User Login Sequence

User	Server

1: login (username, password)

2: verifyCredentials (username, password)

3: redirectToHomePage()

User Logout Sequence

User	Server

1: logOut ()

2: clearSessionAndCookies ()

3: redirectLogInPage()
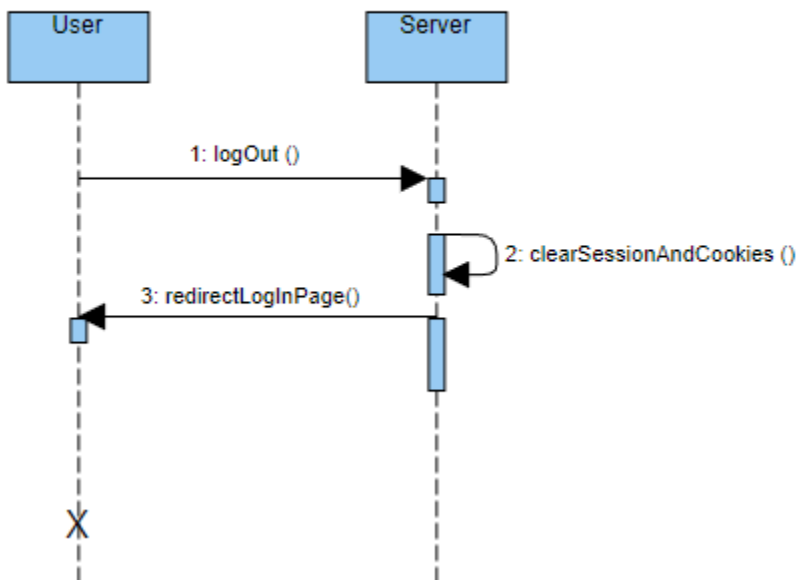
User Account Creation Sequence

| User	Server	Database

1: register (userInfo[])

2: verifyUniqueUsernameEmail (userInfo[])

3: createNewUser (userInfo[])

4: redirectToHomePage()
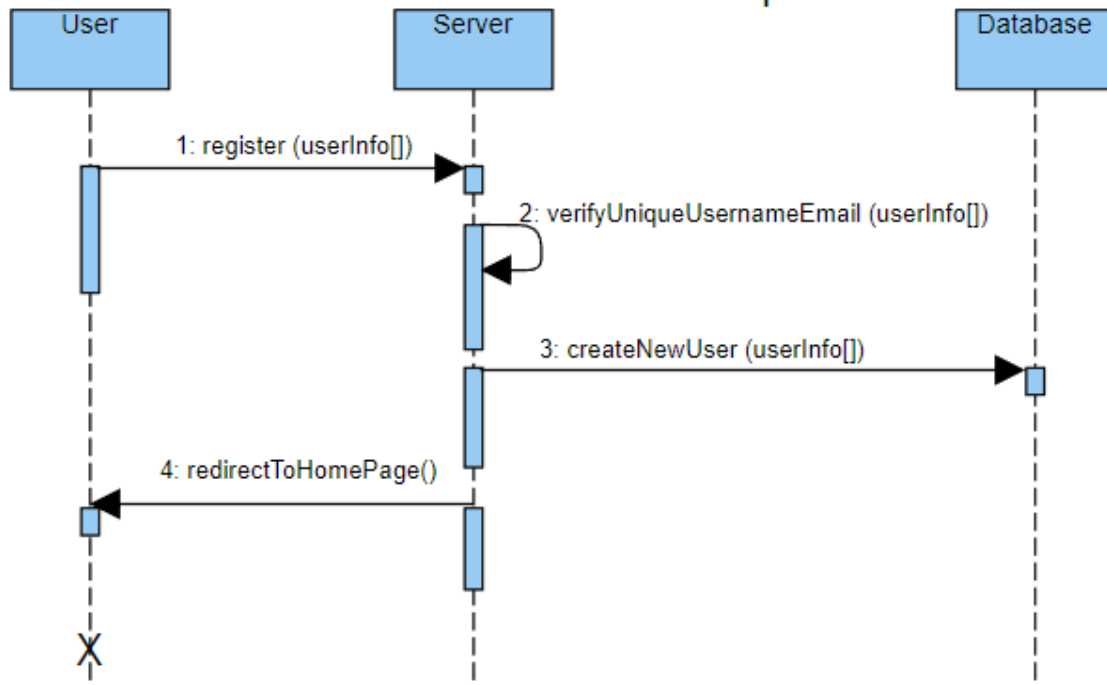
User Account Deletion Sequence

User	Server	Database

1: deleteAccount(userInfo[])

2: verifyUserCredentials(userInfo[])

3: deleteUser(userInfo[])

4: redirectLogInPage()
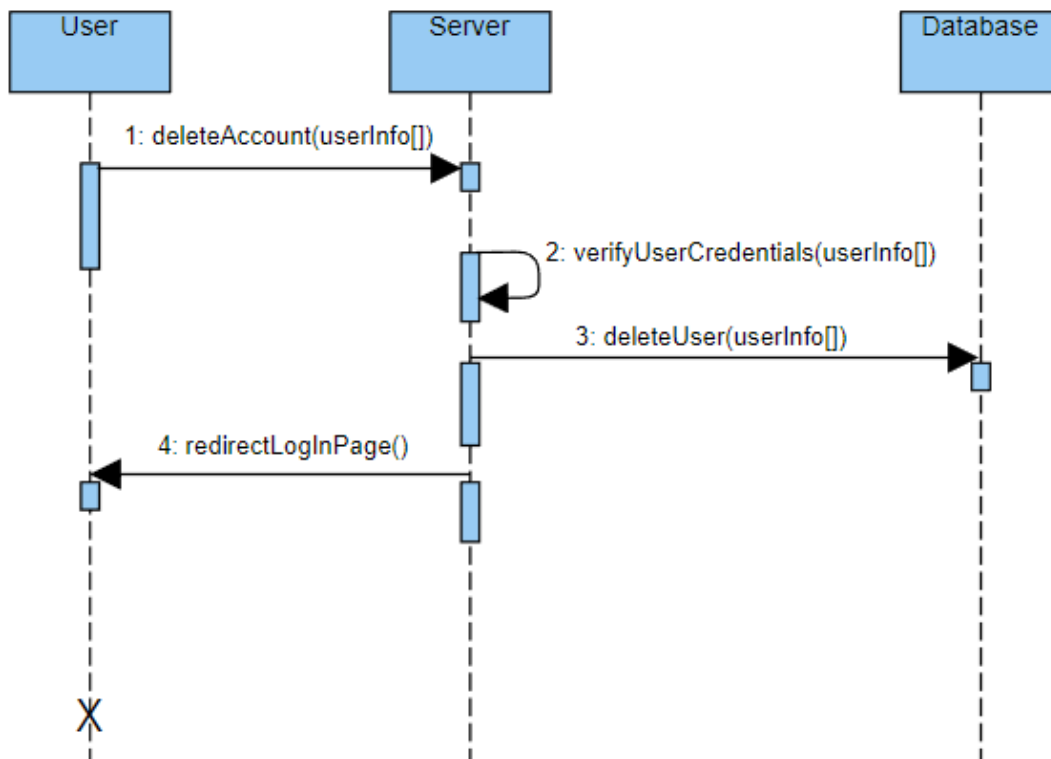
User Password Reset Sequence

User	Server	Email Server

1: forgotPassword(email)

2: verifyUserEmail(email)

3: sendPasswordResetLink(email)

4: Click password reset link

5: verifyPasswordResetToken(token)

6: redirectPasswordResetPage(email)

7: newPassword(email)

8: updatePassword(email)

9: redirectLogInPage()

X
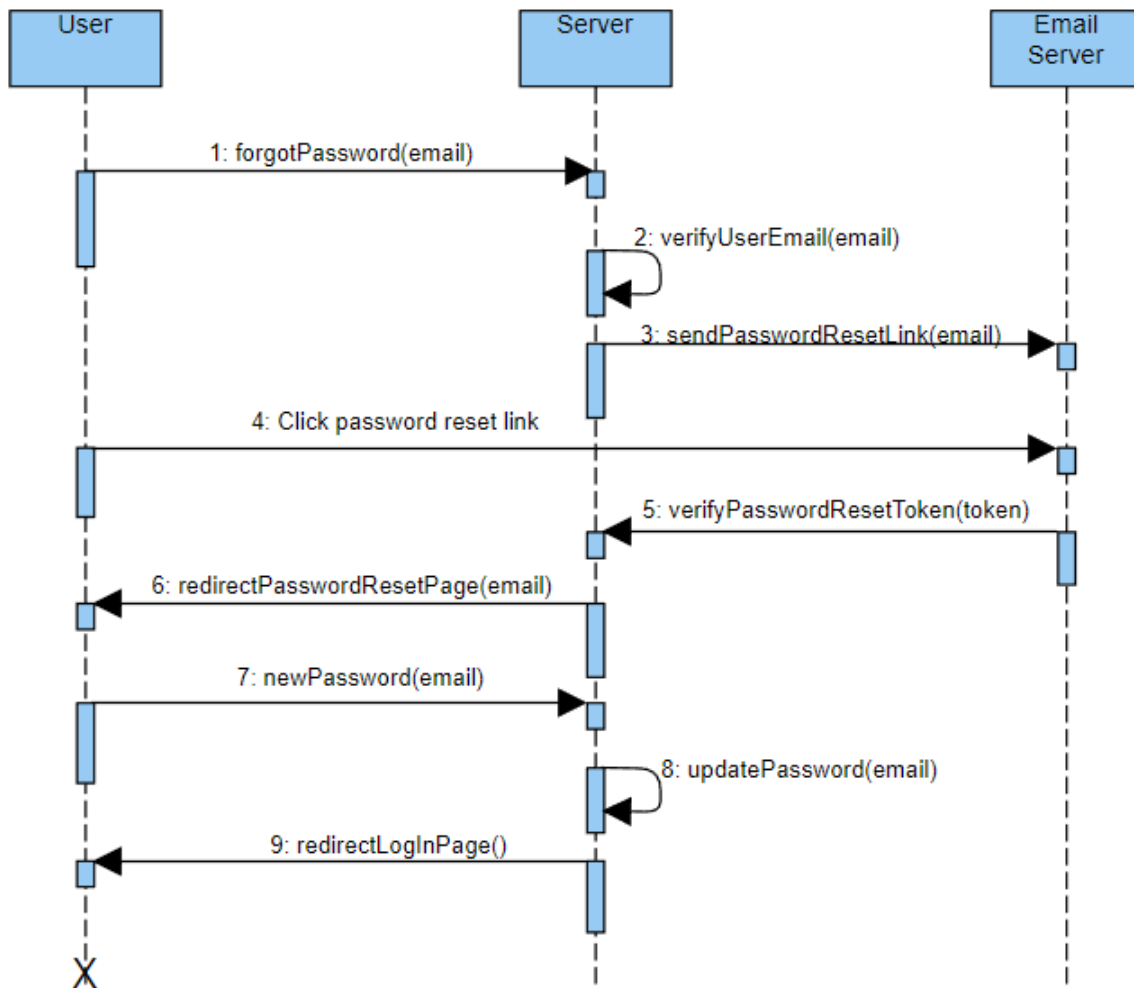
User Server Creation Sequence

User	Server	Database

1: click on create server

2: verifyUniqueServerName(serverName)

3: serverEntry(serverName)

4: addUserAsOwner(username)

5: redirectServerPage()

X
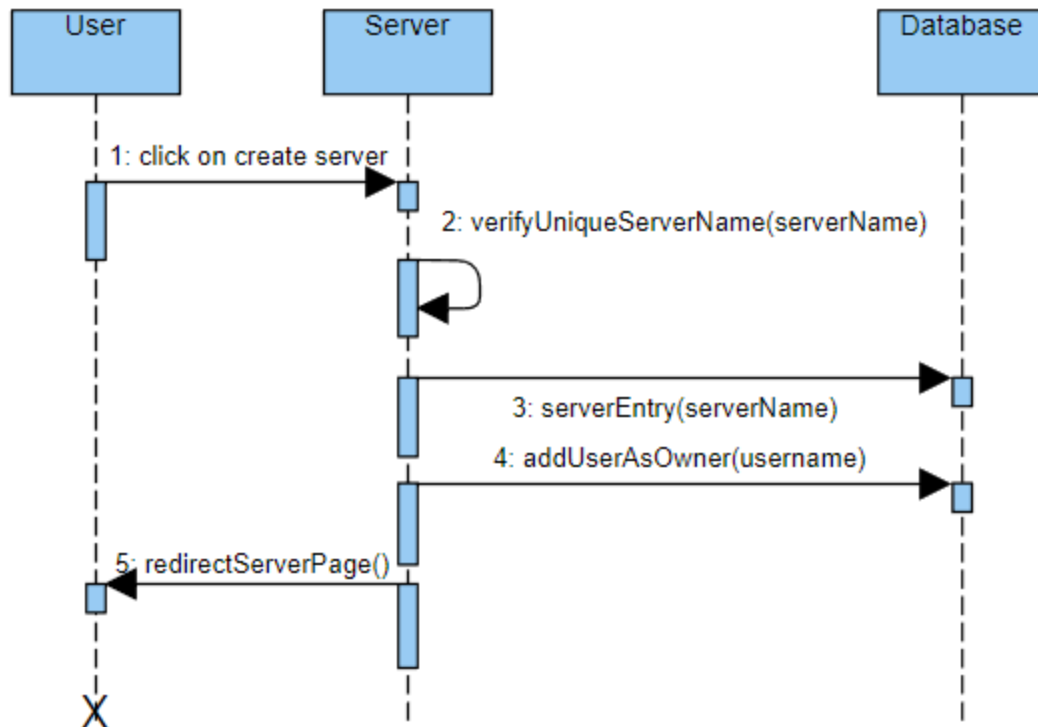
User Server Deletion Sequence

User	Server	Database

1: Click on delete server button

2: verifyUserIsOwner(username)

3: deleteServer(serverName)

4: redirectToHomePage()

X
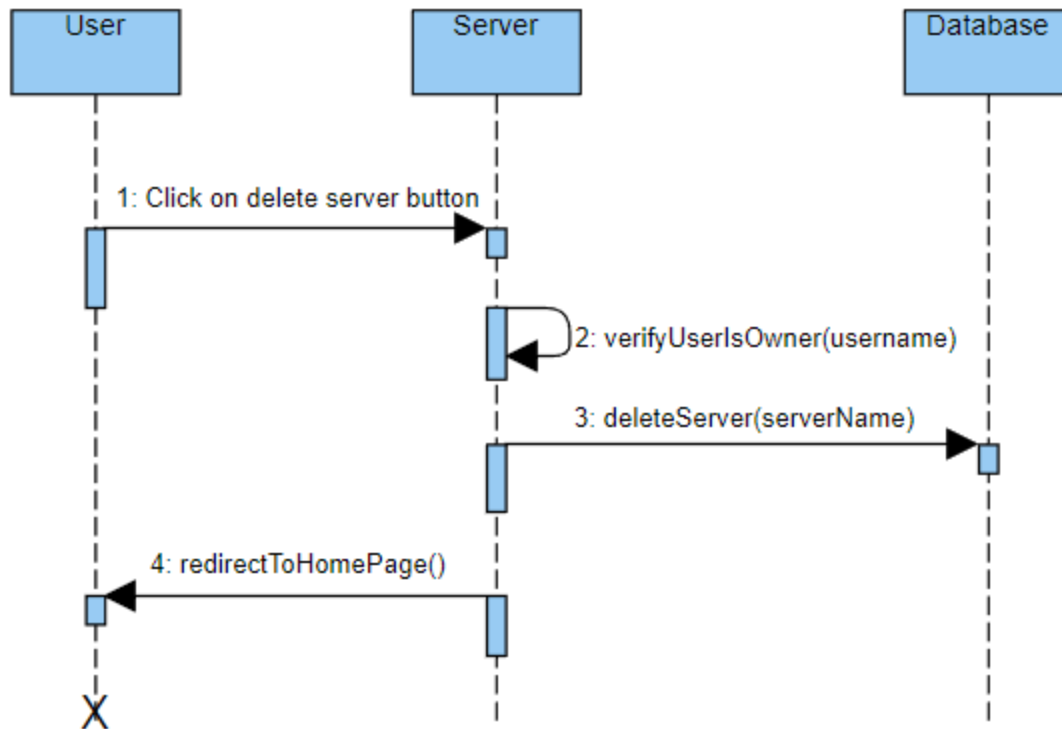
User Role Assignment Sequence

User	Server	Database

1: Click manage roles button

2: verifyUserIsAdmin(username)

3: updateUserRole(username, role)

4: redirectServerPage()

X
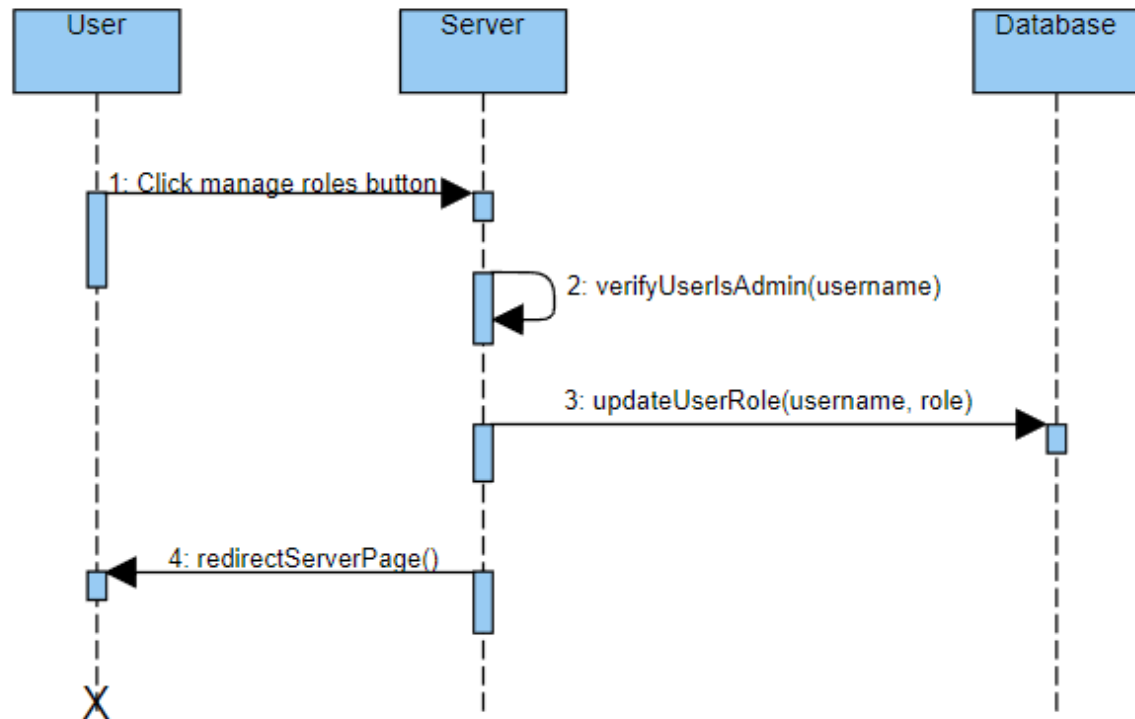
User Server Join Sequence

User	Server	Database

1: enterServer(inviteCode)

2: verifyInviteCode(serverName, code)

3: addUserToMemberList(username)

4: redirectServerPage()
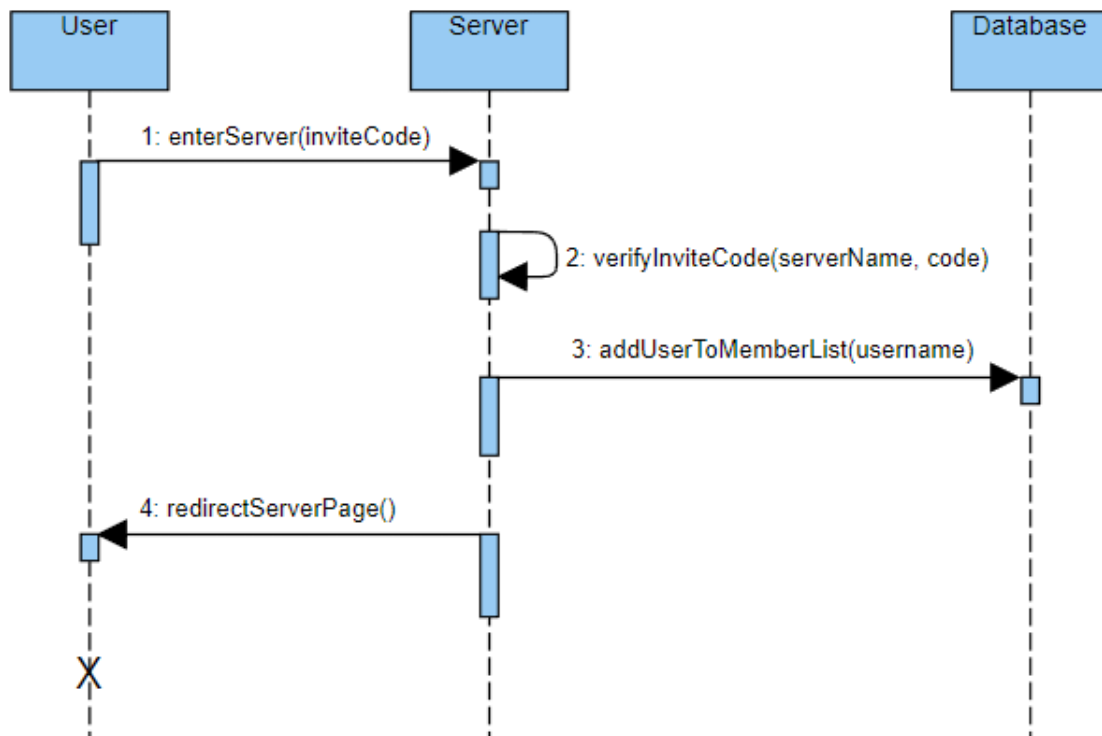
User Server Leave Sequence

User	Server	Database

1: leaveServer()

2: removeUserFromMemberList(username, serverName)

3: redirectToHomePage()
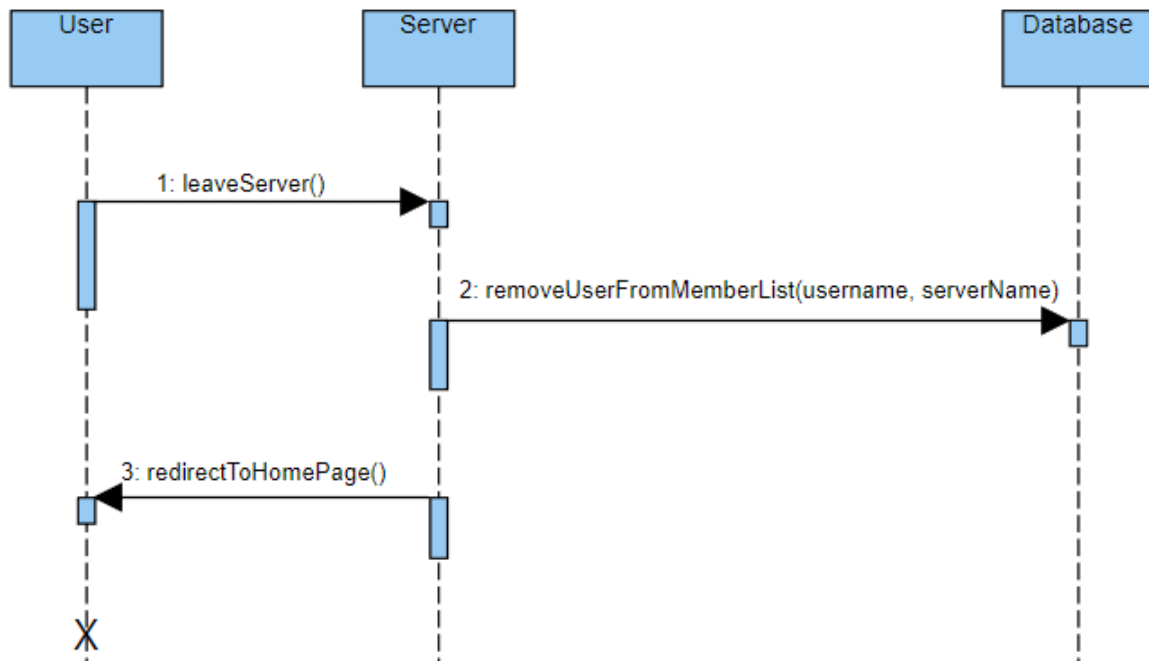
User Profile Update Sequence

User	Server	Database

1: Click profile settings button

2: Select profile edit option

3: update profile information

4: updateUserInfo()

5: redirectToProfilePage()

6: selectServer()

7: verifyUserIsAdmin()

8: allowUserToUpdateRoles()

9: updateRoles()

10: updateUserRole(username, role)

11: redirectServerPage()
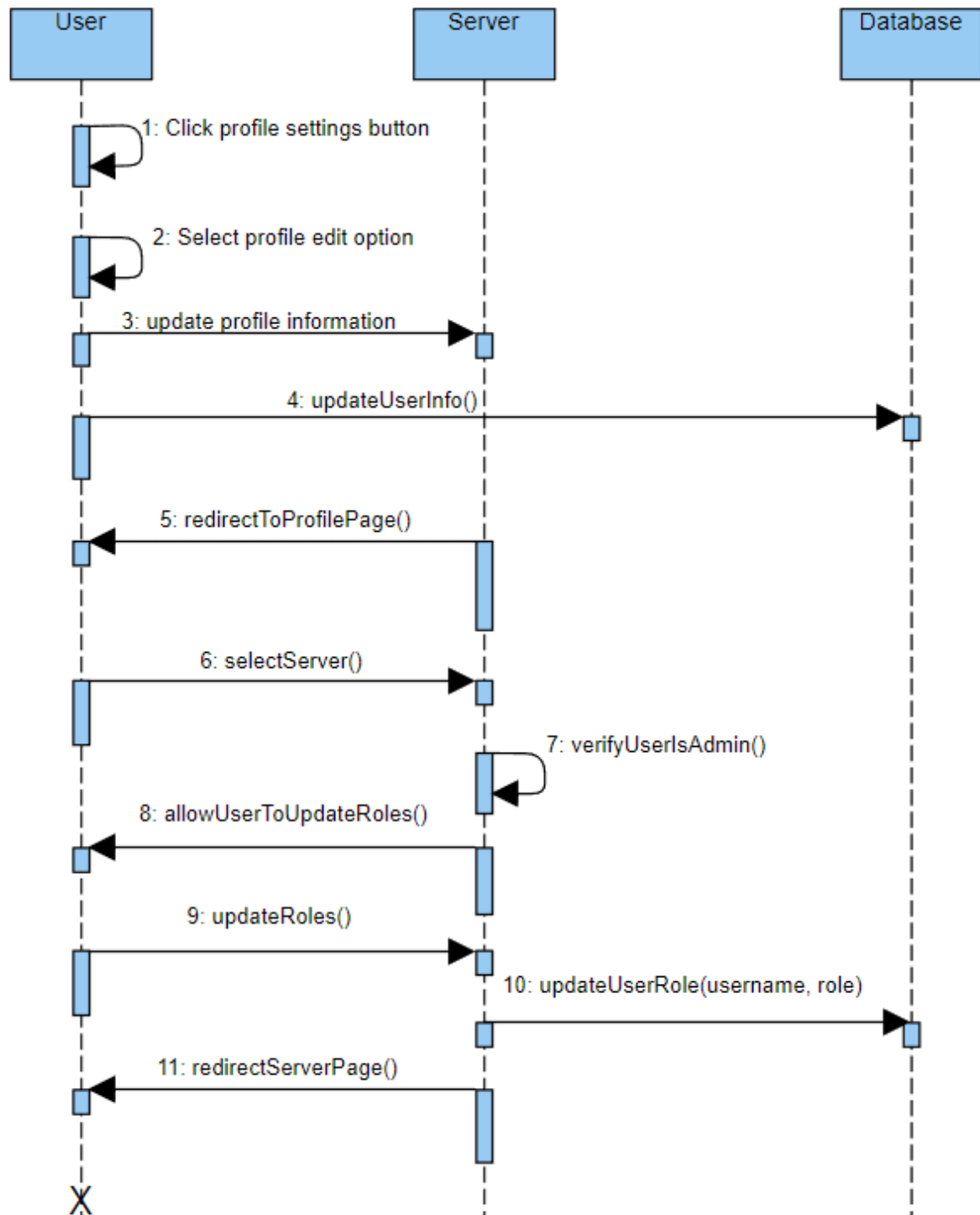
User Text Channel Swap Sequence

```
   User                    Server

     1: selectServer()
     │───────────────────────▶│
     │                        │
     │                        │◀┐ 2: listTextChannels(serverName)
     │                        │─┘
     3: selectTextChannel()   │
     │◀┐                      │
     │─┘                      │
     │                        │◀┐ 4: displayTextChannel()
     │                        │─┘
     X                        │
```
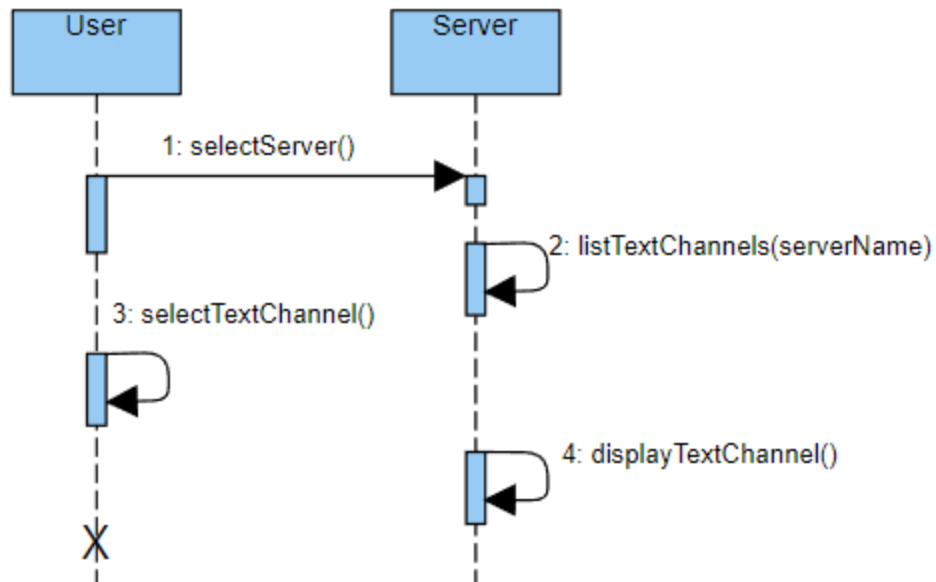
User Text Channel CRUD Sequence

```
   User                  Server                 Database

     1: selectServer()
     │──────────────────────▶│
     │                       │◀┐ 2: verifyUserIsAdmin(username)
     │                       │─┘
     3: allowUserManageChannels()
     │◀──────────────────────│
     4: select channel management option
     │◀┐                     │
     │─┘                     │
     5: crudChannel()        │
     │──────────────────────▶│
     │                       │  6: updateServerTextChannel()
     │                       │────────────────────────▶│
     7: redirectServerPage() │
     │◀──────────────────────│
     X
```
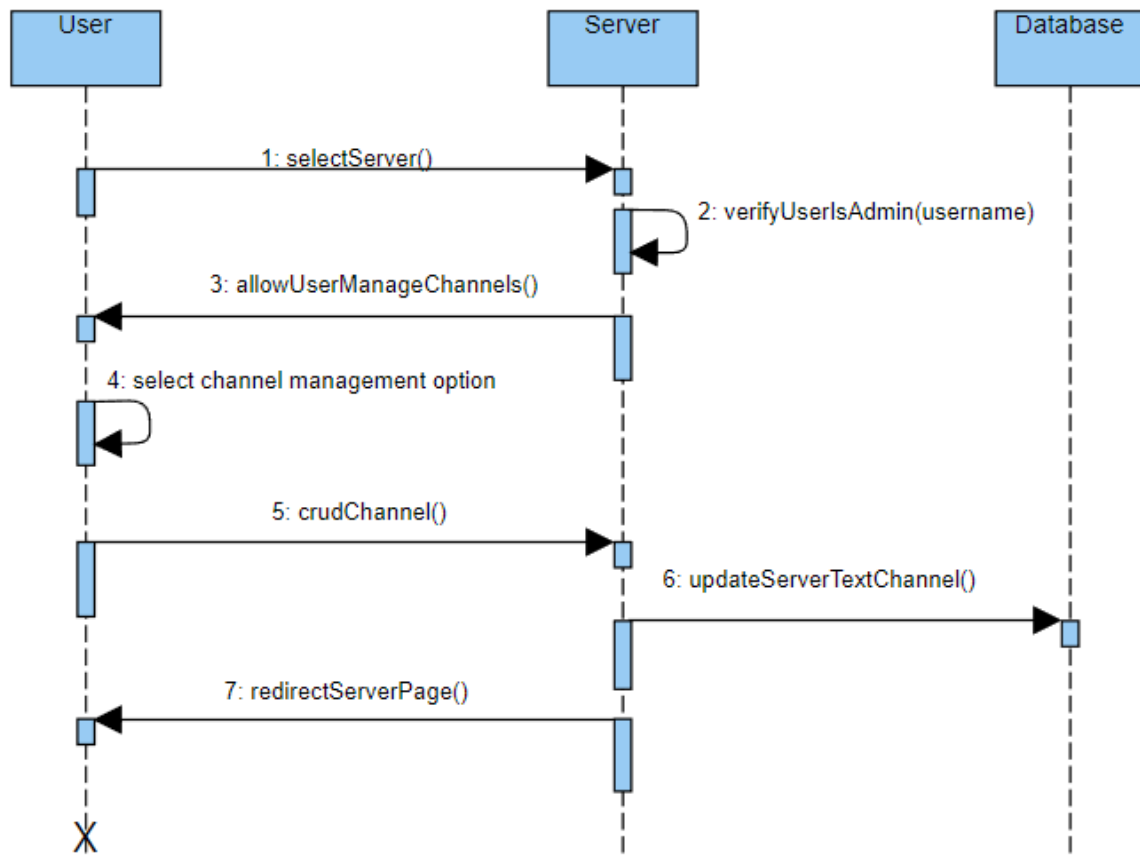
User Message Send Sequence

User

Server

Channel

Message

Database

X

1: selectServer()

2: verifyUserIsMember(username)

3: allowUserPostMessages()

4: selectChannel

5: diplayChannel

6: typesMessage

7: add images/files (if applicable)

8: add hyperlink (if applicable)

9: sendMessage()

10: createMessageObject()

11: storeMessageObject()

11: redirectToChannel
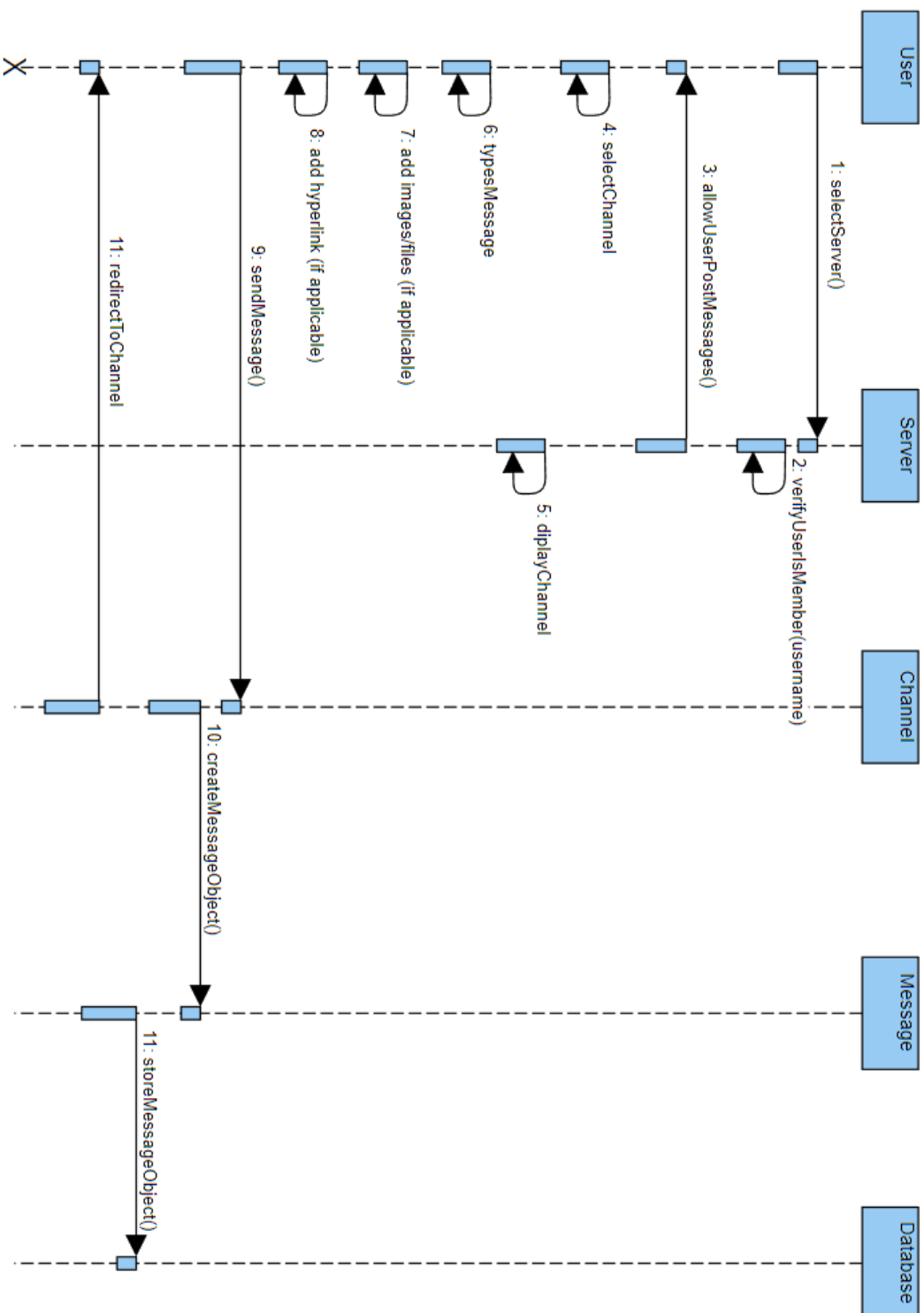
User Message Receive Sequence

User	Channel	Message	Database

1: sendMessage

2: storeMessageObject()

3: displayMessage()

X

User Member View Sequence

User	Server

1: selectServer

2: listServerMembers()

3: display server members

4: view members list

X