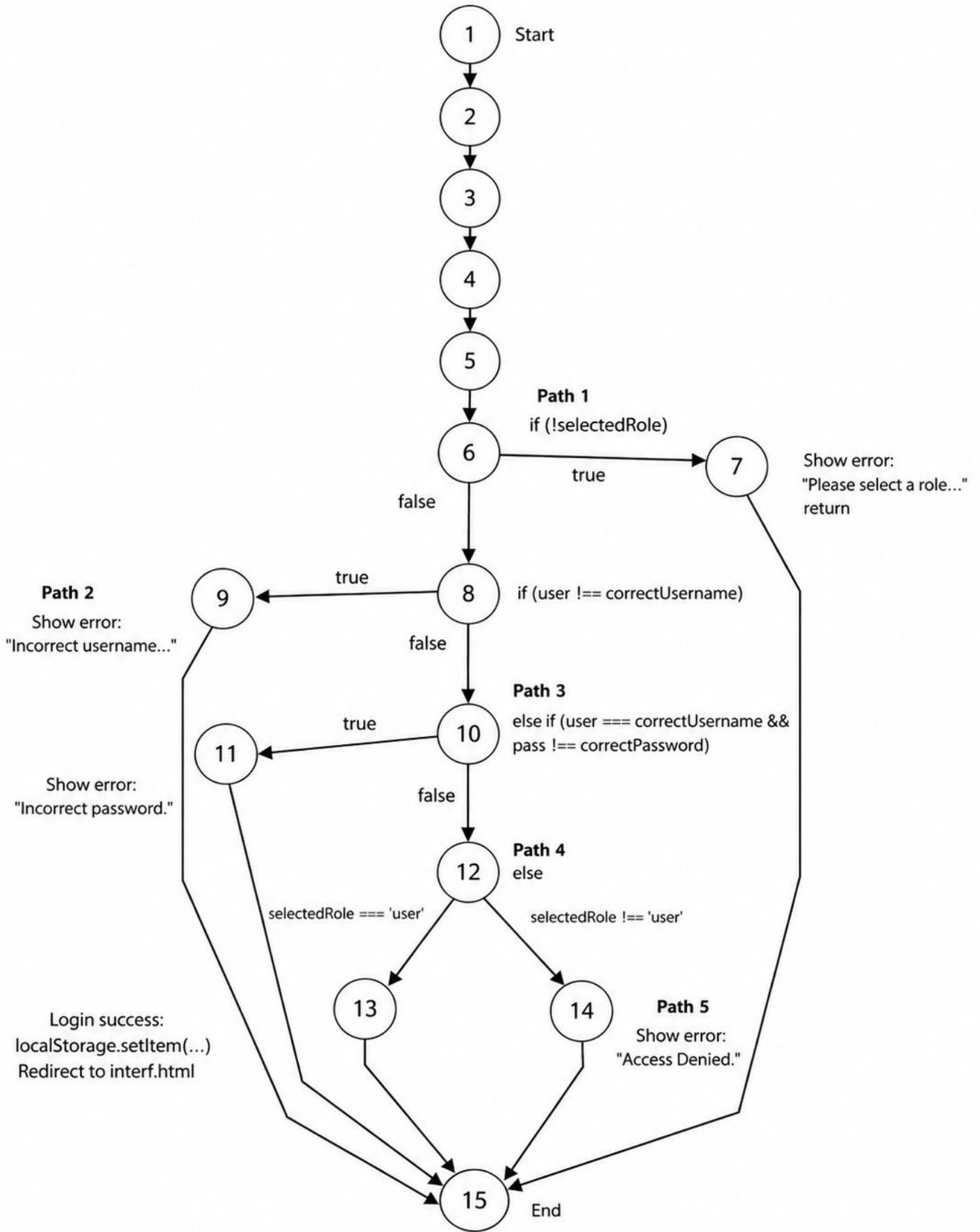


# WHITE-BOX TESTING

## Employee Registration Module

```
1. document.getElementById('loginForm').addEventListener('submit', function(e) {
2.     e.preventDefault();
3.     const user = document.getElementById('username').value;
4.     const pass = document.getElementById('password').value;
5.     const errorMsg = document.getElementById('error');
6.     if (!selectedRole) {
7.         errorMsg.innerHTML = "Please select a role (User/Admin) first!";
            return;
        }
        const correctUsername = "Sneha";
        const correctPassword = "123@";
8.     if (user !== correctUsername) {
9.         errorMsg.innerHTML = `Incorrect username...`;
        }
10.    else if (user === correctUsername && pass !== correctPassword) {
11.        errorMsg.innerHTML = `Incorrect password.`;
        }
12.    else {
13.        if (selectedRole === 'user') {
            localStorage.setItem("loggedInUser", user);
            window.location.href = "interf.html";
14.        } else {
            errorMsg.innerHTML = "Access Denied.";
        }
15.    }
});
```



**Flow Graph**

## Cyclomatic Complexity:

Complexity  $V(G)$

$$= E - N + 2$$

$$= 18 - 15 + 2 = 5$$

## Paths:

### Path 1 (Role not selected)

1 → 2 → 3 → 4 → 5 → 6(T) → 7 → 15

### Path 2 (Incorrect Username)

1 → 2 → 3 → 4 → 5 → 6(F) → 8(T) → 9 → 15

### Path 3 (Incorrect Password)

1 → 2 → 3 → 4 → 5 → 6(F) → 8(F) → 10(T) → 11 → 15

### Path 4 (Successful Login – User role)

1 → 2 → 3 → 4 → 5 → 6(F) → 8(F) → 10(F) → 12 → 13 → 15

### Path 5 (Access Denied – Admin or other role)

1 → 2 → 3 → 4 → 5 → 6(F) → 8(F) → 10(F) → 12 → 14 → 15