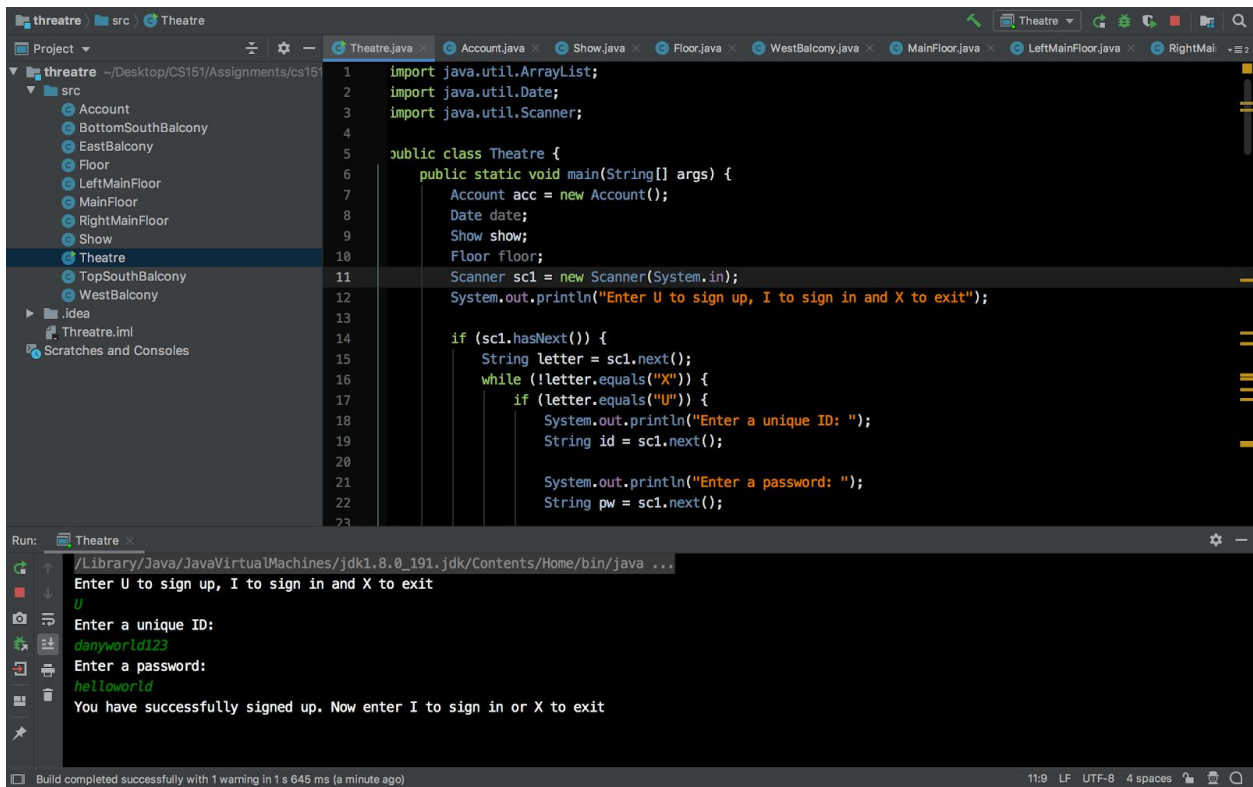


Screen 1: Sign Up



The screenshot shows an IDE with a project named 'threatre'. The 'Theatre.java' file is open, displaying the following code:

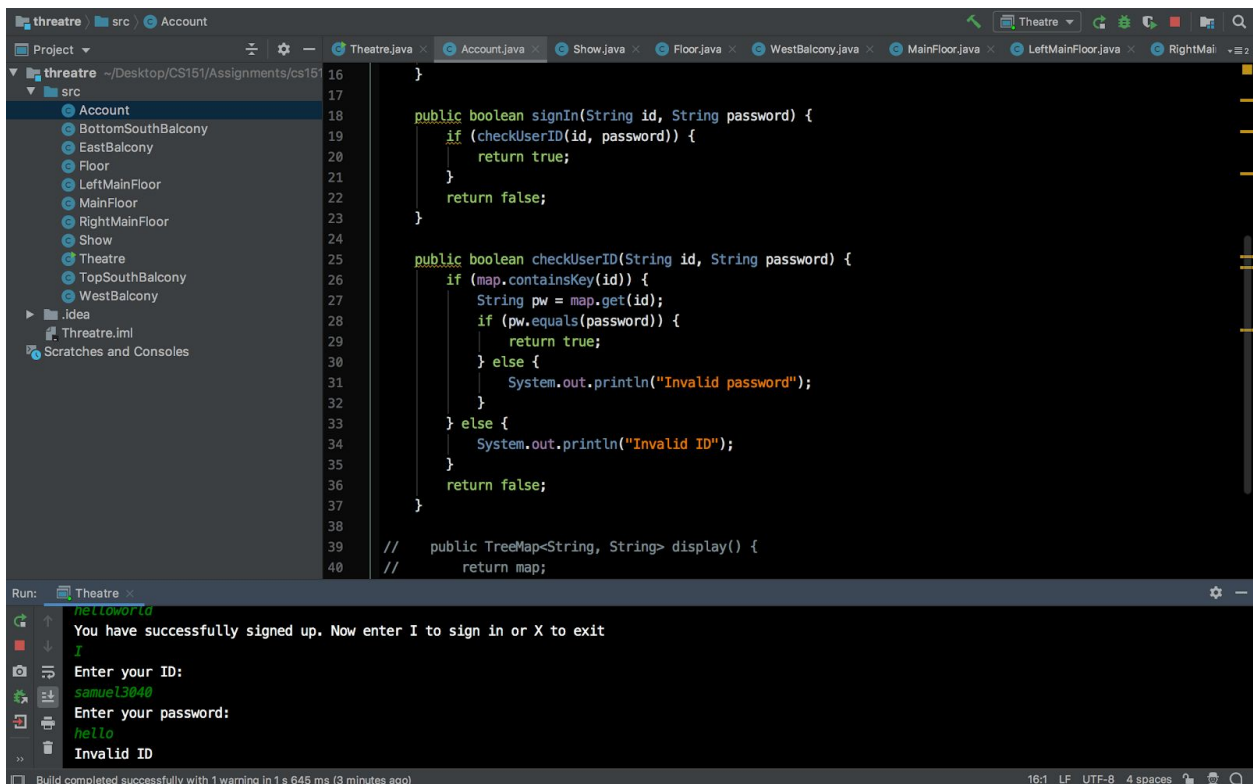
```
1 import java.util.ArrayList;
2 import java.util.Date;
3 import java.util.Scanner;
4
5 public class Theatre {
6     public static void main(String[] args) {
7         Account acc = new Account();
8         Date date;
9         Show show;
10        Floor floor;
11        Scanner sc1 = new Scanner(System.in);
12        System.out.println("Enter U to sign up, I to sign in and X to exit");
13
14        if (sc1.hasNext()) {
15            String letter = sc1.next();
16            while (!letter.equals("X")) {
17                if (letter.equals("U")) {
18                    System.out.println("Enter a unique ID: ");
19                    String id = sc1.next();
20
21                    System.out.println("Enter a password: ");
22                    String pw = sc1.next();
23                }
24            }
25        }
26    }
27 }
```

The Run console shows the execution output:

```
Run: Theatre
/Library/Java/JavaVirtualMachines/jdk1.8.0_191.jdk/Contents/Home/bin/java ...
Enter U to sign up, I to sign in and X to exit
U
Enter a unique ID:
danyworld123
Enter a password:
helloworld
You have successfully signed up. Now enter I to sign in or X to exit
```

Build completed successfully with 1 warning in 1 s 645 ms (a minute ago)

Screen 2: Sign in with an invalid ID



The screenshot shows the same IDE with the 'Account.java' file open, displaying the following code:

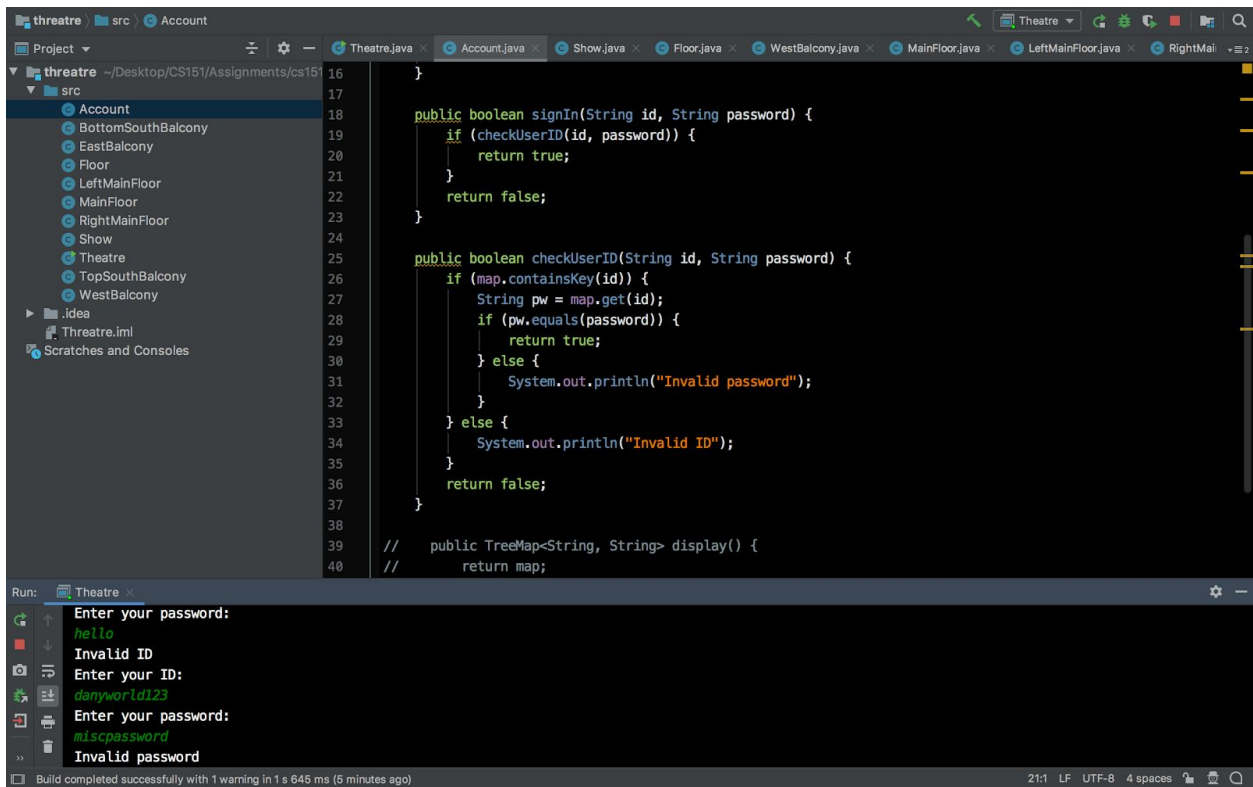
```
16 }
17
18 public boolean signIn(String id, String password) {
19     if (checkUserID(id, password)) {
20         return true;
21     }
22     return false;
23 }
24
25 public boolean checkUserID(String id, String password) {
26     if (map.containsKey(id)) {
27         String pw = map.get(id);
28         if (pw.equals(password)) {
29             return true;
30         } else {
31             System.out.println("Invalid password");
32         }
33     } else {
34         System.out.println("Invalid ID");
35     }
36     return false;
37 }
38
39 // public TreeMap<String, String> display() {
40 //     return map;
41 }
```

The Run console shows the execution output:

```
Run: Theatre
helloworld
You have successfully signed up. Now enter I to sign in or X to exit
I
Enter your ID:
samuel3040
Enter your password:
hello
Invalid ID
```

Build completed successfully with 1 warning in 1 s 645 ms (3 minutes ago)

Screen 3: Sign in with an invalid password



```
Project: theatre ~\Desktop\CS151\Assignments\cs151
src
├── Account
├── BottomSouthBalcony
├── EastBalcony
├── Floor
├── LeftMainFloor
├── MainFloor
├── RightMainFloor
├── Show
├── Theatre
├── TopSouthBalcony
├── WestBalcony
├── .idea
├── Theatre.iml
└── Scratches and Consoles

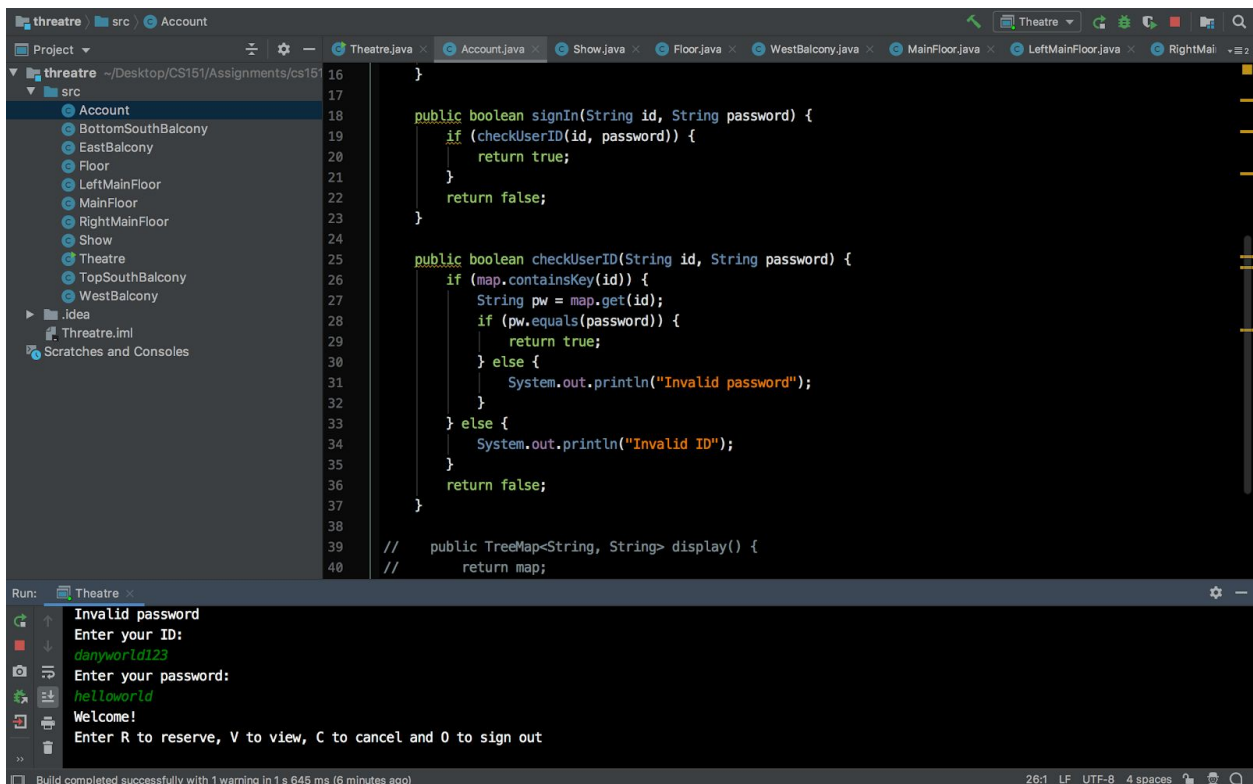
Theatre.java
16 }
17
18 public boolean signIn(String id, String password) {
19     if (checkUserID(id, password)) {
20         return true;
21     }
22     return false;
23 }
24
25 public boolean checkUserID(String id, String password) {
26     if (map.containsKey(id)) {
27         String pw = map.get(id);
28         if (pw.equals(password)) {
29             return true;
30         } else {
31             System.out.println("Invalid password");
32         }
33     } else {
34         System.out.println("Invalid ID");
35     }
36     return false;
37 }
38
39 // public TreeMap<String, String> display() {
40 //     return map;
41 }
```

Run: Theatre

```
Enter your password:
hello
Invalid ID
Enter your ID:
danyworld123
Enter your password:
miscpassword
Invalid password
```

Build completed successfully with 1 warning in 1 s 645 ms (6 minutes ago) 21:1 LF UTF-8 4 spaces

Screen 4: Sign in with a valid credential



```
Project: theatre ~\Desktop\CS151\Assignments\cs151
src
├── Account
├── BottomSouthBalcony
├── EastBalcony
├── Floor
├── LeftMainFloor
├── MainFloor
├── RightMainFloor
├── Show
├── Theatre
├── TopSouthBalcony
├── WestBalcony
├── .idea
├── Theatre.iml
└── Scratches and Consoles

Theatre.java
16 }
17
18 public boolean signIn(String id, String password) {
19     if (checkUserID(id, password)) {
20         return true;
21     }
22     return false;
23 }
24
25 public boolean checkUserID(String id, String password) {
26     if (map.containsKey(id)) {
27         String pw = map.get(id);
28         if (pw.equals(password)) {
29             return true;
30         } else {
31             System.out.println("Invalid password");
32         }
33     } else {
34         System.out.println("Invalid ID");
35     }
36     return false;
37 }
38
39 // public TreeMap<String, String> display() {
40 //     return map;
41 }
```

Run: Theatre

```
Invalid password
Enter your ID:
danyworld123
Enter your password:
helloworld
Welcome!
Enter R to reserve, V to view, C to cancel and 0 to sign out
```

Build completed successfully with 1 warning in 1 s 645 ms (6 minutes ago) 26:1 LF UTF-8 4 spaces