# Login Success Case 1

**View** | **LoginController** | **UserAcc** | **AuthenticationManager** (Manager Layer) | **AuthenticationService** (Service Layer) | **AuthenticationDAO** (Data Access Layer) | **SQL Server 2019** Developer

AccountSettingsMenu()

getEmail()

email →

getPassword()

password →

POST request →

new UserAccount(email, password) →

UserAccount()

← return UserAccount instance

AuthenticateUser(userEmail : String, userPassword : String) : APIToken →

AuthenticationService authService = new AuthenticationService()

← return AuthenticationService instance

authService.validateUserInput(userID: String, userPassword : String) : bool

← return True

AuthenticationDAO authDao = new AuthenticationDAO() →

← return AuthenticationDAO instance

authDAO.validateCrendentials(userID: String, userPassword: String) : bool →

SELECT * FROM AccountRecords where userID = @id AND userPassword = @password →

← returns 1 row

← return True

authService.generateOTP() : String

← return String

User enters correct OTP and it is submitted within 2 minutes of it being sent →

User enters correct OTP and it is submitted within 2 minutes of it being sent →

User enters correct OTP and it is submitted within 2 minutes of it being sent →

authService.validateOTP(OTP: string) : bool

← return True

authService.generateToken() : APIToken

← return APIToken

← return APIToken, navigate user to the home page

← return APIToken, navigate user to the home page

← return APIToken, navigate user to the home page

← return APIToken, navigate user to the home page
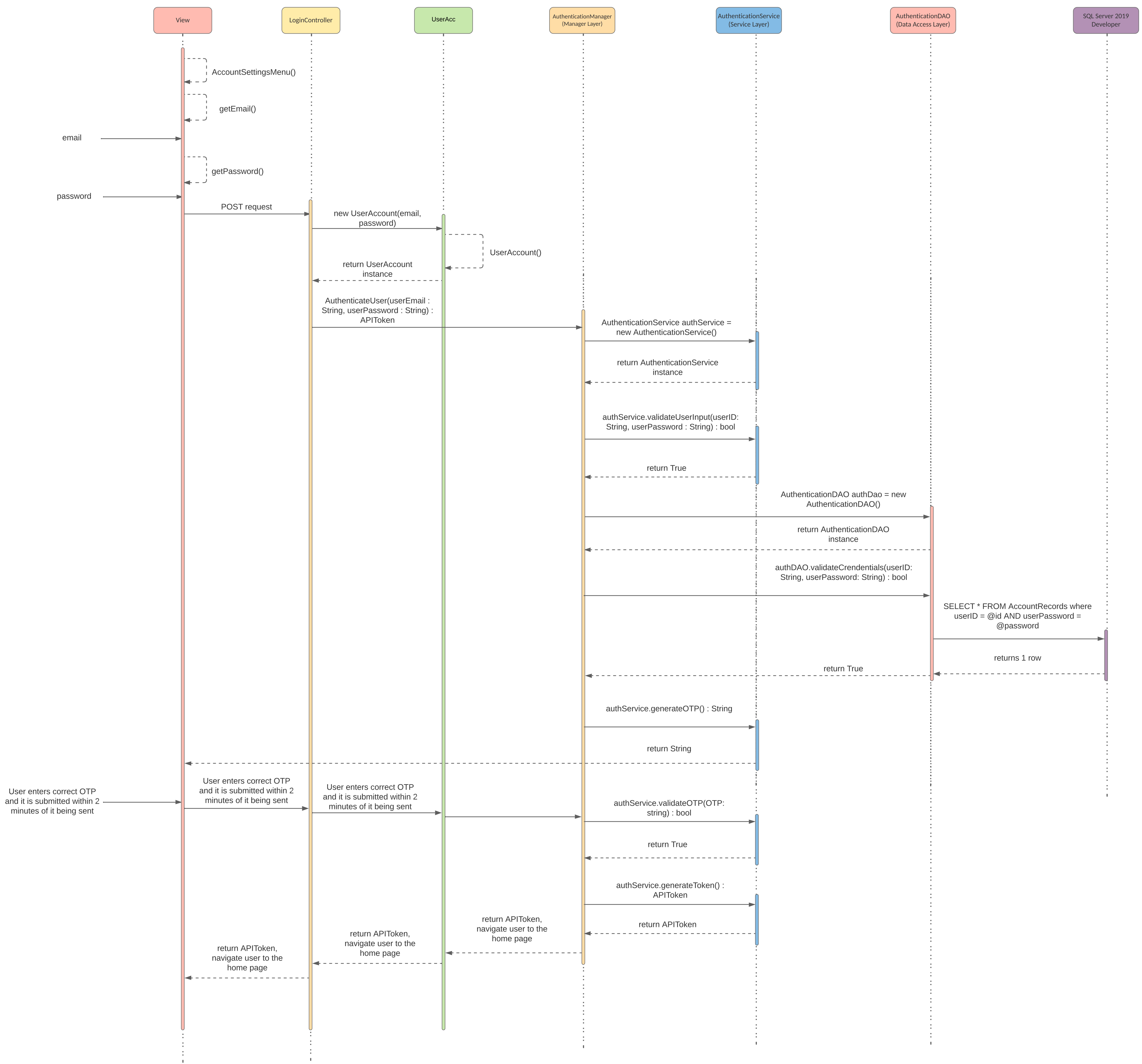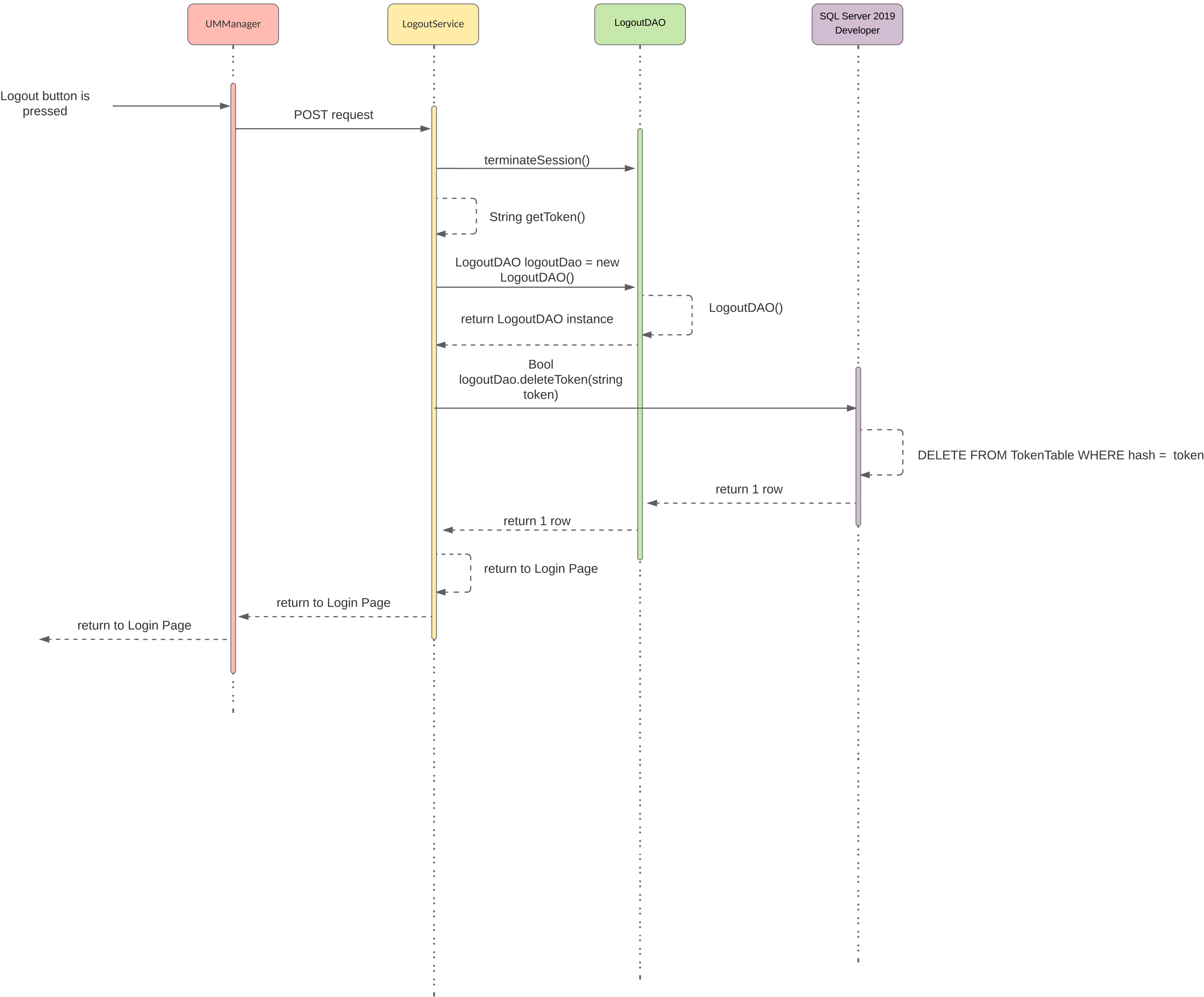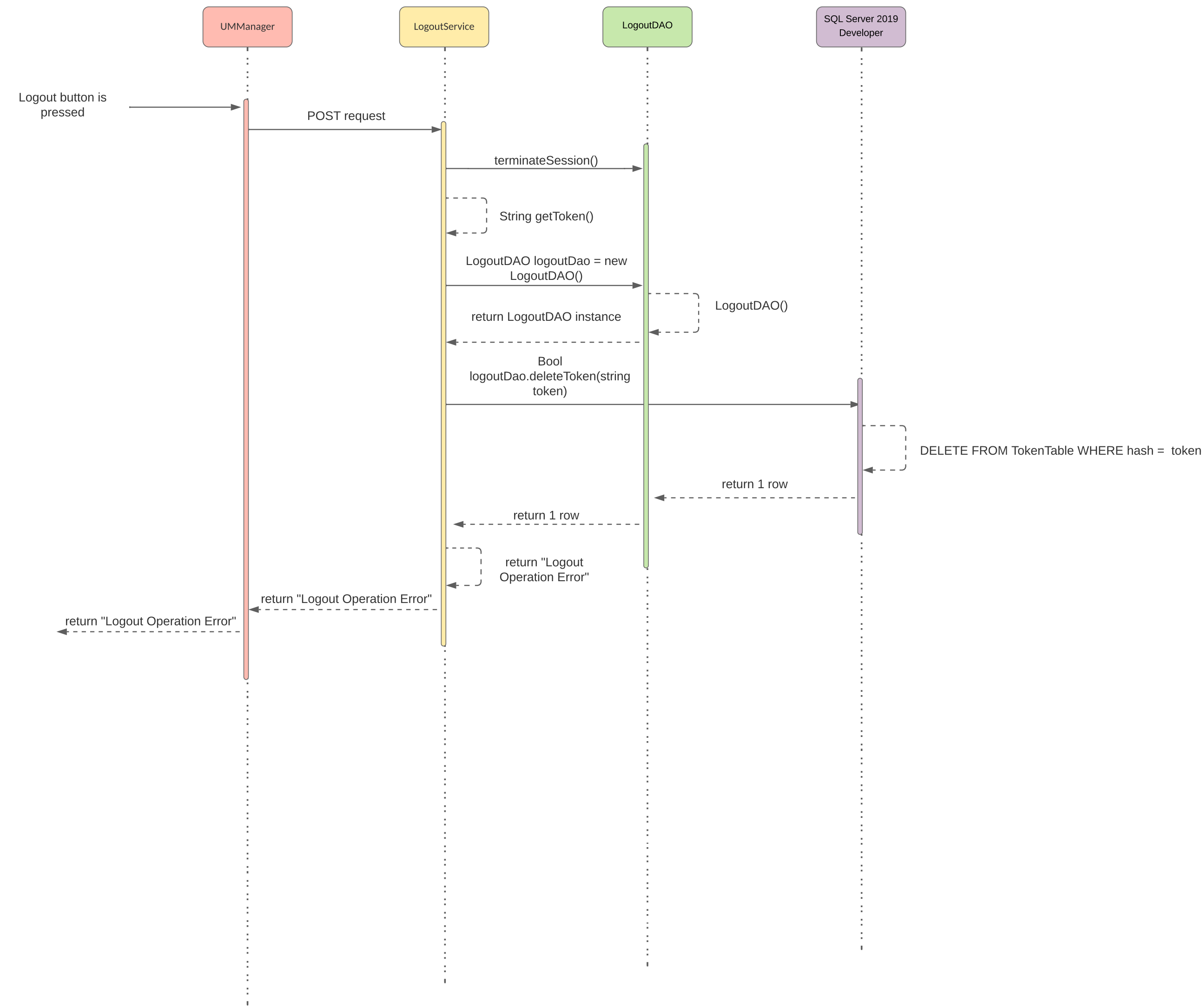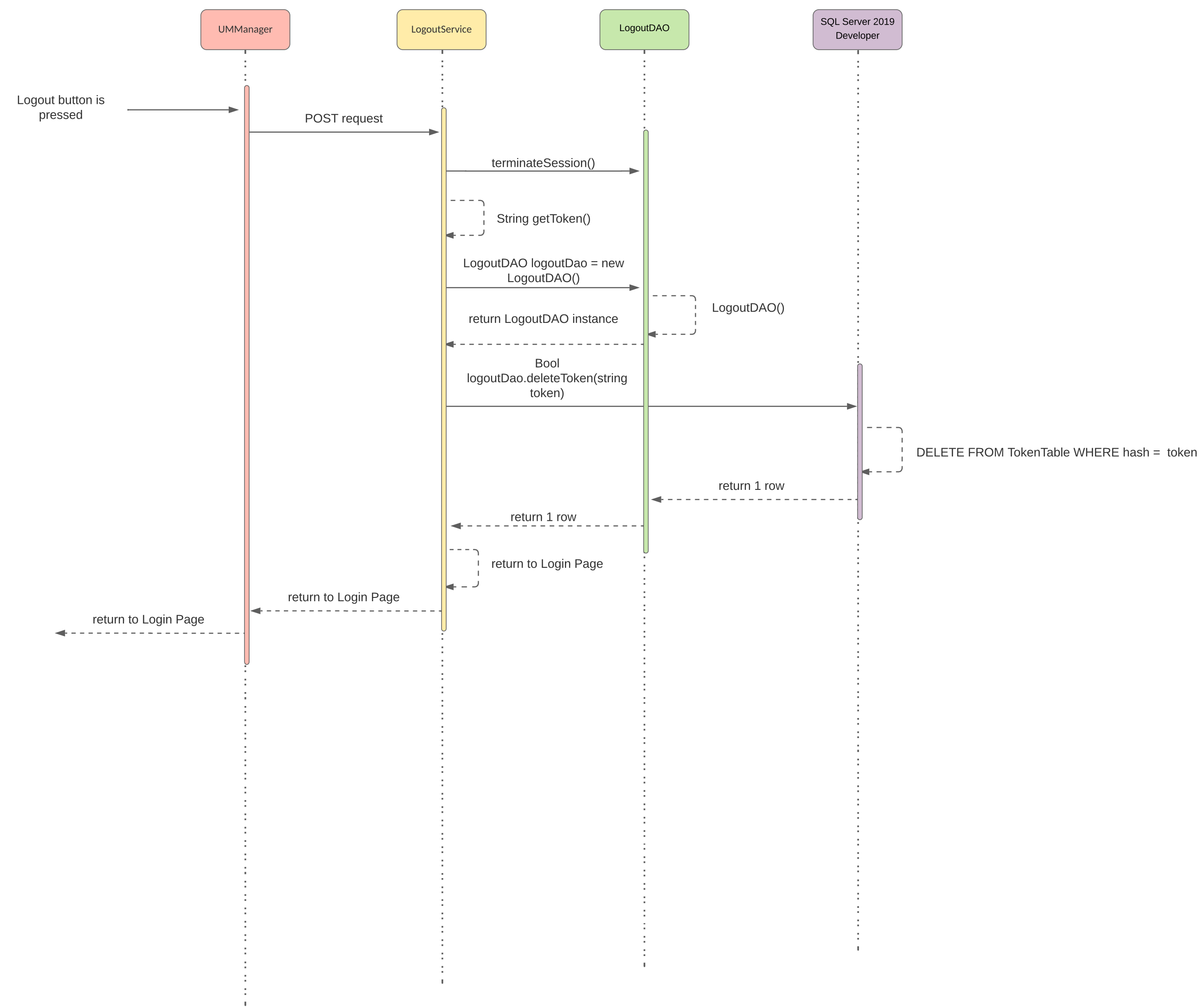
Logout Success Case 1: User performs logout request. The active session ends. The user is automatically navigated to the default home view of the system with the default culture settings. A system message displays "Logout successfully" upon completion of automatic navigation to home view. The logout process completes within 5 seconds upon invocation.

UMManager   LogoutService   LogoutDAO   SQL Server 2019 Developer

Logout button is pressed

POST request →

terminateSession() →

String getToken()

LogoutDAO logoutDao = new LogoutDAO() →

LogoutDAO()

← return LogoutDAO instance

Bool logoutDao.deleteToken(string token) →

DELETE FROM TokenTable WHERE hash = token

← return 1 row

← return 1 row

return to Login Page

← return to Login Page

← return to Login Page

Logout Failure Case 1: User performs logout request. The active session has ended. The user is not automatically navigated to the default home view. A system message displays "Logout operation error" or no message is shown

| UMManager | LogoutService | LogoutDAO | SQL Server 2019 Developer |

Logout button is pressed

POST request

terminateSession()

String getToken()

LogoutDAO logoutDao = new LogoutDAO()

LogoutDAO()

return LogoutDAO instance

Bool logoutDao.deleteToken(string token)

DELETE FROM TokenTable WHERE hash = token

return 1 row

return 1 row

return "Logout Operation Error"

return "Logout Operation Error"

return "Logout Operation Error"

Logout Failure Case 2: User performs logout request. The active session has ended. The user is automatically navigated to the default home view, but not set to the default culture settings. A system message displays "Logout operation error" or no message is shown

| UMMManager | LogoutService | LogoutDAO | SQL Server 2019 Developer |
|---|---|---|---|

Logout button is pressed

POST request

terminateSession()

String getToken()

LogoutDAO logoutDao = new LogoutDAO()

LogoutDAO()

return LogoutDAO instance

Bool logoutDao.deleteToken(string token)

DELETE FROM TokenTable WHERE hash = token

return 1 row

return 1 row

return to Login Page

return to Login Page

return to Login Page

Logout Failure Case 3: The logout process takes longer than 5 seconds.

| UMMManager | LogoutService | LogoutDAO | SQL Server 2019 Developer |

Logout button is pressed

POST request

terminateSession()

String getToken()

LogoutDAO logoutDao = new LogoutDAO()

LogoutDAO()

return LogoutDAO instance

Bool logoutDao.deleteToken(string token)

DELETE FROM TokenTable WHERE hash = token

return 1 row

return 1 row

return Error: Error takes longer than 5 seconds

return Error: Error takes longer than 5 seconds

return Error: Error takes longer than 5 seconds