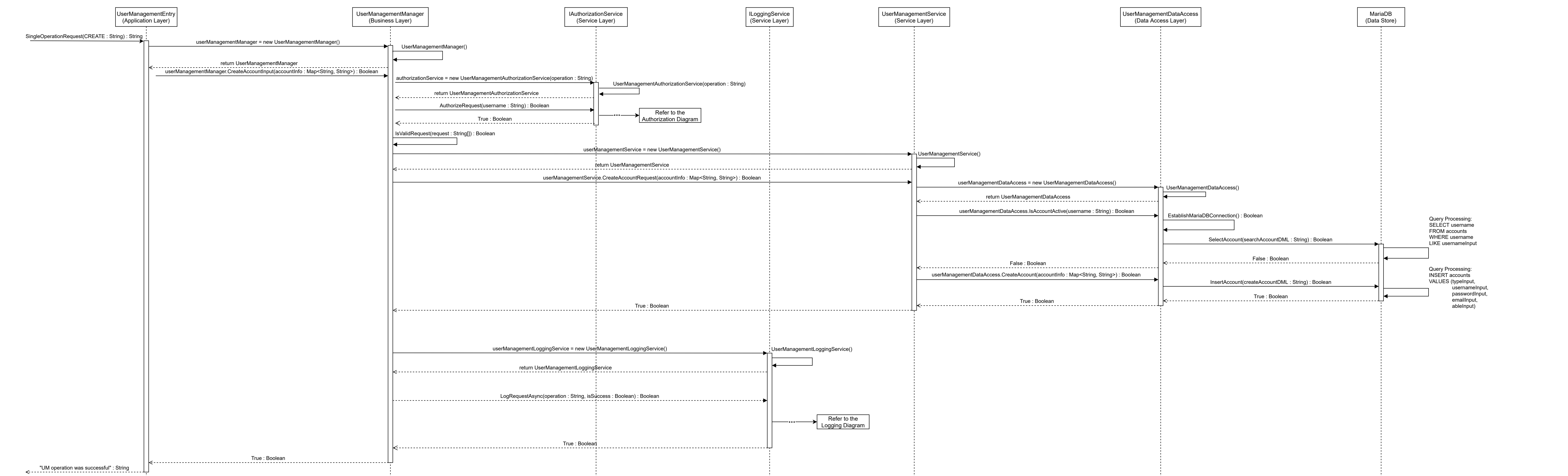


### SUCCESS CASE DIAGRAM



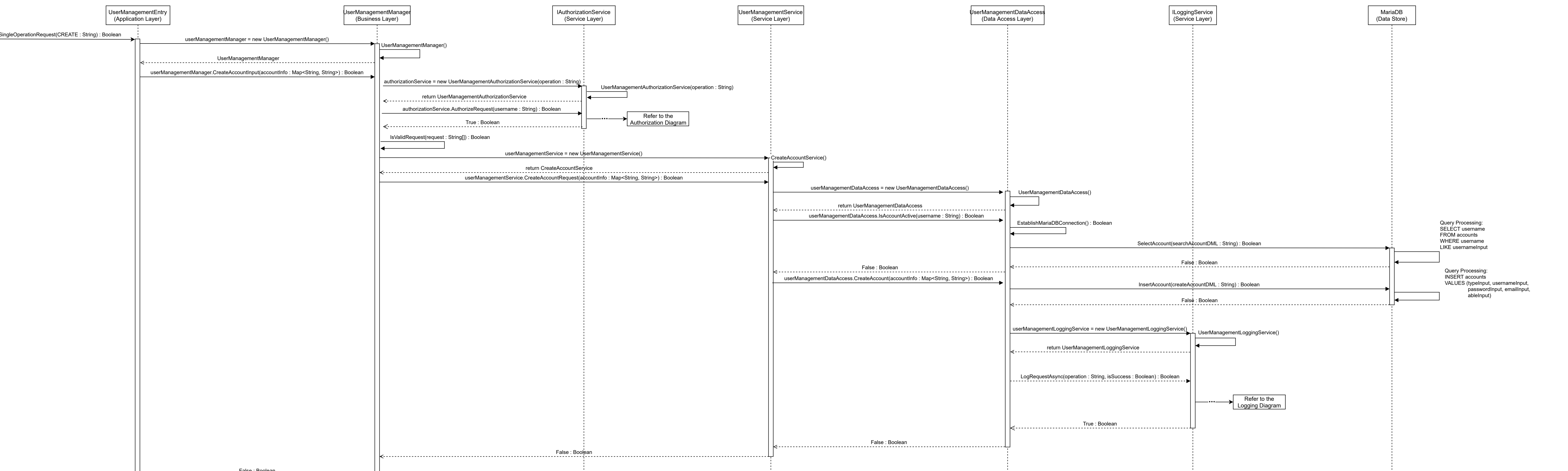
### Success Scenario

1. Single Request to make for the CREATE operation
2. Notifies of CreateAccountManager is created
3. Input account info
4. Check if request is valid, the following is checked:
  - does it follow the appropriate rules
  - does it contain all necessary info for the operation requested
  - how many times of CreateAccountManager is created
  - Call the CreateAccount Service to process operation with the validated input
5. Return TRUE to the client if the account is successfully created
6. Call the account already exists using the username
7. Establish the MySQL connection if AccountInfo is not already opened
8. Perform the SELECT query in the Accounts table in the database
9. SELECT username
10. FROM account
11. WHERE username
12. LIKE username
13. Returns FALSE if not found
14. Return TRUE to the client if the account already exists, and return FALSE if not found
15. Perform an INSERT query on the Accounts table in the database
16. INSERT account
17. VALUES (username, usernameemail, passwordinput, emailinput, sibilinput)
18. Returns TRUE if the account is successfully created
19. Return TRUE to the Service if the account was successfully created
20. Return TRUE to the client if the account was successfully created
21. Return TRUE to System and below with the appropriate logic for the operation

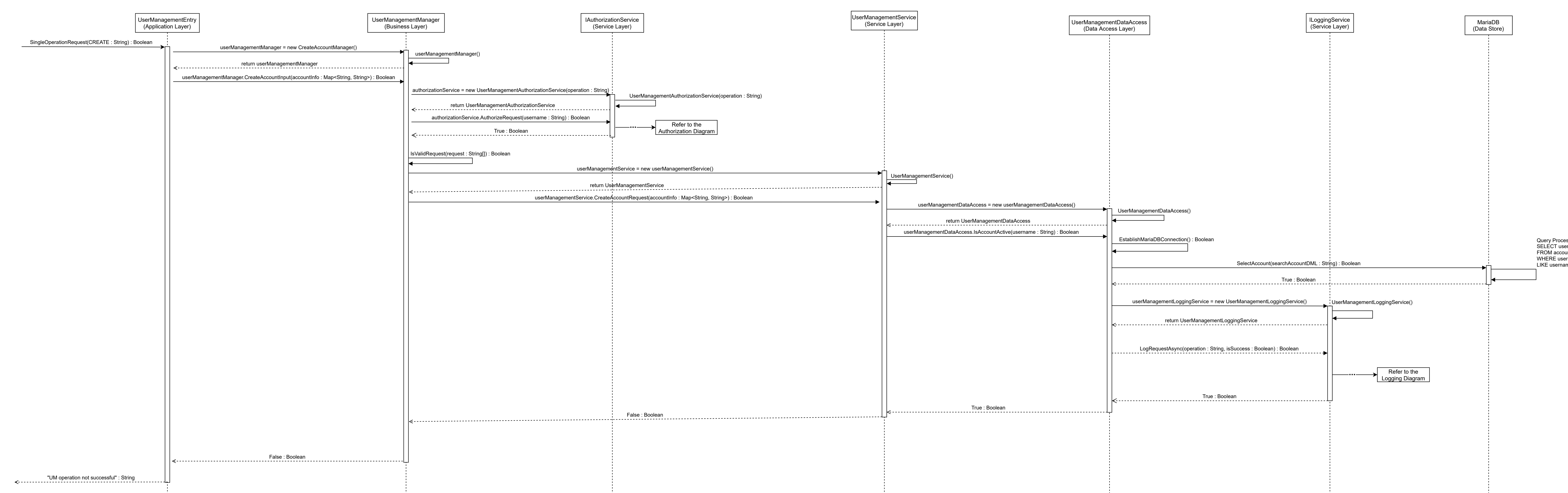
## FAILURE CASE DIAGRAMS

**Fail Case 13**  
New Account is not inserted into MariaDB  
Reasons:

- Incorrect DML syntax
- MariaDB fails either by connection timeout or external factors

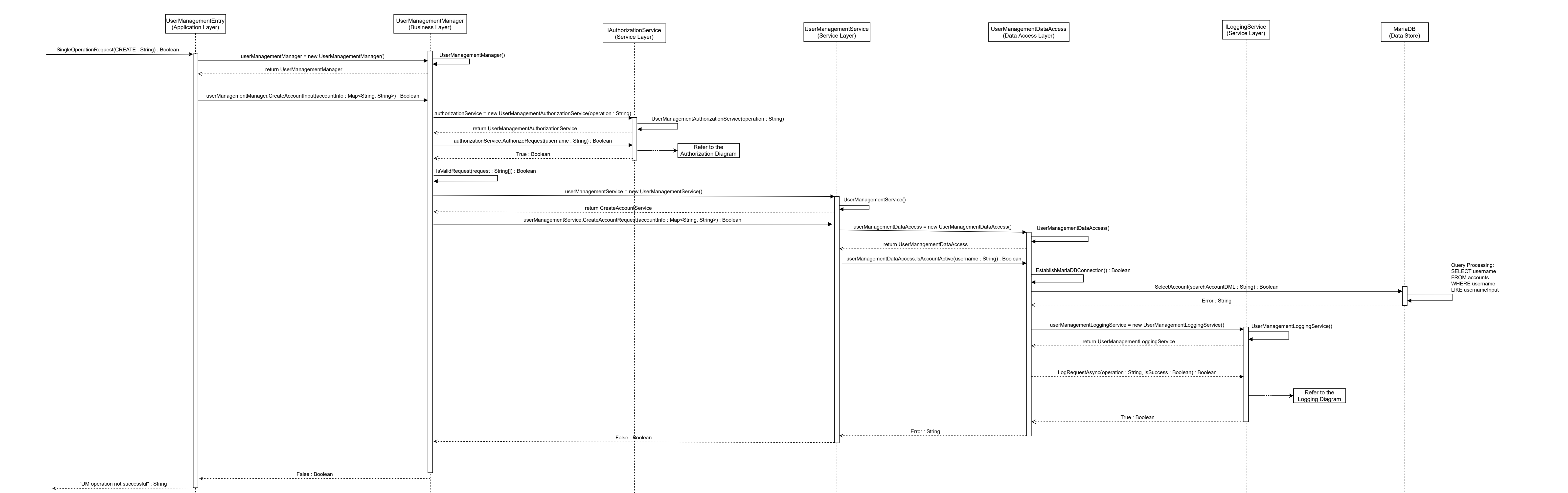


**Fail Case 10a**  
New Account already exists in MariaDB  
Reasons:  
- account already exists

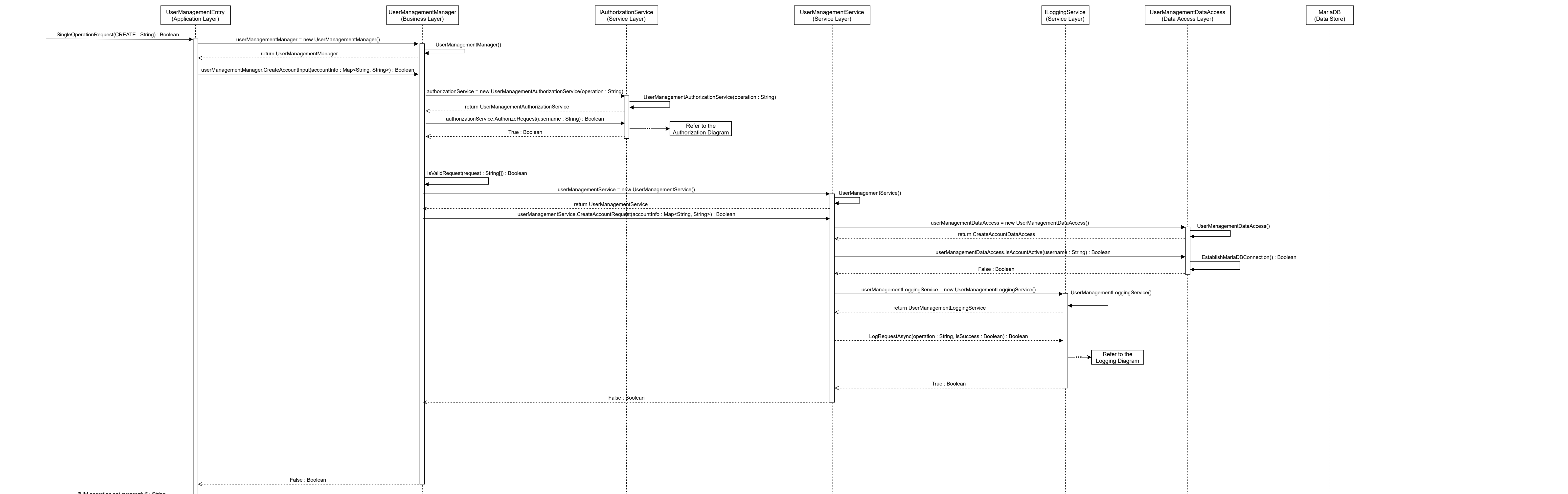


**Fail Case 10b**  
Could Not Process Query  
**Reasons:**

- Incorrect DML syntax
- MariaDB fails either by connection timeout or external factors



**Fail Case 9**  
 MariaDB Connection could not be Established  
**Reasons:**  
 - EstablishMariaDBConnection() returns False  
 - **NOTE:** continue to call this method until True  
 if still no connection after 5 seconds, log the error and end the program



**Fail Case 4**  
Invalid Request  
Reasons:

- Inputs do not follow their respective regex.
- Missing required input(s) or does not match the inputs required for request.

