DISCUSSION FORUM

DESIGN DOCUMENT

SET Software Organization

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1. System Architecture

The MVC (Model – View – Controller) pattern is applied as the main system architecture for our project, an Online Discussion Forum.

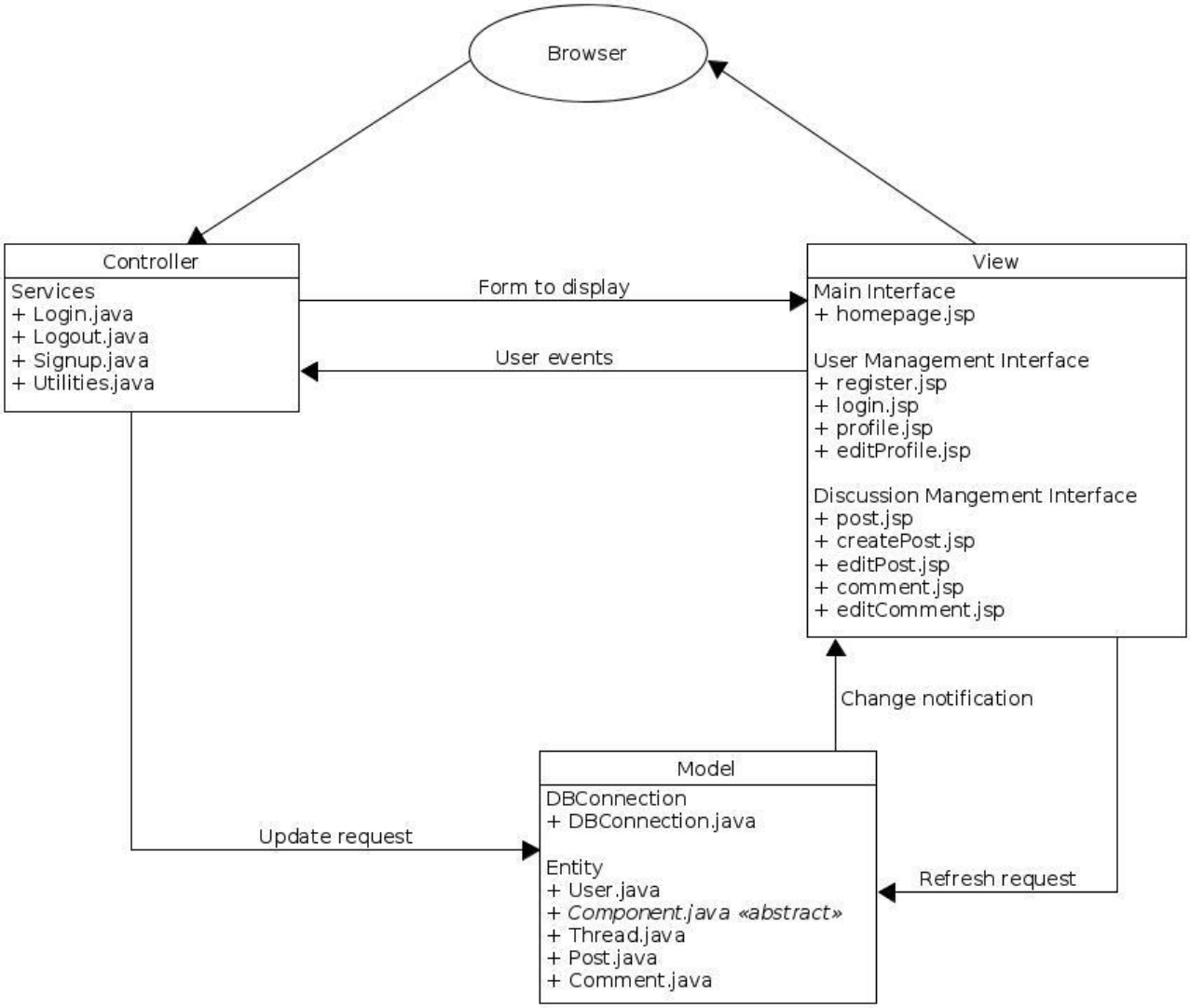
The *View component* provides the user interface elements for different applications of the system. This component makes use of the Model to display the desired information and the Controller to display processed data corresponding to specific user events. There are three kinds of interfaces:

1. **Main Interface**: display the forum's homepage with all the theads and corresponding posts listed in a specific order.
2. **User Management Interface**: display the GUIs for all functions relating to user management services.
3. **Discussion Mangement Interface**: display the GUIs for all functions relating to discussion services.

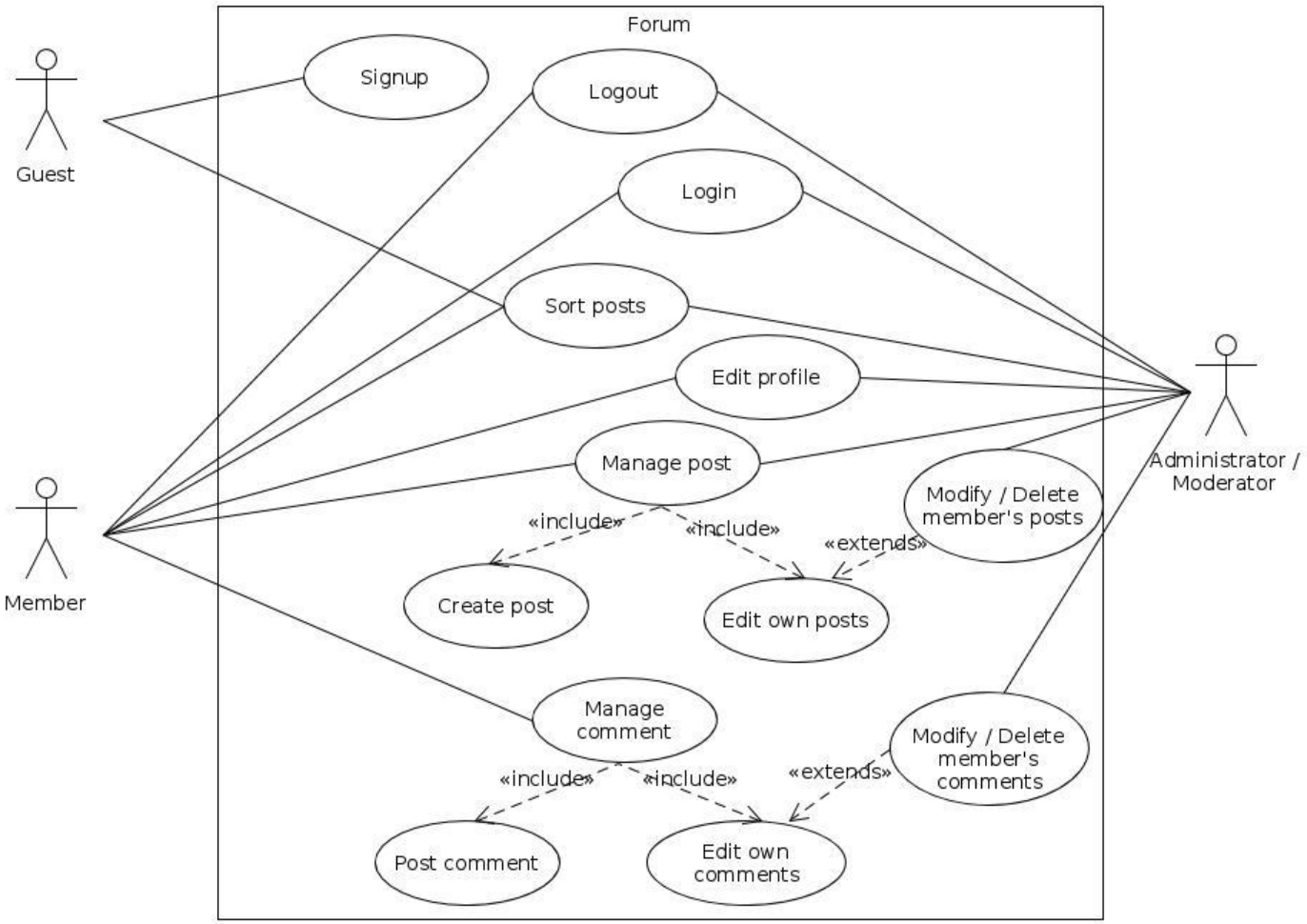
The *Model component* contains the main data models used in the system. There are two kinds of models:

1. **DBConnection Model:** used to provide a database connection.
2. **Entity Model:** represent basic entities existed in the system.

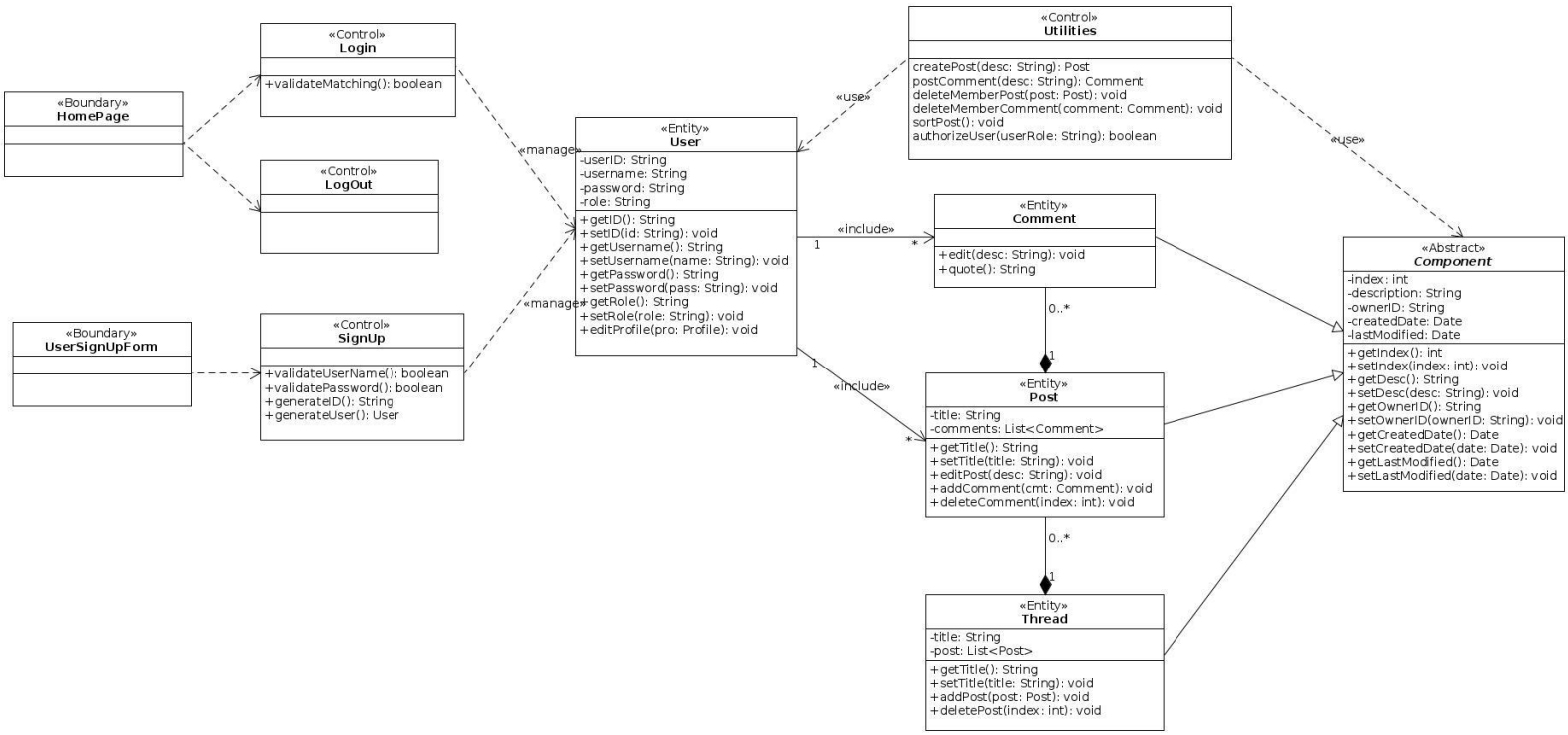
The *Controller component* includes all of the main functions and services deployed in the final system. This component tries to process and update the Model according to the corresponding user events, and return the results to the View component to display.


Browser
Controller
Services
+ Login.java
+ Logout.java
+ Signup.java
+ Utilities.java
Form to display
User events
View
Main Interface
+ homepage.jsp
User Management Interface
+ register.jsp
+ login.jsp
+ profile.jsp
+ editProfile.jsp
Discussion Mangement Interface
+ post.jsp
+ createPost.jsp
+ editPost.jsp
+ comment.jsp
+ editComment.jsp
Change notification
Model
DBConnection
+ DBConnection.java
Entity
+ User.java
+ Component.java «abstract»
+ Thread.java
+ Post.java
+ Comment.java
Update request
Refresh request

2. Use Case Diagram

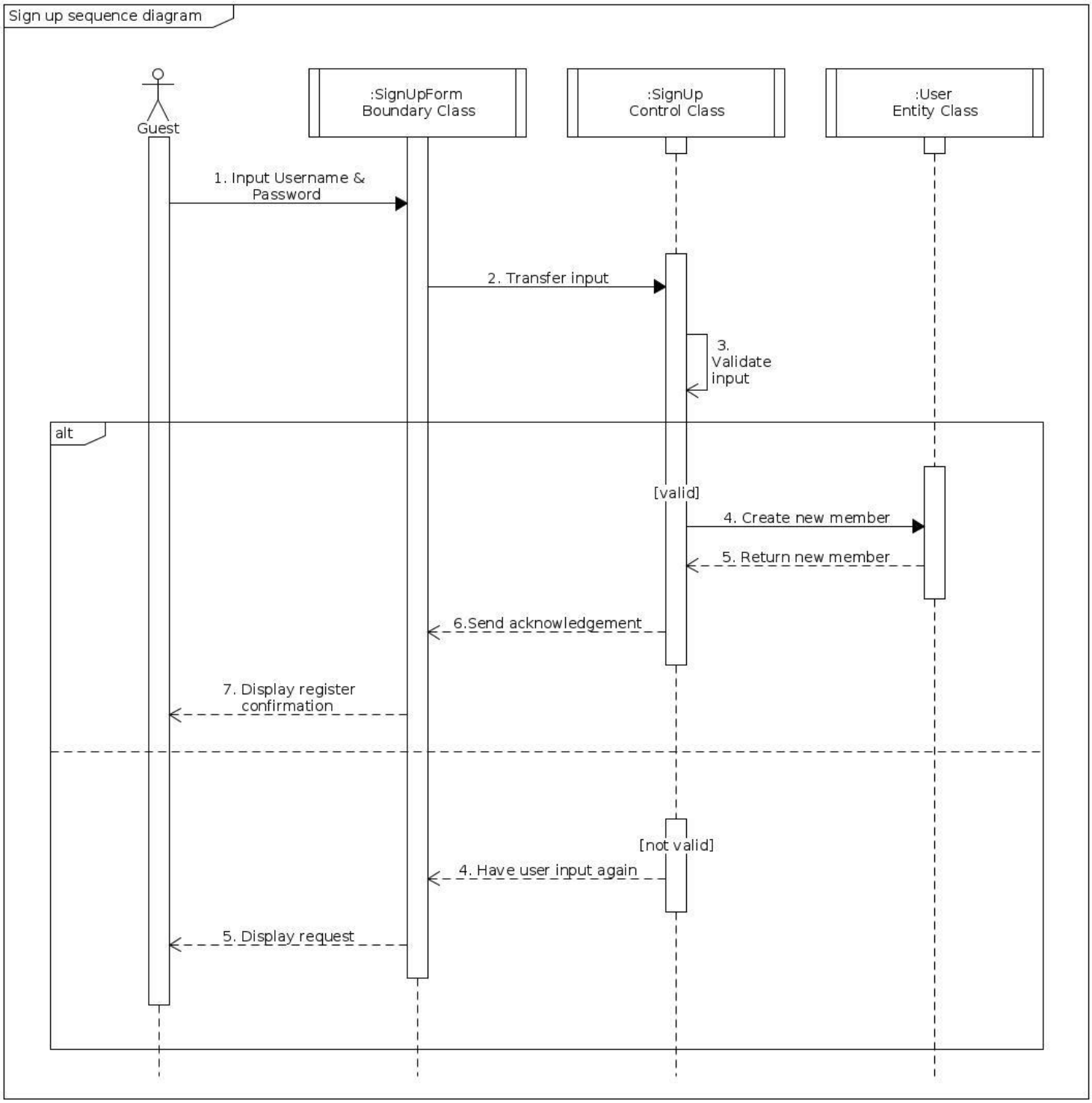


3. Class Diagram

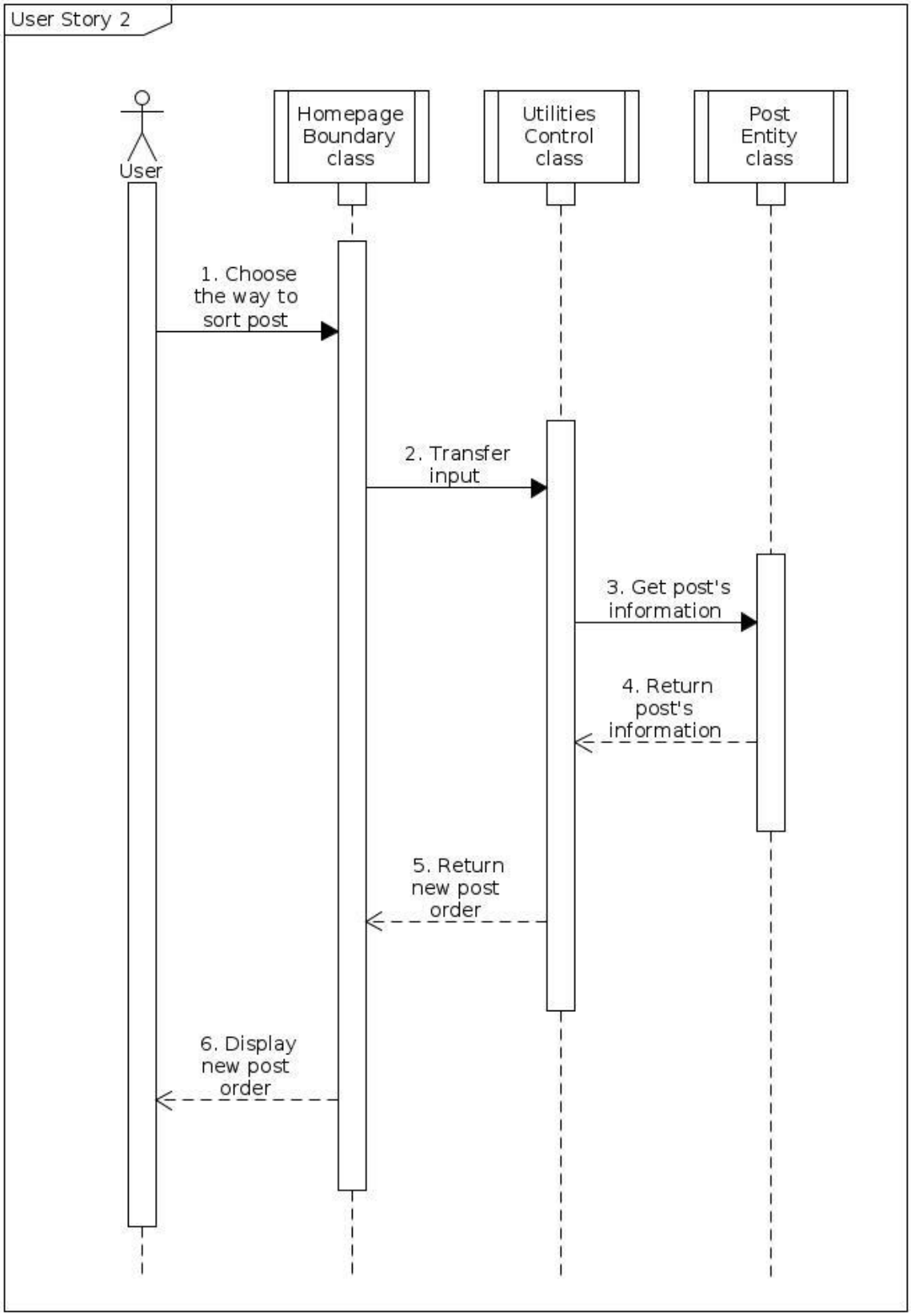


4. Sequence Diagrams

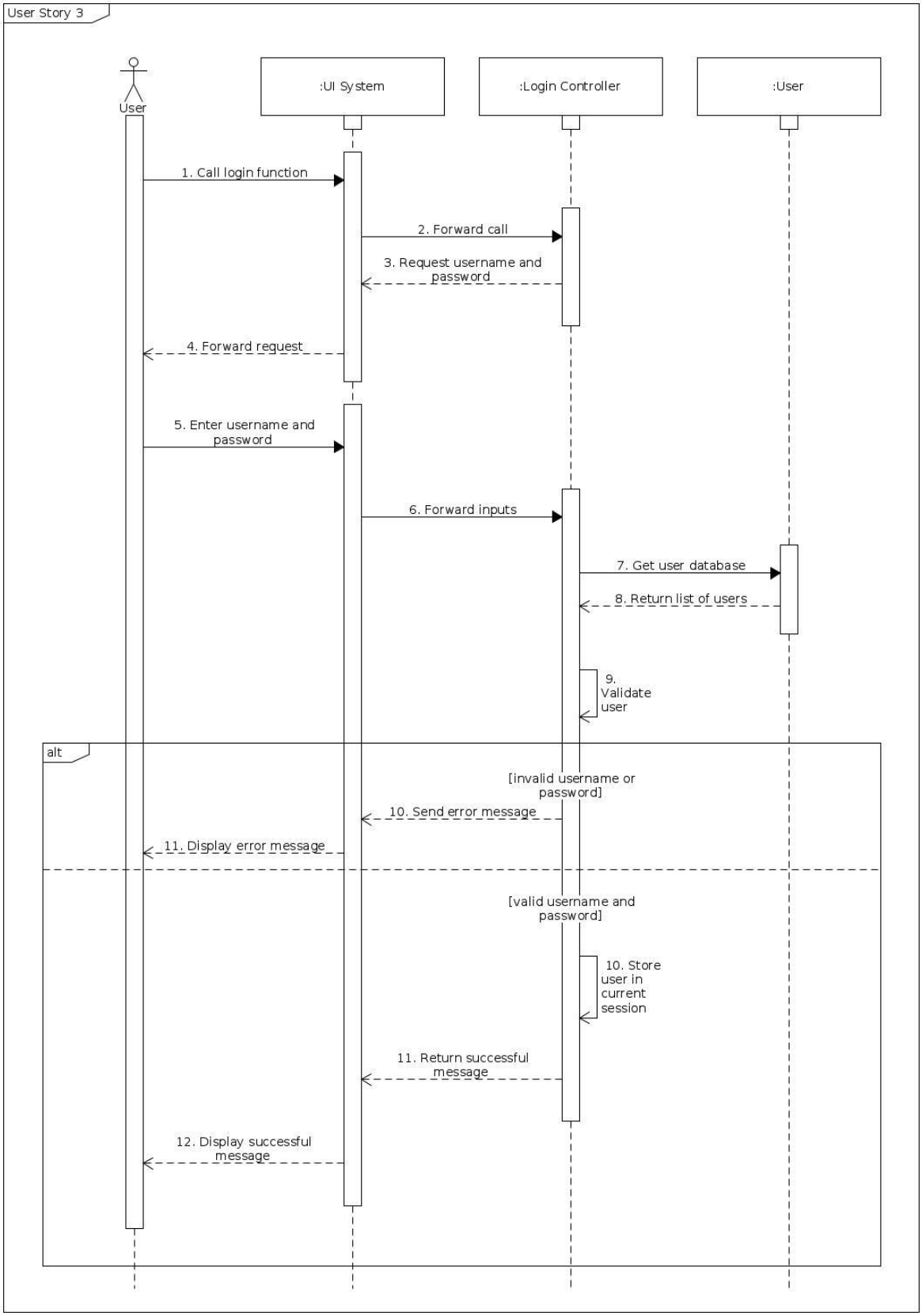
4.1 Sign up sequence diagram

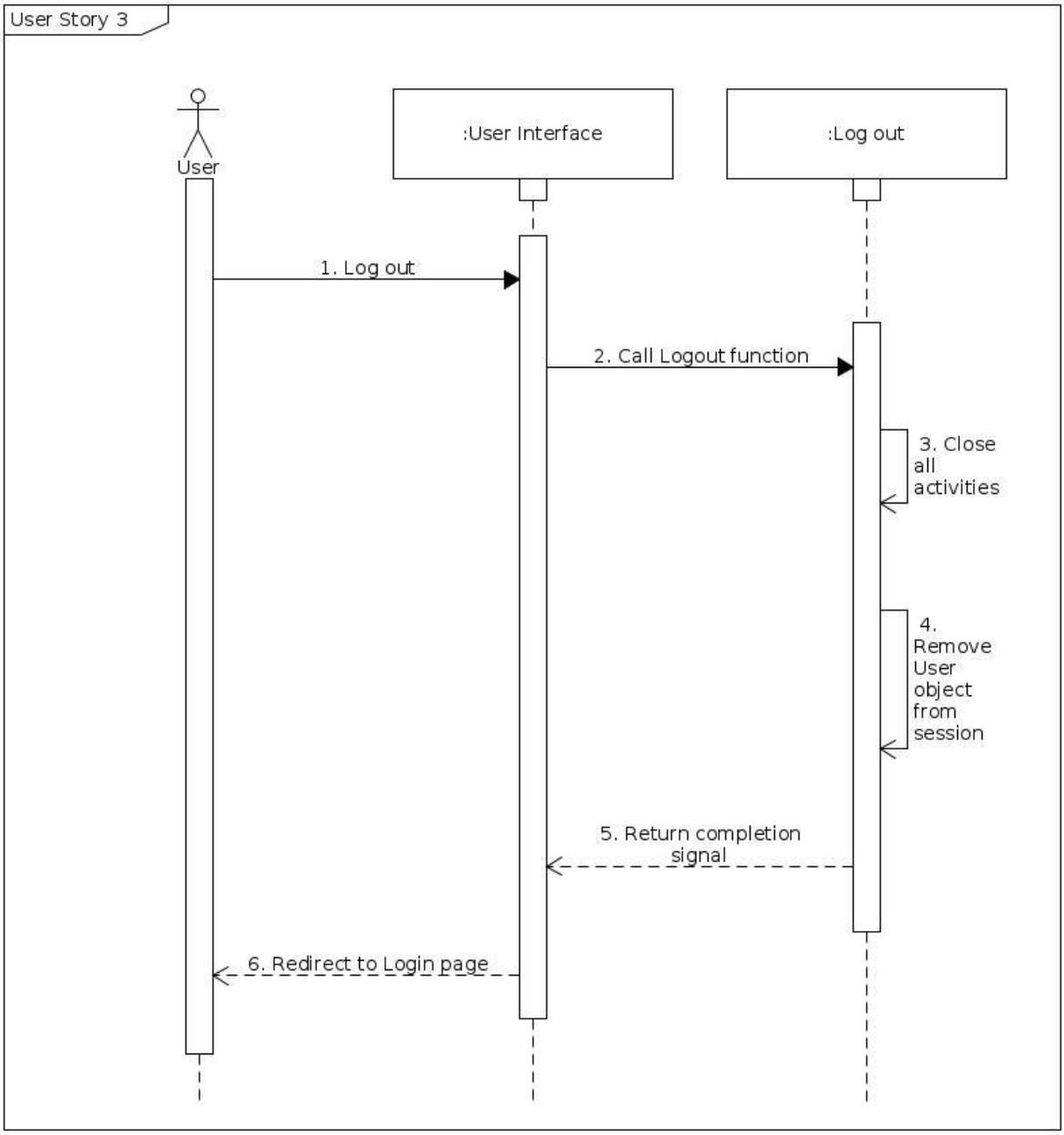


4.2 Sort displayed posts sequence diagram

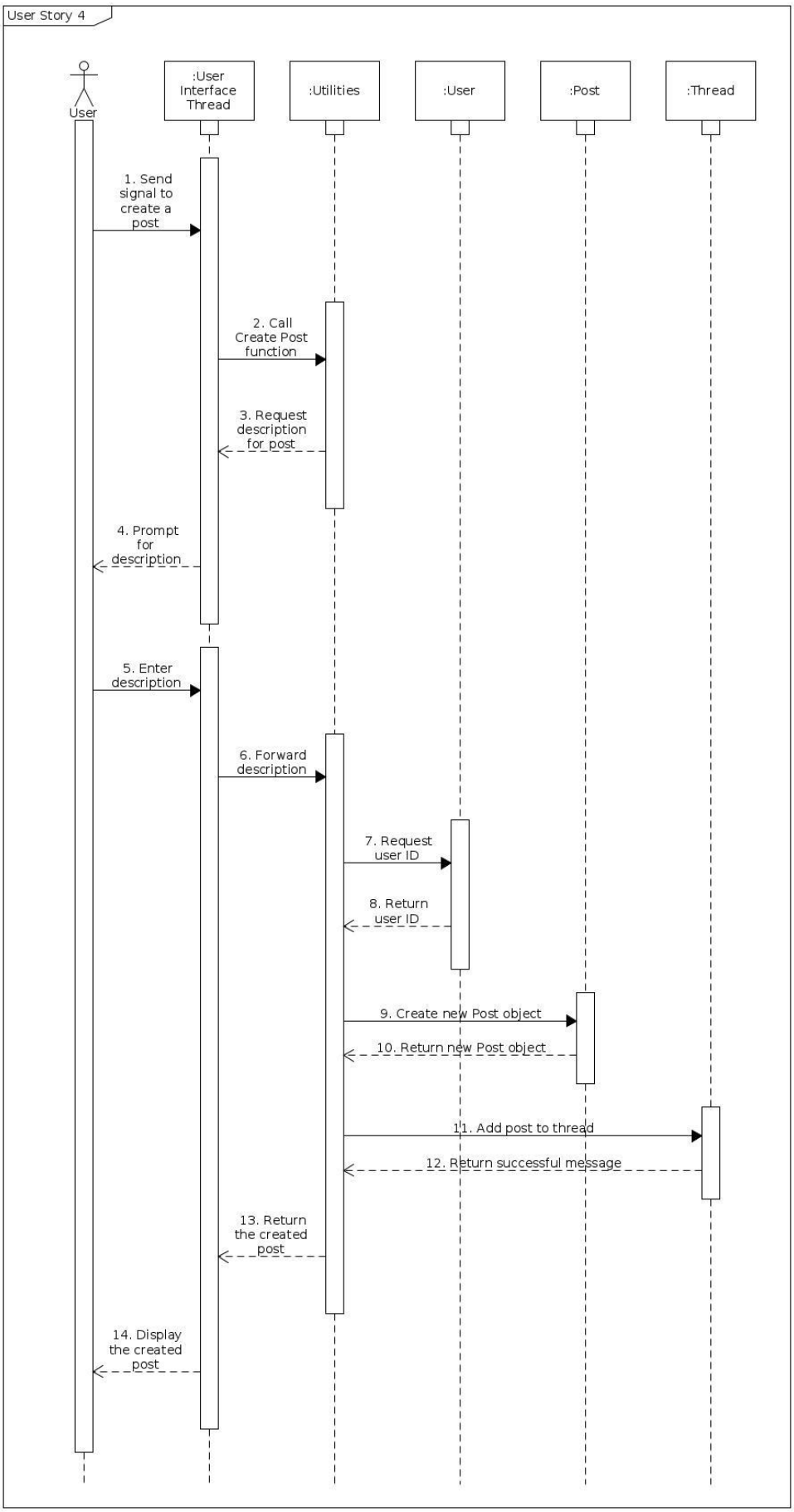


4.3 Login / logout sequence diagram

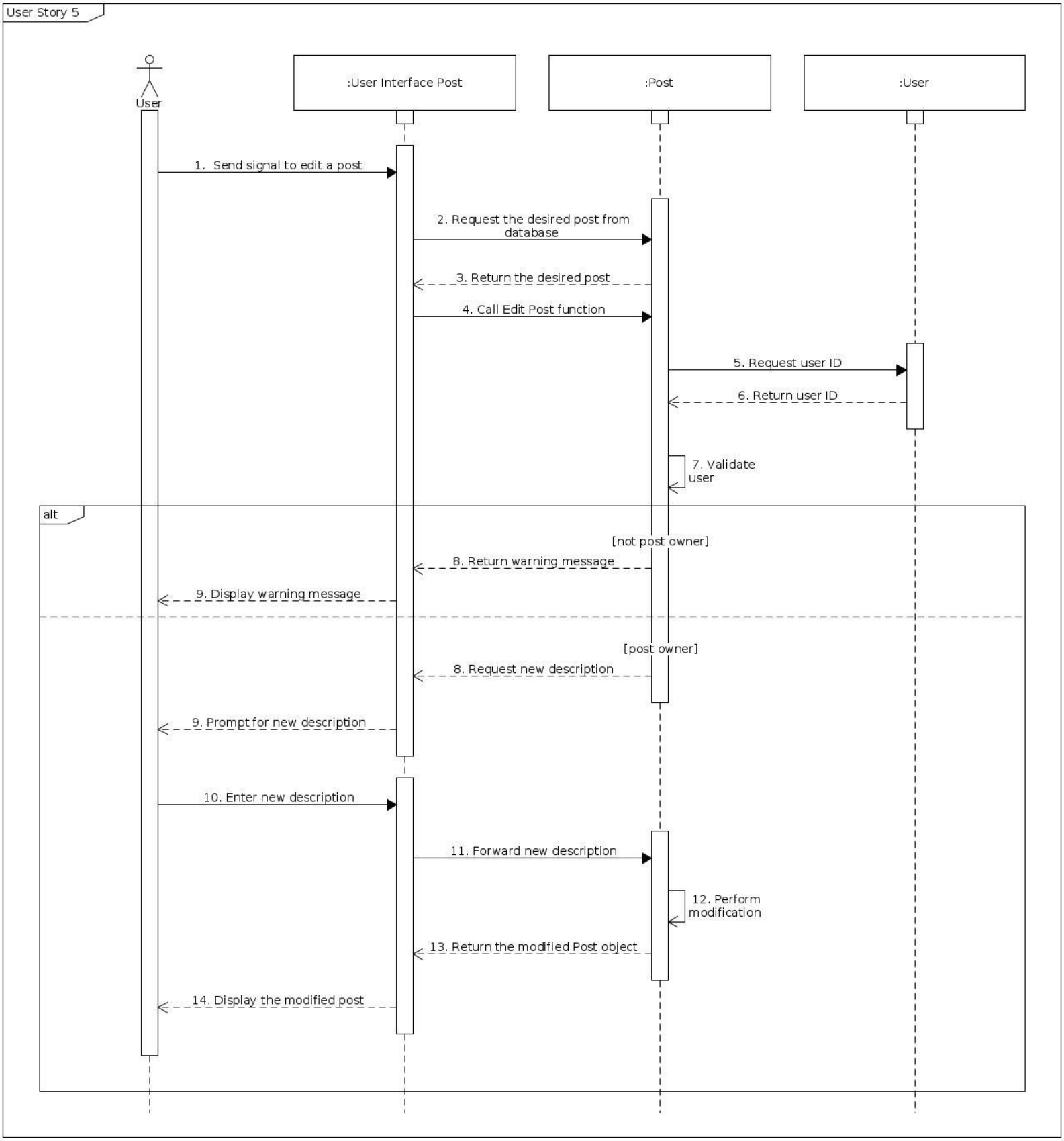



User Story 3
User
:User Interface
:Log out
1. Log out
2. Call Logout function
3. Close all activities
4. Remove User object from session
5. Return completion signal
6. Redirect to Login page

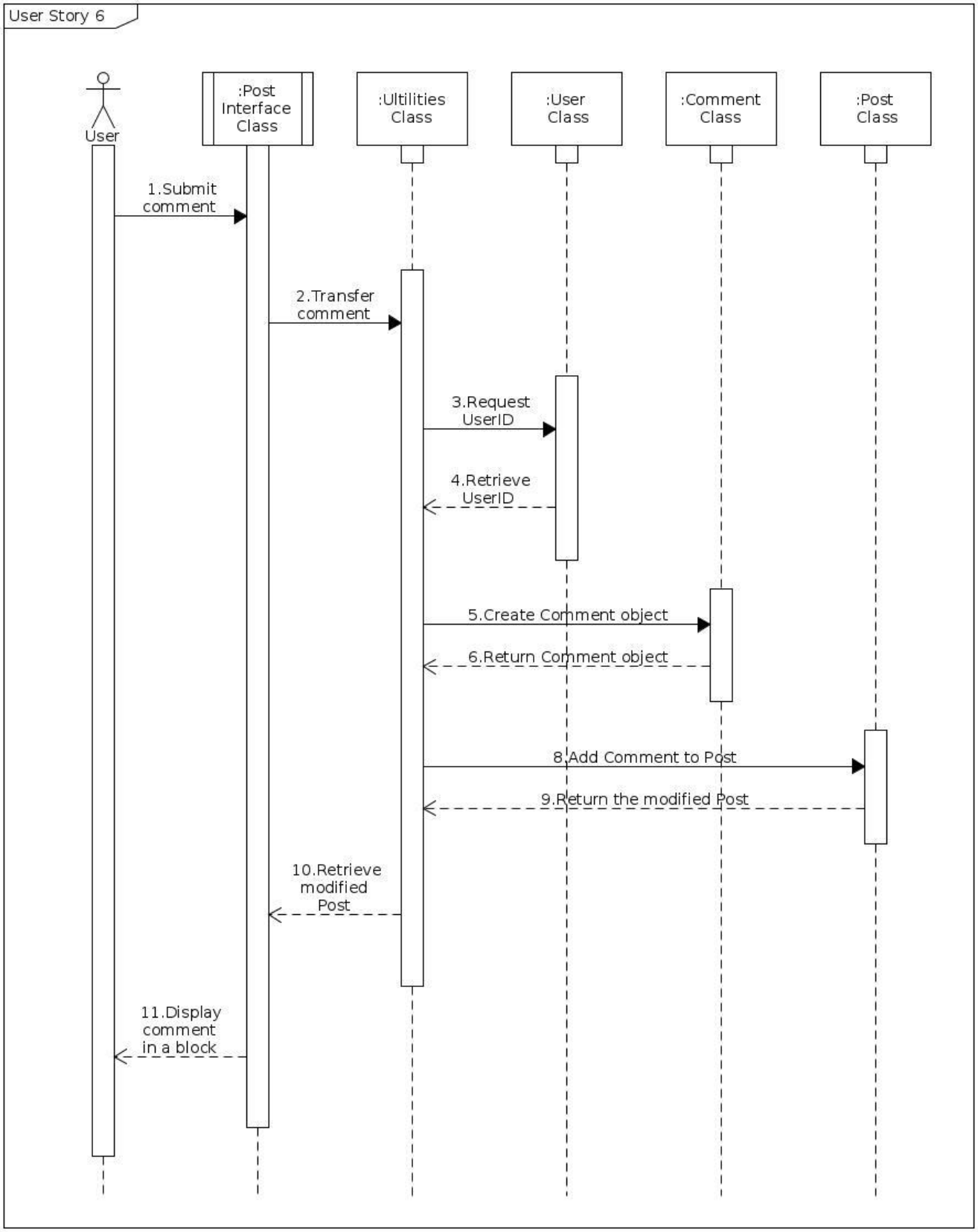
4.4 Create new post sequence diagram



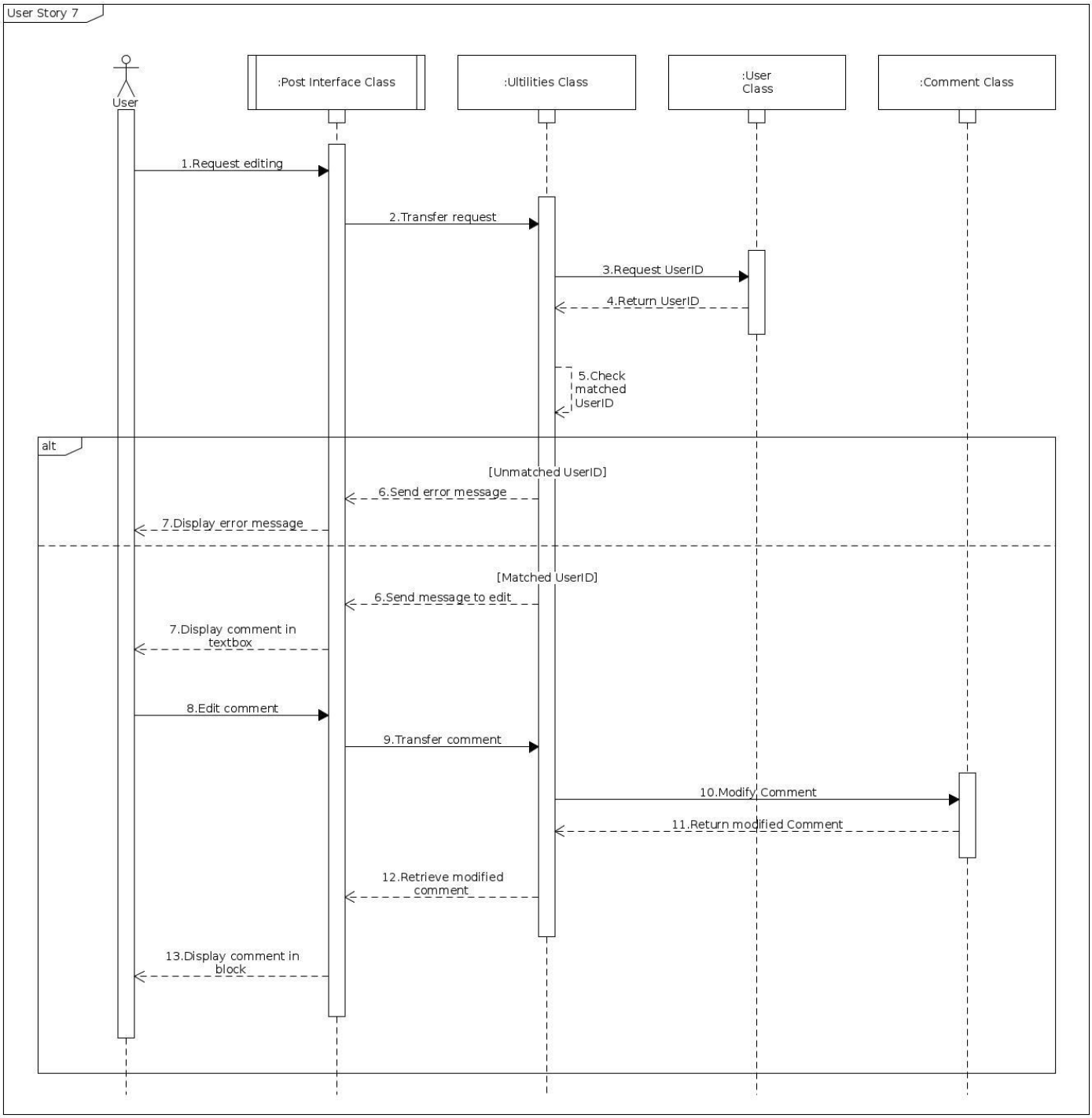
4.5 Edit post sequence diagram



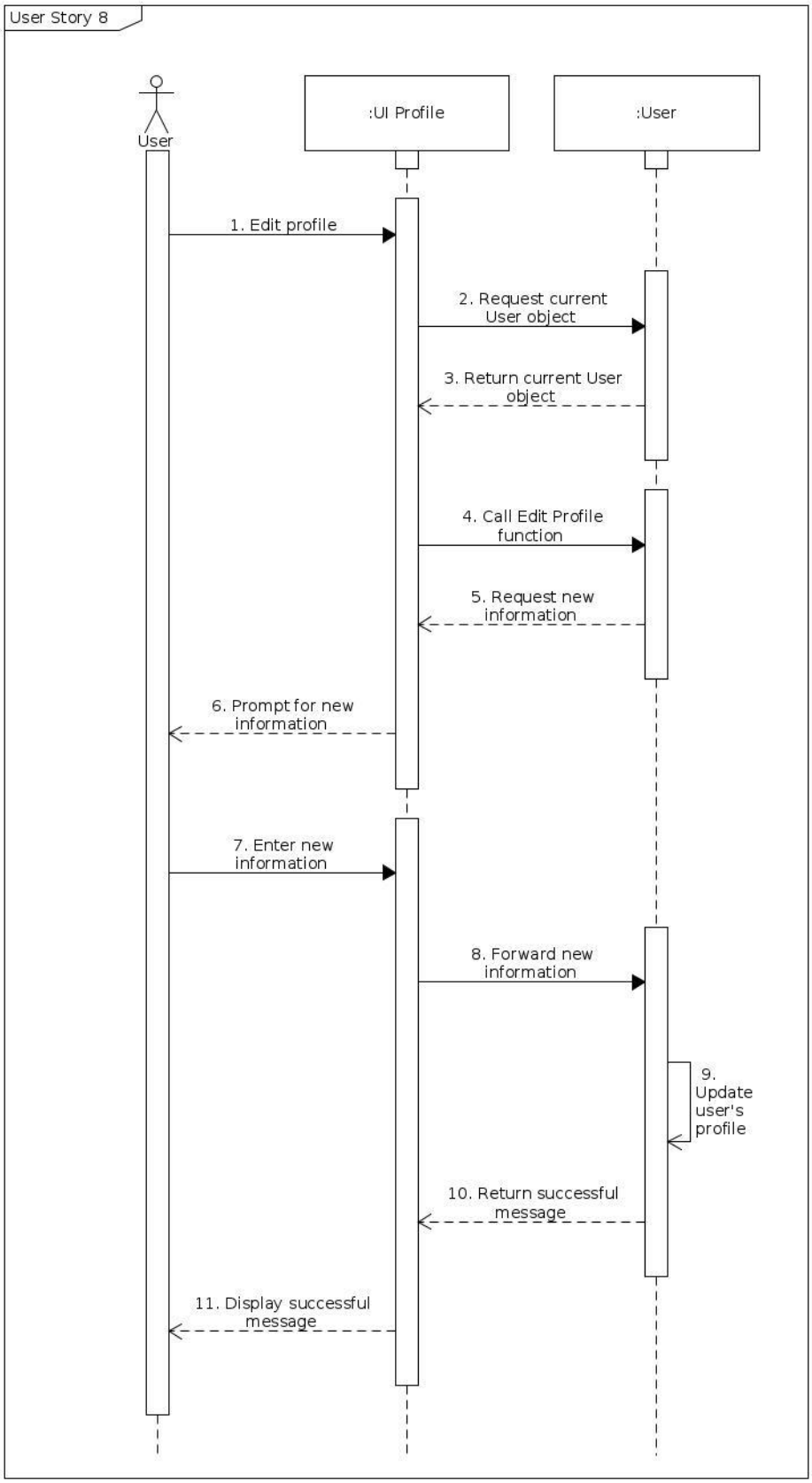
4.6 Post new comment sequence diagram



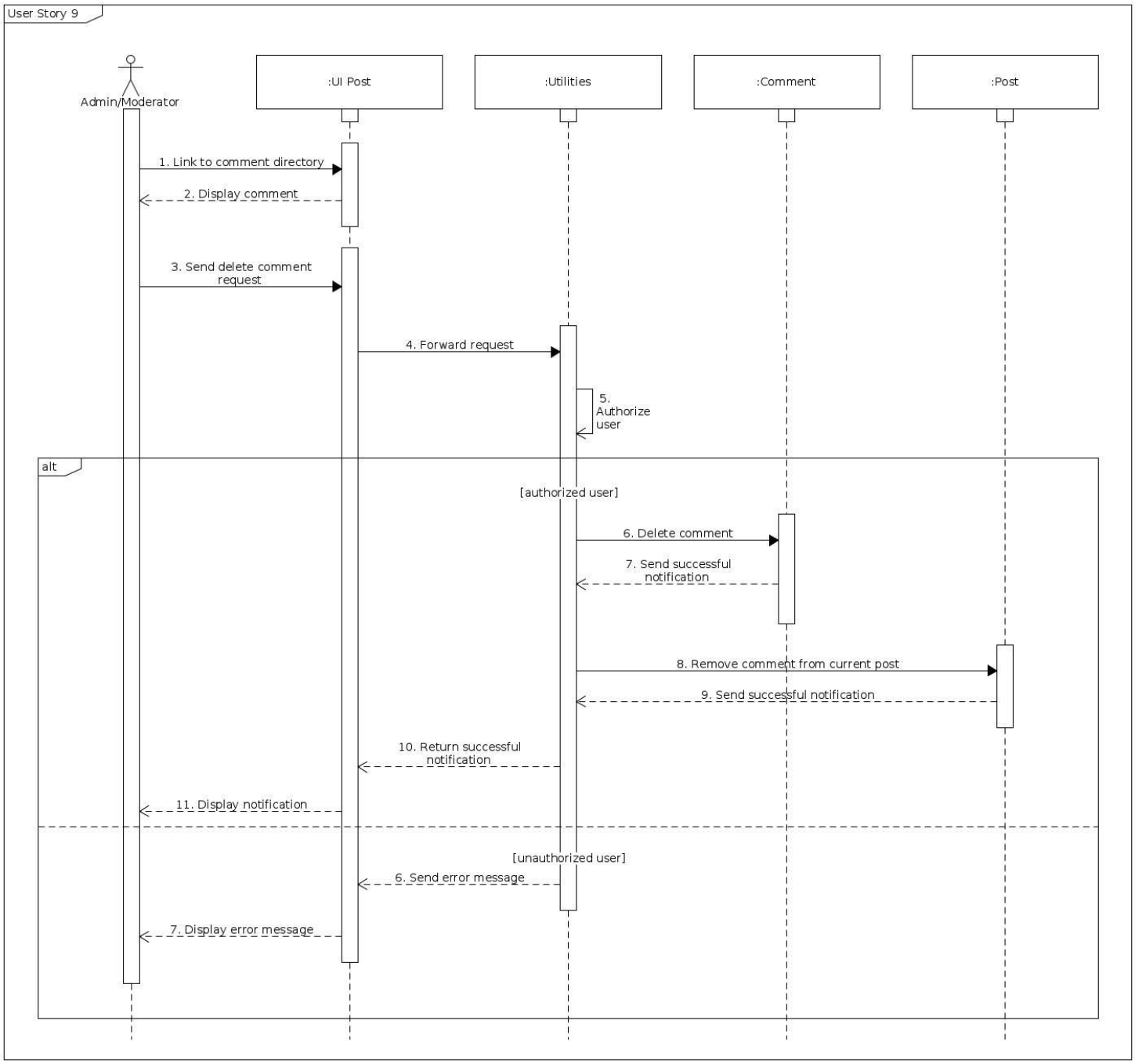
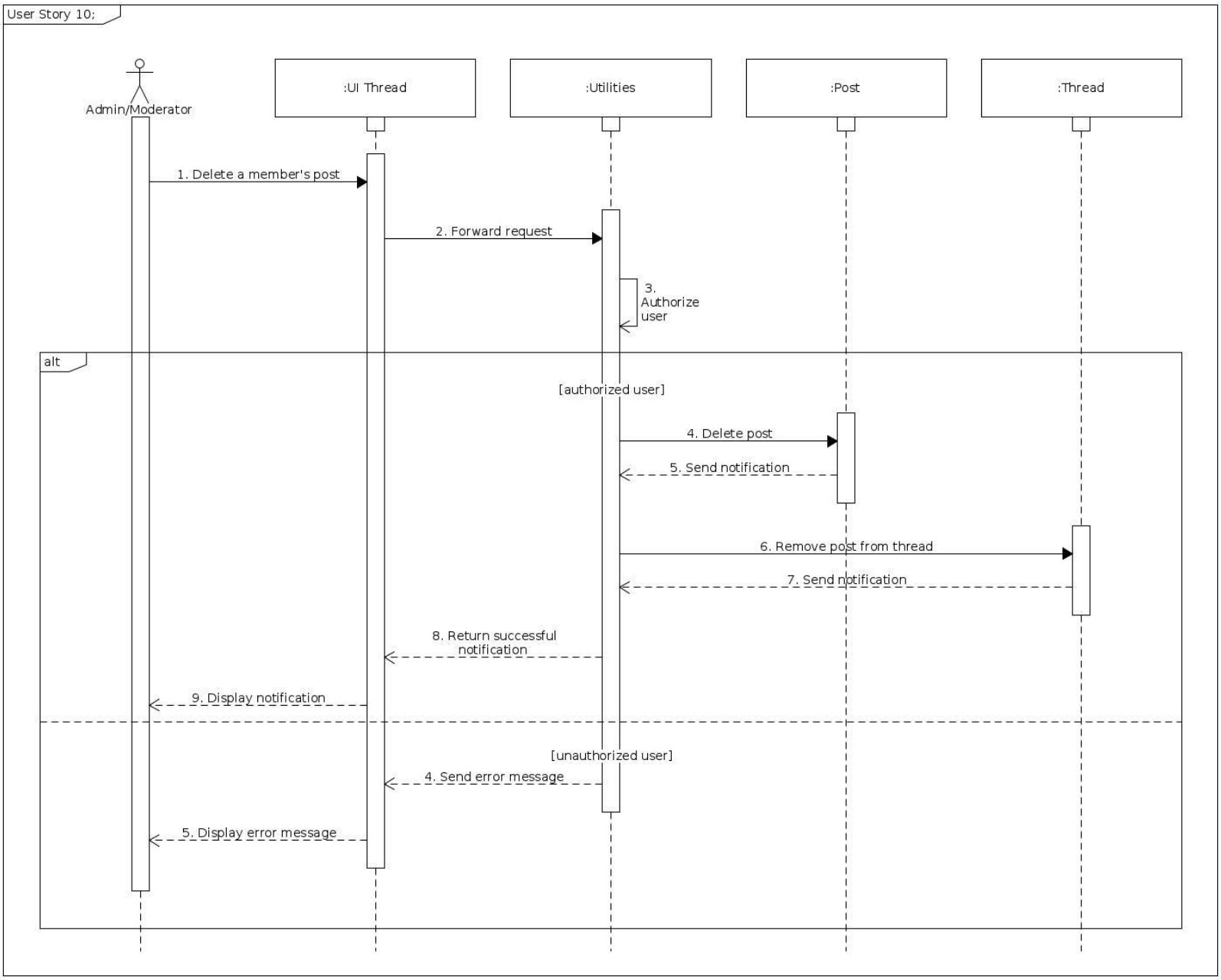
4.7 Edit comment sequence diagram



4.8 Edit profile sequence diagram



4.9 Delete members' comments sequence diagram



4.10 Delete members' posts sequence diagram