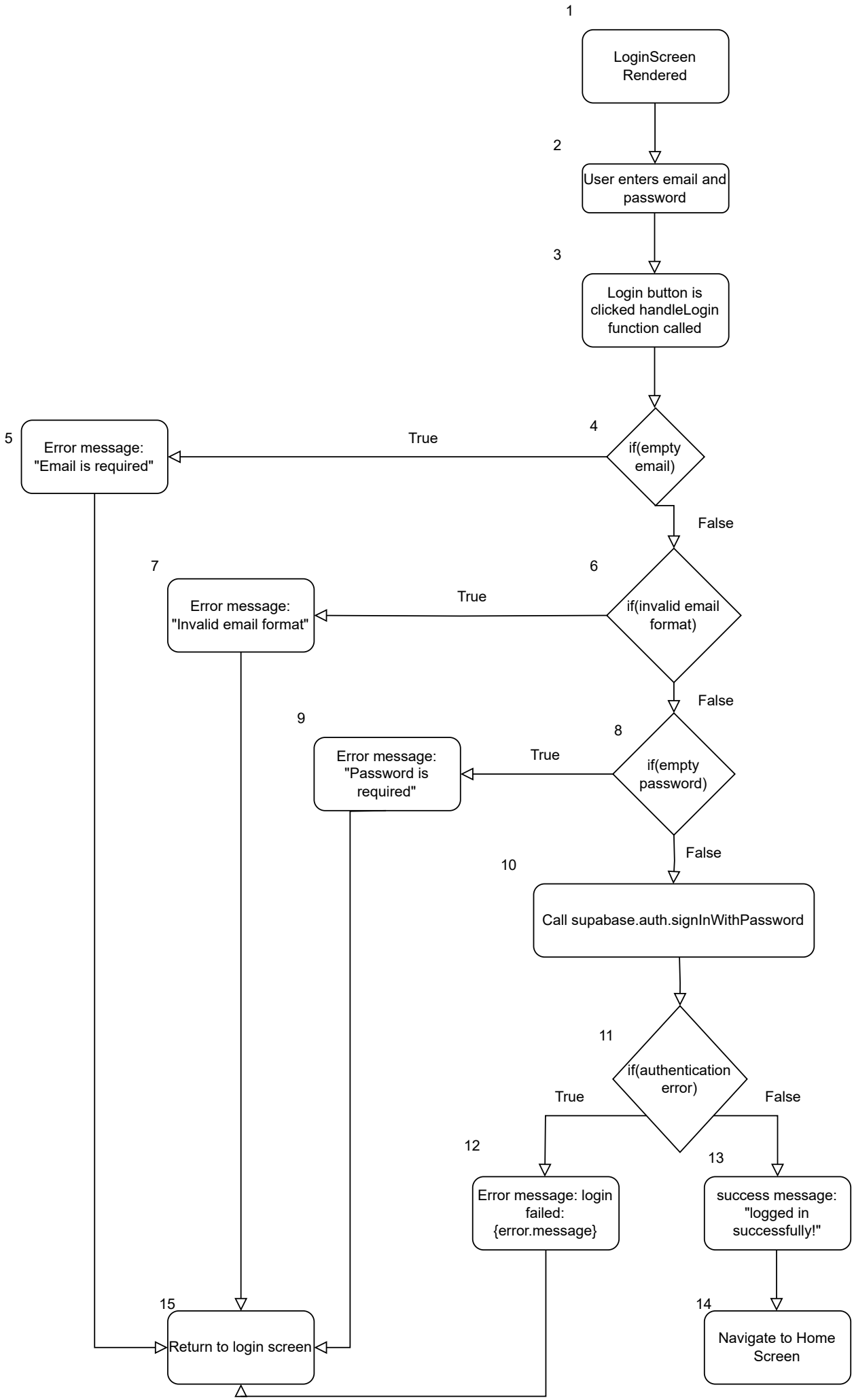
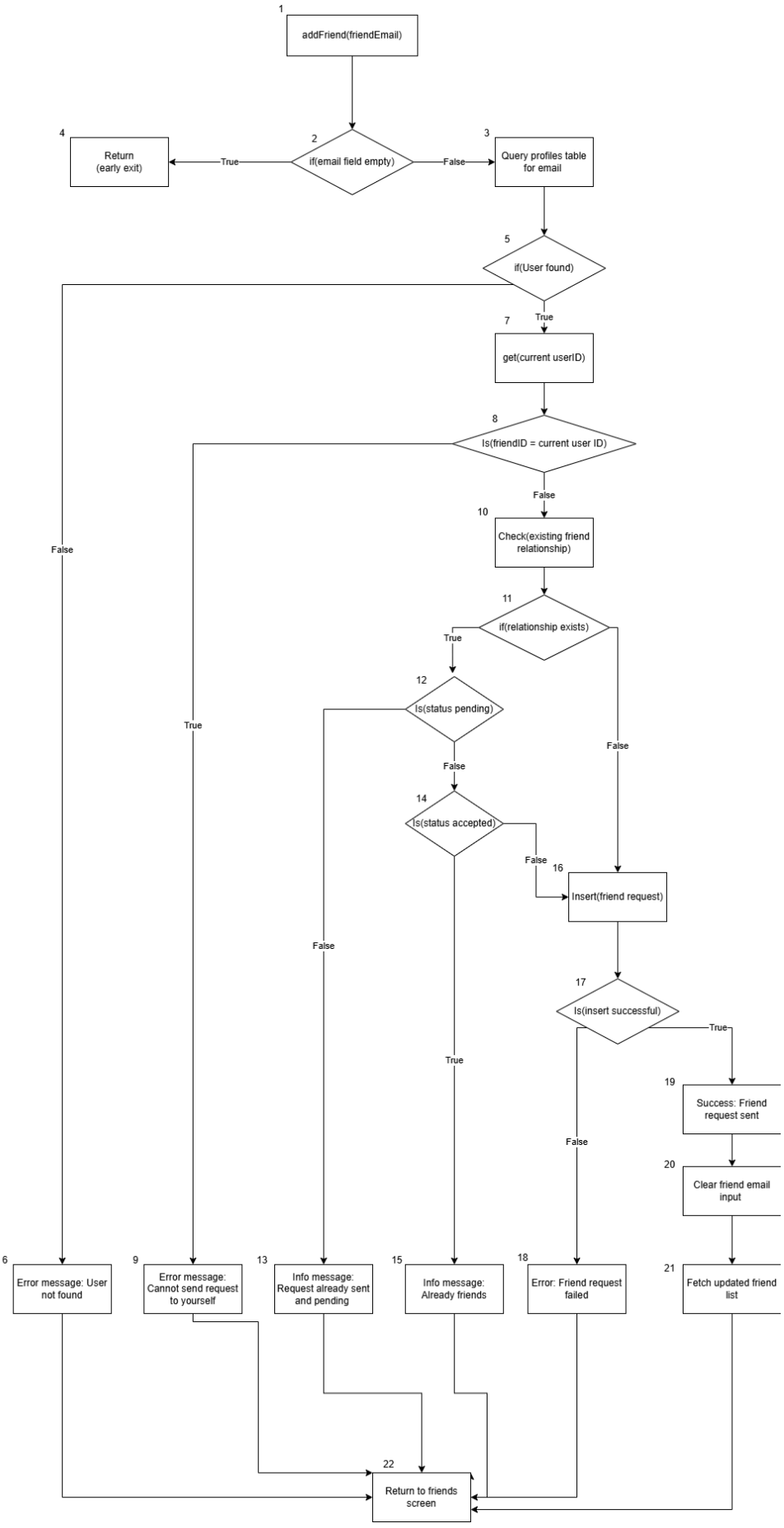

1
LoginScreen Rendered
2
User enters email and password
3
Login button is clicked handleLogin function called
4
if(empty email)
True
5
Error message: "Email is required"
False
6
if(invalid email format)
True
7
Error message: "Invalid email format"
False
8
if(empty password)
True
9
Error message: "Password is required"
False
10
Call supabase.auth.signInWithPassword
11
if(authentication error)
True
12
Error message: login failed: {error.message}
False
13
success message: "logged in successfully!"
14
Navigate to Home Screen
15
Return to login screen

Basic Path Testing

Table of Basis Paths

No	Basis Path	Path Description
1.	1, 2, 3, 4, 5, 15	Empty Email
2.	1, 2, 3, 4, 6, 7, 15	Invalid Email Format
3.	1, 2, 3, 4, 6, 8, 9, 15	Empty Password
4.	1, 2, 3, 4, 6, 8, 10, 11, 12, 15	Authentication Error
5.	1, 2, 3, 4, 6, 8, 10, 11, 13, 14	Login Successful


1
addFriend(friendEmail)
2
if(email field empty)
True
4
Return
(early exit)
False
3
Query profiles table for email
5
if(User found)
False
6
Error message: User not found
True
7
get(current userID)
8
Is(friendID = current user ID)
True
9
Error message: Cannot send request to yourself
False
10
Check(existing friend relationship)
11
if(relationship exists)
True
12
Is(status pending)
True
13
Info message: Request already sent and pending
False
14
Is(status accepted)
True
15
Info message: Already friends
False
16
Insert(friend request)
17
Is(insert successful)
True
18
Error: Friend request failed
False
19
Success: Friend request sent
20
Clear friend email input
21
Fetch updated friend list
22
Return to friends screen

Test Cases & Results

Test Input	Expected Output	Actual Output
email = "example@gmail.com” password = "123123123"	Navigation to Main screen	Navigation to Main screen
email = "" password = "123123123”	“Login failed: missing email or password”	“Login failed: missing email or password”
email = "example.com" password = "123123123"	“Login failed: Invalid login credentials”	“Login failed: Invalid login credentials”
email = "example@gmail.com” password = ""	“Login failed: Invalid login credentials”	“Login failed: Invalid login credentials”
email = "example@gmail.com" password = "321"	“Login failed: Invalid login credentials”	“Login failed: Invalid login credentials”

Table of Basis Paths

No	Basis Path	Path Description
1.	1, 2, 4	Empty Email field
2.	1, 2, 3, 5, 6, 22	User not found
3.	1, 2, 3, 5, 7, 8, 9, 22	Send request to self
4.	1, 2, 3, 5, 7, 8,10, 11,12, 13, 22	Request already pending
5.	1, 2, 3, 5, 7, 8, 10, 11, 12, 14, 15, 22	Already friends
6.	1, 2, 3, 5, 7, 8, 10, 11, 12, 14, 16, 17, 18, 22	Insert failed
7.	1, 2, 3, 5, 7, 8, 10, 11, 12, 14, 16, 17, 19, 20, 21, 22	Request sent successfully

Test case 1

Test Input	Expected output	Actual output
Email: cys@gmail.com (not existent user)	Error message: User not found	Error message: User not found
Email : ncspam14@gmail.com (before accepting friend request)	Info Message: Friend request already sent and pending.	Info Message: Friend request already sent and pending.
Email : ncspam14@gmail.com (after accepting friend request)	Info Message : You are already friends.	Info Message : You are already friends.