Documents > ESFP-2 Project > ESFP-2\_project.cpp > main()". The code is written in C++ and contains several conditional statements and function calls. The code editor has a dark theme with syntax highlighting. A sidebar on the left shows project files and a status bar at the bottom provides information about the file.

```
261     cin >> choice1;
262
263     cout << endl
264     << "-----" << endl
265     << endl;
266
267     new_user obj1;
268     user_data obj2;
269
270     if (choice1 == "yes")
271     {
272
273         obj1.check_choice2();
274         cout << endl
275         << "Do you want to verify your Details?" << endl;
276         cin >> ans3;
277
278         if (ans3 == "yes")
279         {
280
281             obj1.check_choice1();
282
283             cout << endl
284             << "Do you want to continue ?" << endl;
285             cin >> choice3;
286             if (choice3 == "yes")
287             {
288
289                 cout << endl
290                 << "-----" << endl
291                 << endl;
292                 obj2.check_choice3();
293             }
294             else
295             {
296                 exit(0);
297             }
298         }
299         else
299         {
299             exit(0);
299         }
299     }
```

Ln 261, Col 21 Spaces: 5 UTF-8 LF C++ Go Live Mac

# Project Code



The screenshot shows a code editor window titled "ESFP-2\_project.cpp". The file path is "Users > manthanpanchal > Documents > ESFP-2 Project > ESFP-2\_project.cpp > main()". The code is written in C++ and handles user login. It includes a welcome message, a login check, and a prompt for re-entering details if login fails. It also checks for a "yes" response to re-enter details. Finally, it logs in successfully.

```
else
{
    exit(0);
}

else if (choice1 == "no")
{
    cout << setw(50) << "----- Welcome Dear, Nice to see you :)" << endl
        << endl;
    bool status = login();

    if (!status)
    {
        cout << endl
            << "-----"
            << endl;

        cout << "----- Login Failed ! -----" << endl;

        cout << endl
            << "-----"
            << endl;

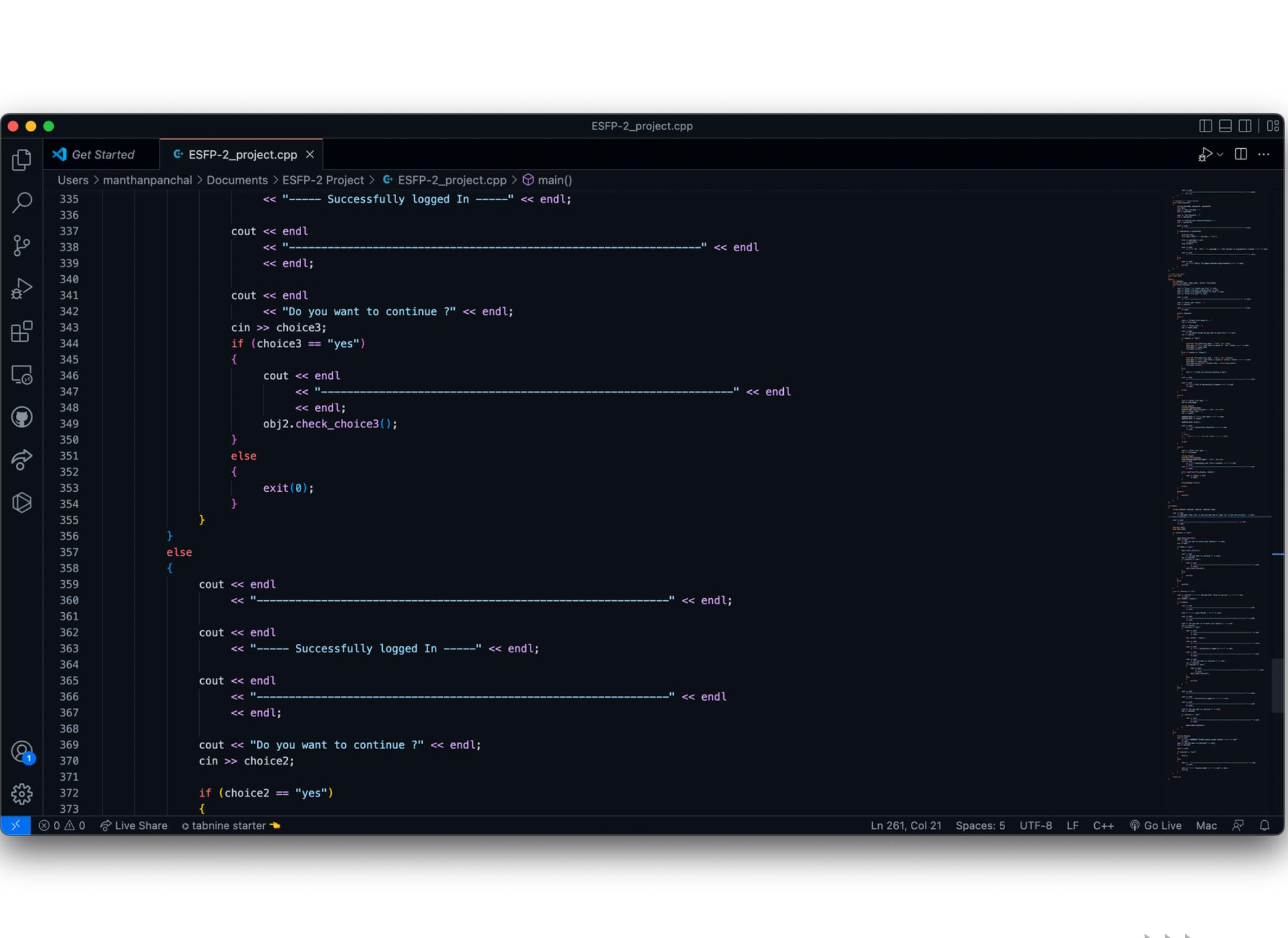
        cout << "Do you want to re-enter your details ? " << endl;
        cin >> choice4;
        if (choice4 == "yes")
        {
            cout << endl
                << "-----"
                << endl;

            bool status = login();

            cout << endl
                << "-----"

            cout << endl
                << "----- Successfully logged In -----" << endl;
        }
    }
}
```

# Project Code

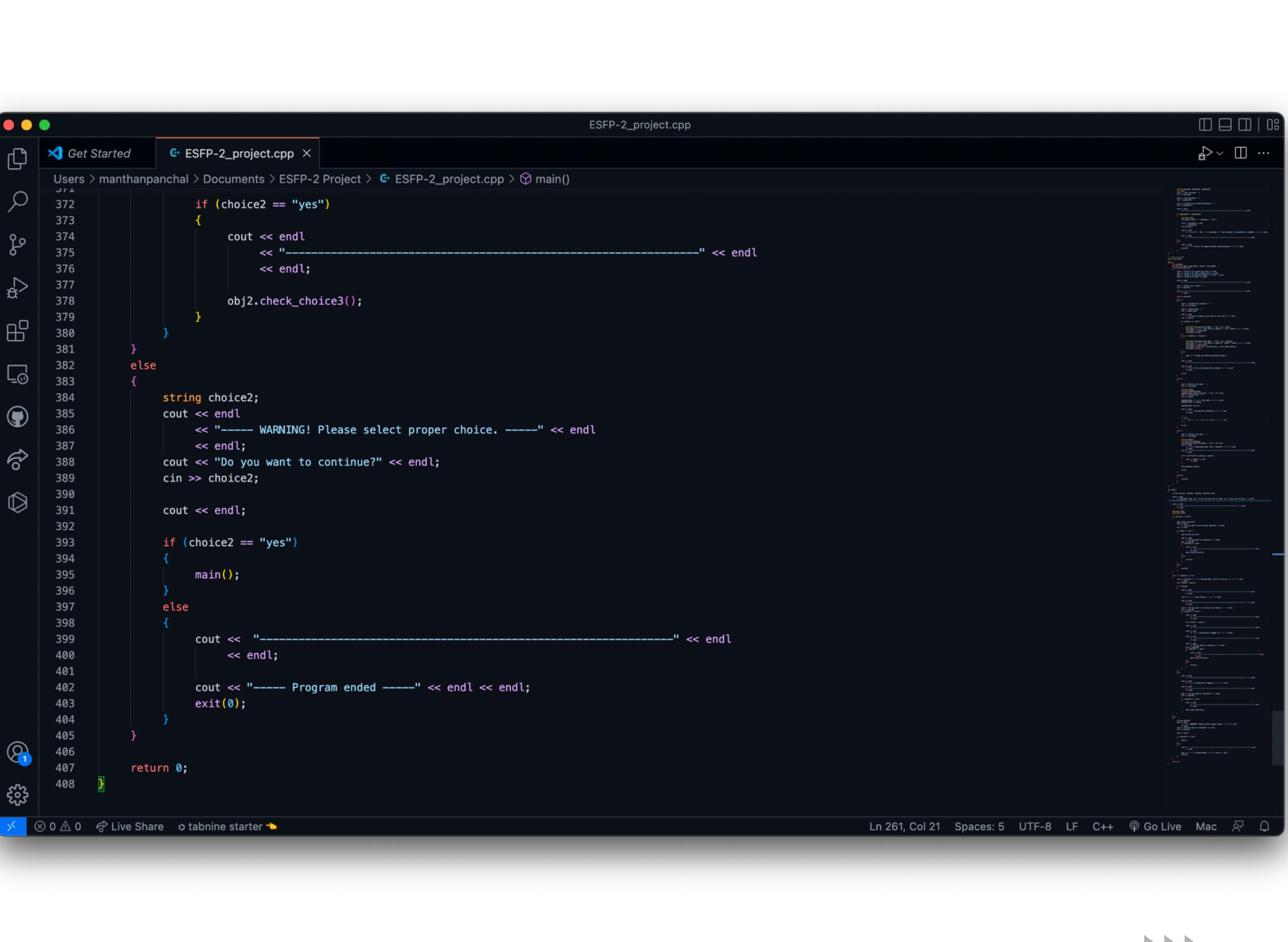


The screenshot shows a code editor window titled "ESFP-2\_project.cpp". The file path is "Users > manthanpanchal > Documents > ESFP-2 Project > ESFP-2\_project.cpp > main()". The code is a C++ program with the following logic:

```
335     << "----- Successfully logged In -----" << endl;
336
337     cout << endl
338     << "-----" << endl;
339
340     cout << endl
341     << "Do you want to continue ?" << endl;
342     cin >> choice3;
343     if (choice3 == "yes")
344     {
345         cout << endl
346         << "-----" << endl;
347         << endl;
348         obj2.check_choice3();
349     }
350     else
351     {
352         exit(0);
353     }
354
355 }
356
357 else
358 {
359     cout << endl
360     << "-----" << endl;
361
362     cout << endl
363     << "----- Successfully logged In -----" << endl;
364
365     cout << endl
366     << "-----" << endl;
367     << endl;
368
369     cout << "Do you want to continue ?" << endl;
370     cin >> choice2;
371
372     if (choice2 == "yes")
373     {
```

The code uses standard input/output streams (`cout`, `cin`) and includes conditional statements (`if`, `else`) to handle user input and log messages.

# Project Code



The screenshot shows a code editor window titled "ESFP-2\_project.cpp" with the following content:

```
ESFP-2_project.cpp
Get Started ESFP-2_project.cpp x
Users > manthanpanchal > Documents > ESFP-2 Project > ESFP-2_project.cpp > main()
372     if (choice2 == "yes")
373     {
374         cout << endl
375         << "-----"
376         << endl;
377         obj2.check_choice3();
378     }
379 }
380 else
381 {
382     string choice2;
383     cout << endl
384     << "----- WARNING! Please select proper choice. -----" << endl
385     << endl;
386     cout << "Do you want to continue?" << endl;
387     cin >> choice2;
388
389     cout << endl;
390
391     if (choice2 == "yes")
392     {
393         main();
394     }
395     else
396     {
397         cout << "-----"
398         << endl;
399         cout << "----- Program ended -----" << endl << endl;
400         exit(0);
401     }
402 }
403 return 0;
404 }
```

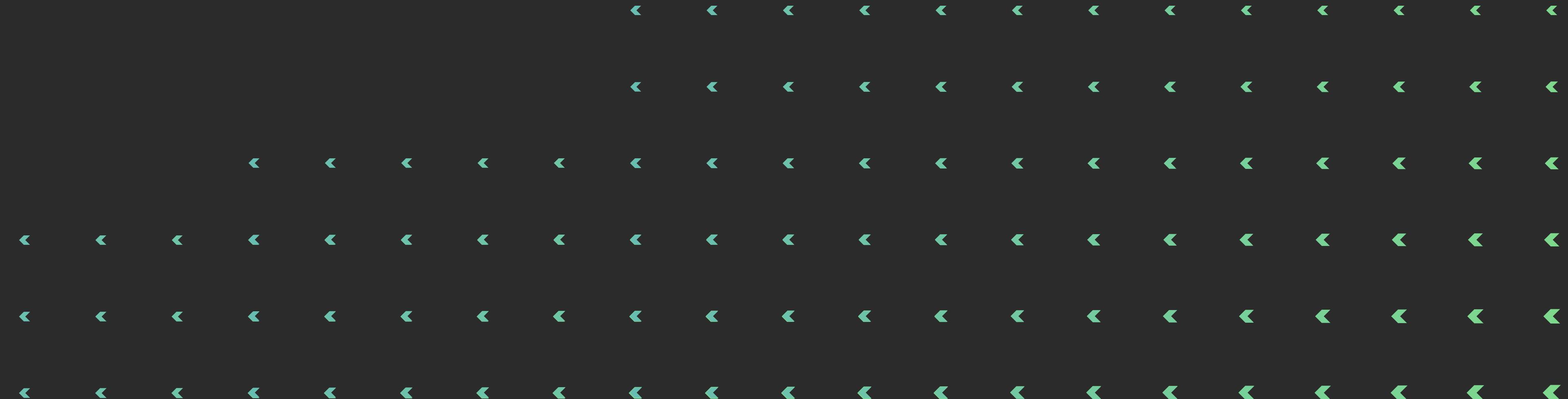
The code is part of a C++ project named "ESFP-2 Project". It contains a main() function that handles user input for continuing the program. If "yes" is chosen, it calls main() again. If "no", it prints a warning message, asks if they want to continue, and then exits the program if "no" is chosen again.



# How Project works

- Let's see

>>>





## Create a account

- Create an account.
- Set username and password



## Create a File

- Create a file in your created account.
- Input some data into your file.
- Save in the form of .txt or .bin.



## Display contains of file

- Login in your created account.
- Display data of your file on the screen.

>>>

# Create a account



Welcome! Type 'yes' if you are new user or type 'no' if you are old user.  
yes

---

Set username : manthan  
Set Password : manthanpanchal009  
Confirm your entered Password : manthanpanchal009

---

----- Mr. / Mrs. manthan Your Account is Successfully created -----

---

>>>

# Create a file



```
Press 1 to create new file  
Press 2 to edit created file  
Press 3 to display content of file  
Press 0 to exit
```

---

```
Enter your choice : 1
```

---

```
Create file named as : ict_info  
Enter data : ICT_belongs_to_GanpatUniversity
```

```
In which format do you want to save file ?  
text
```

---

```
----- File is Successfully created -----
```

>>>

# Display contains of file



```
Welcome! Type 'yes' if you are new user or type 'no' if you are old user.  
no
```

```
----- Welcome Dear, Nice to see you :) -----
```

```
Please enter username : manthan  
Please enter password : manthanpanchal009
```

```
----- Successfully logged In -----
```

```
Do you want to continue ?  
yes
```

```
Press 1 to create new file  
Press 2 to edit created file  
Press 3 to display content of file  
Press 0 to exit
```

```
----- Enter your choice : 3 -----
```

```
Enter file name : ict_info
```

```
----- Displaying your file's contents -----
```

```
----- Your Data is saved in '.txt' format -----
```

```
ICT_belongs_to_GanpatUniversity
```

```
manthanpanchal@Manthans-MacBook-Air ESFP-2 Project %
```

The screenshot shows a code editor window with the title bar 'ict\_info.txt'. The tabs at the top include 'Get Started', 'ESFP-2\_project.cpp', and 'ict\_info.txt'. The main pane displays the following text:

```
Users > manthanpanchal > Documents > ESFP-2 Project > ict_info.txt
1  ----- Your Data is saved in '.txt' format -----
2  ICT_belongs_to_GanpatUniversity
```



# Thank You

