



Dhirubhai Ambani University Technology

Formerly DA-IICT

ConnectSphere Sprint Technical Design Document

IT314 - Software Engineering

Group - 27

November 29, 2025

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1 Sprint 1: User Authentication, Profile Management & Basic Social Features

Sprint Goal: Establish the core user identity system and enable basic interaction through profiles, privacy settings, and initial posting.

1.1 Authentication & User Identity

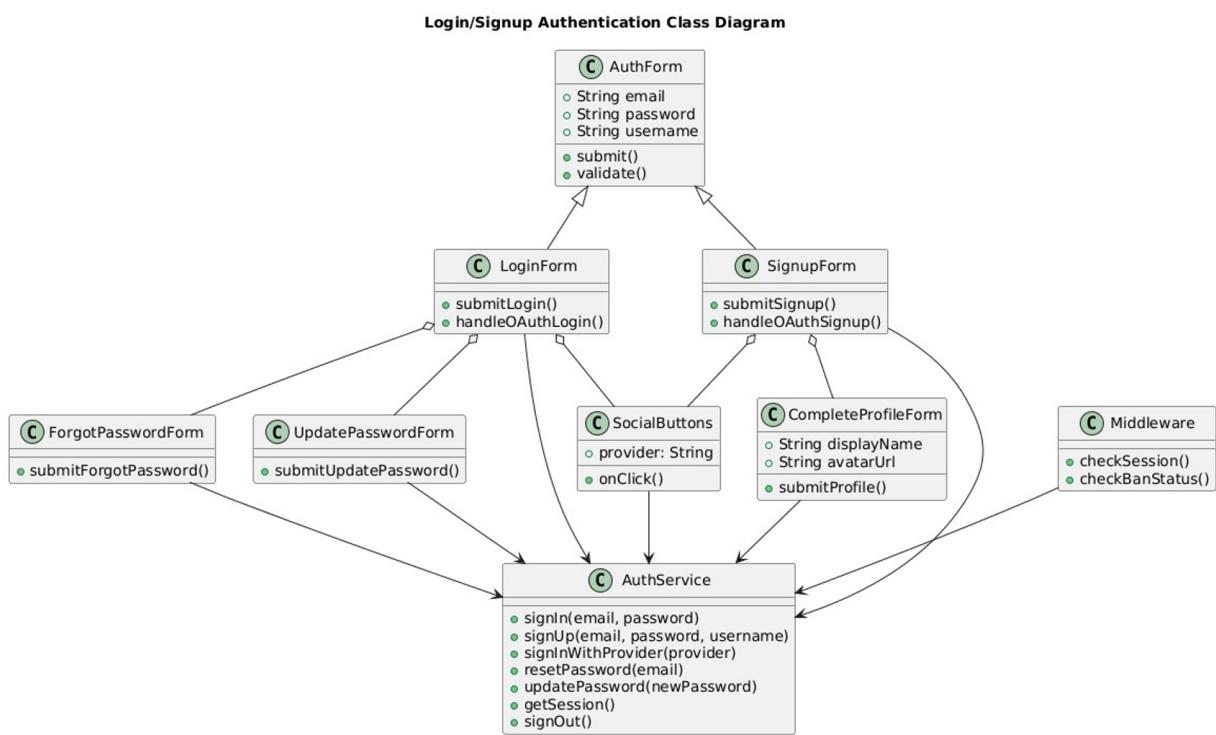


Figure 1: Login/Signup Class Diagram

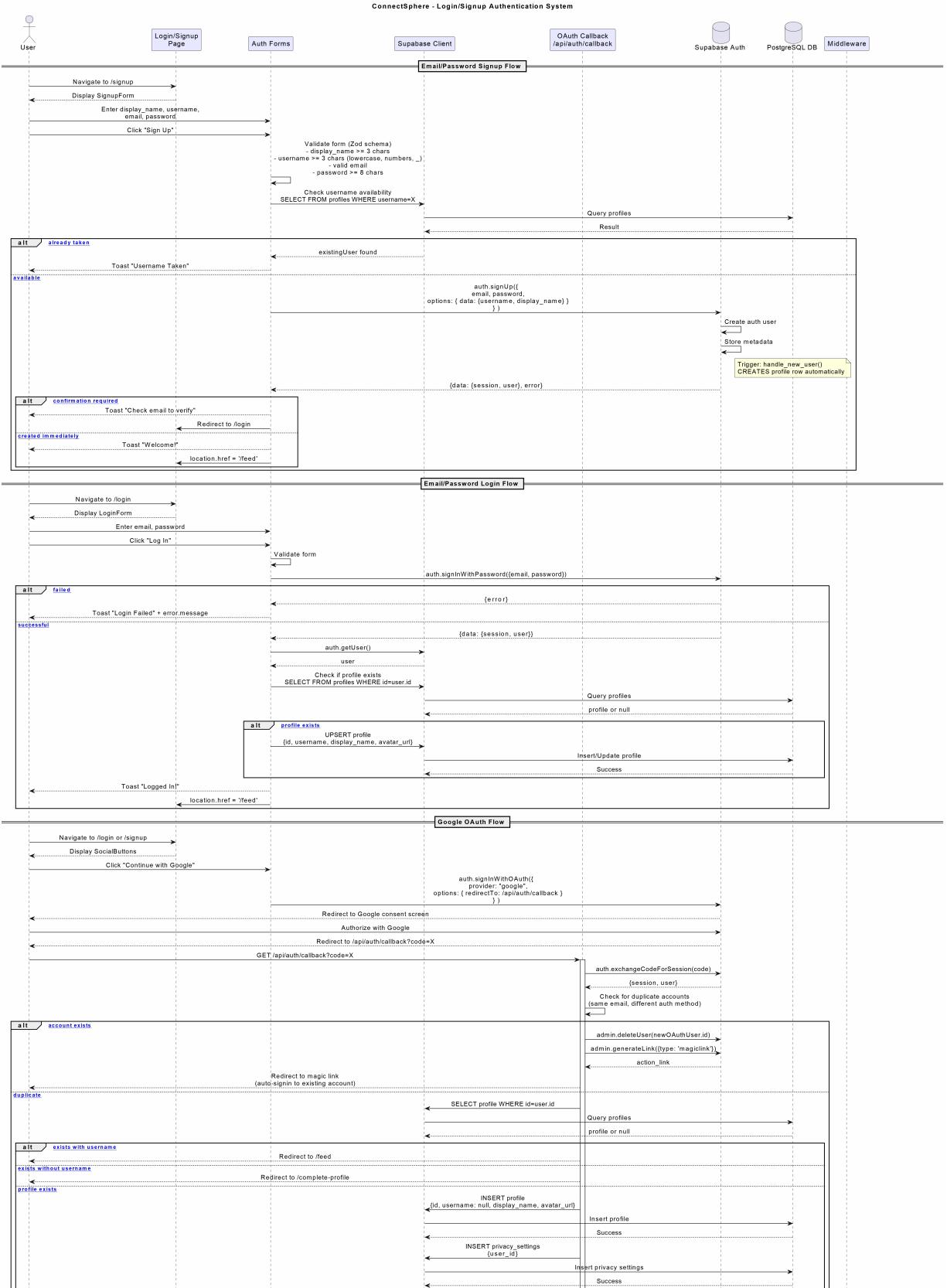


Figure 2: Login & Signup Sequence Diagram (Part 1)

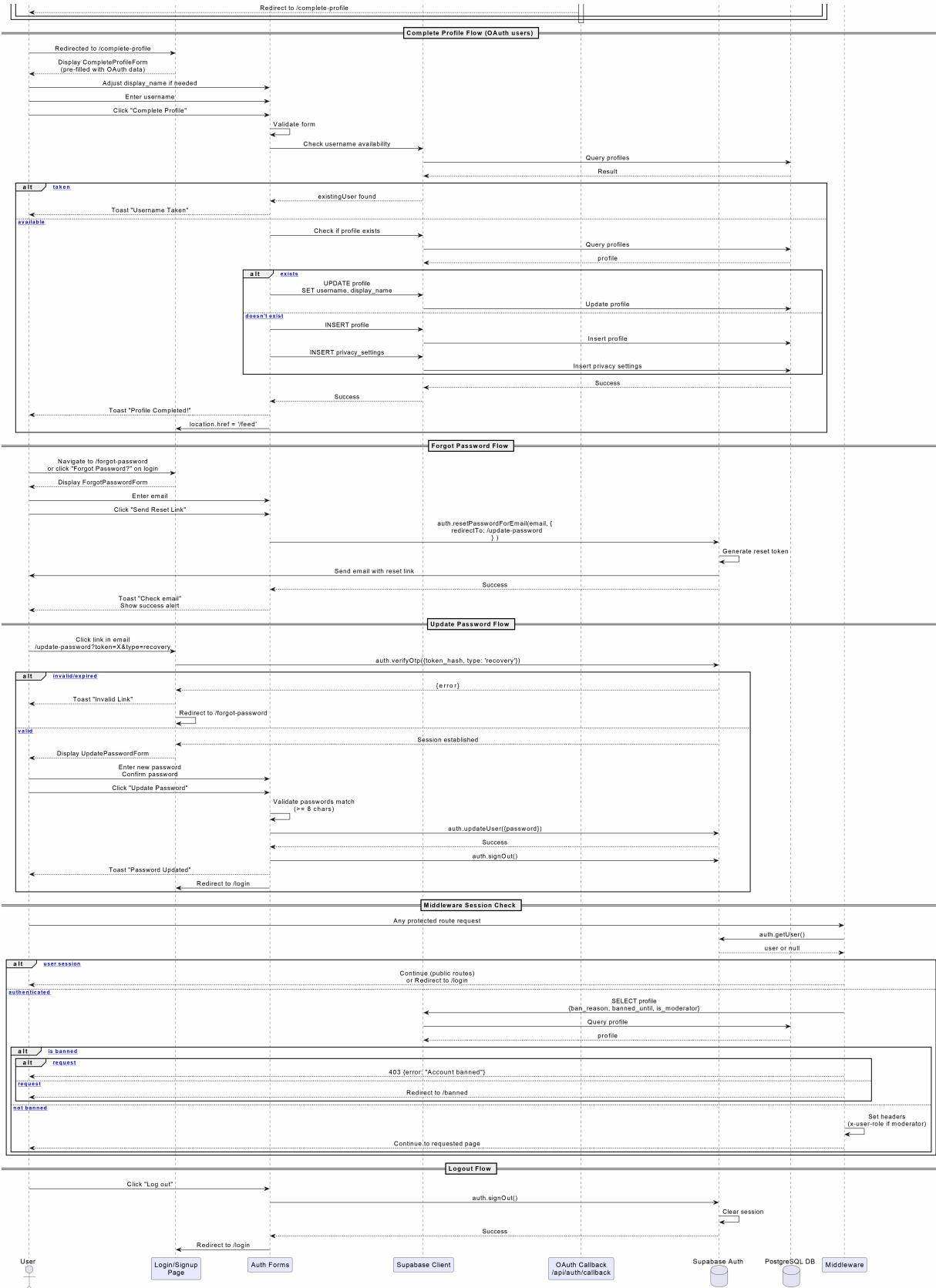


Figure 3: Login & Signup Sequence Diagram (Part 2)

1.2 Profile Management & Privacy settings

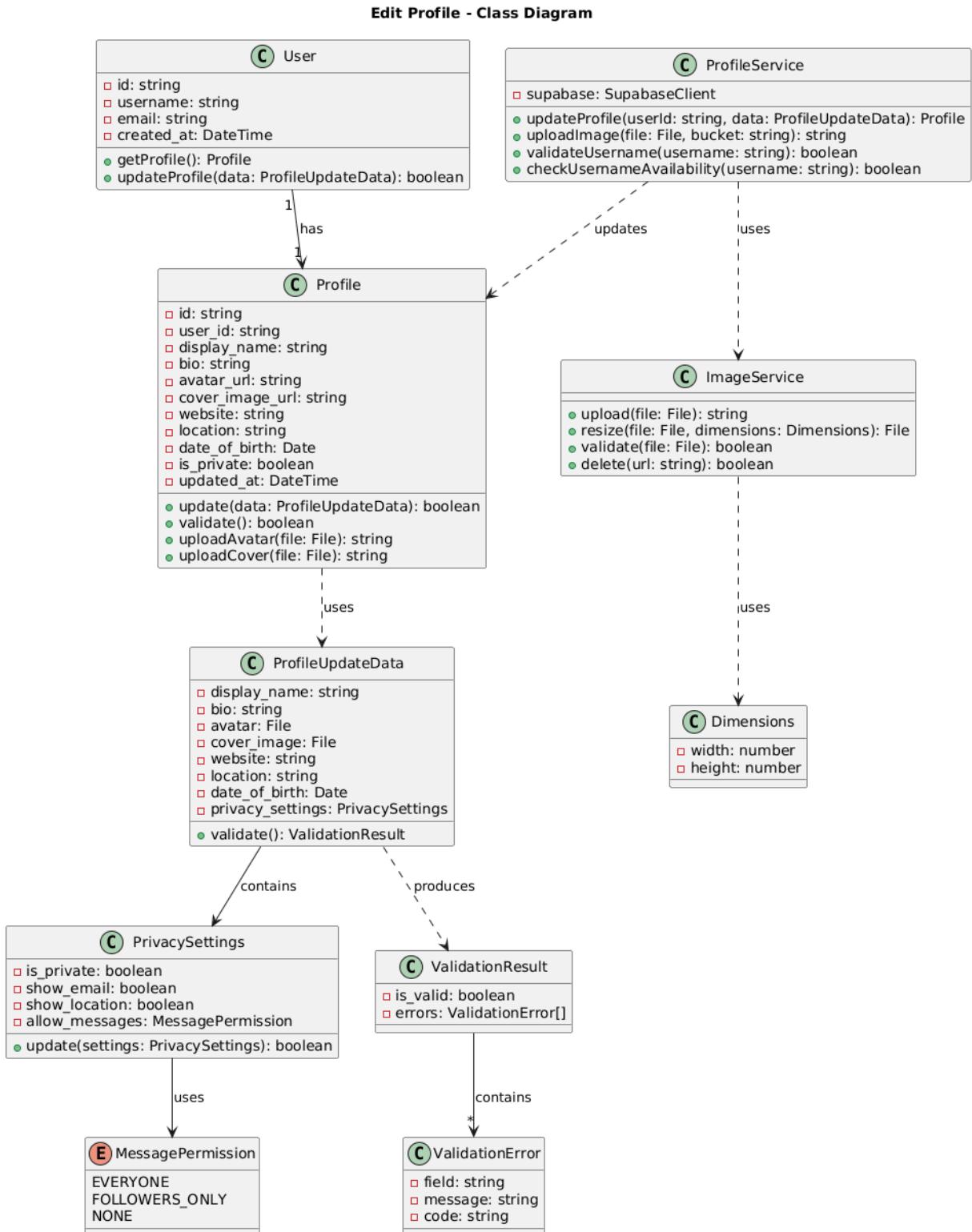


Figure 4: Edit Profile Class Diagram

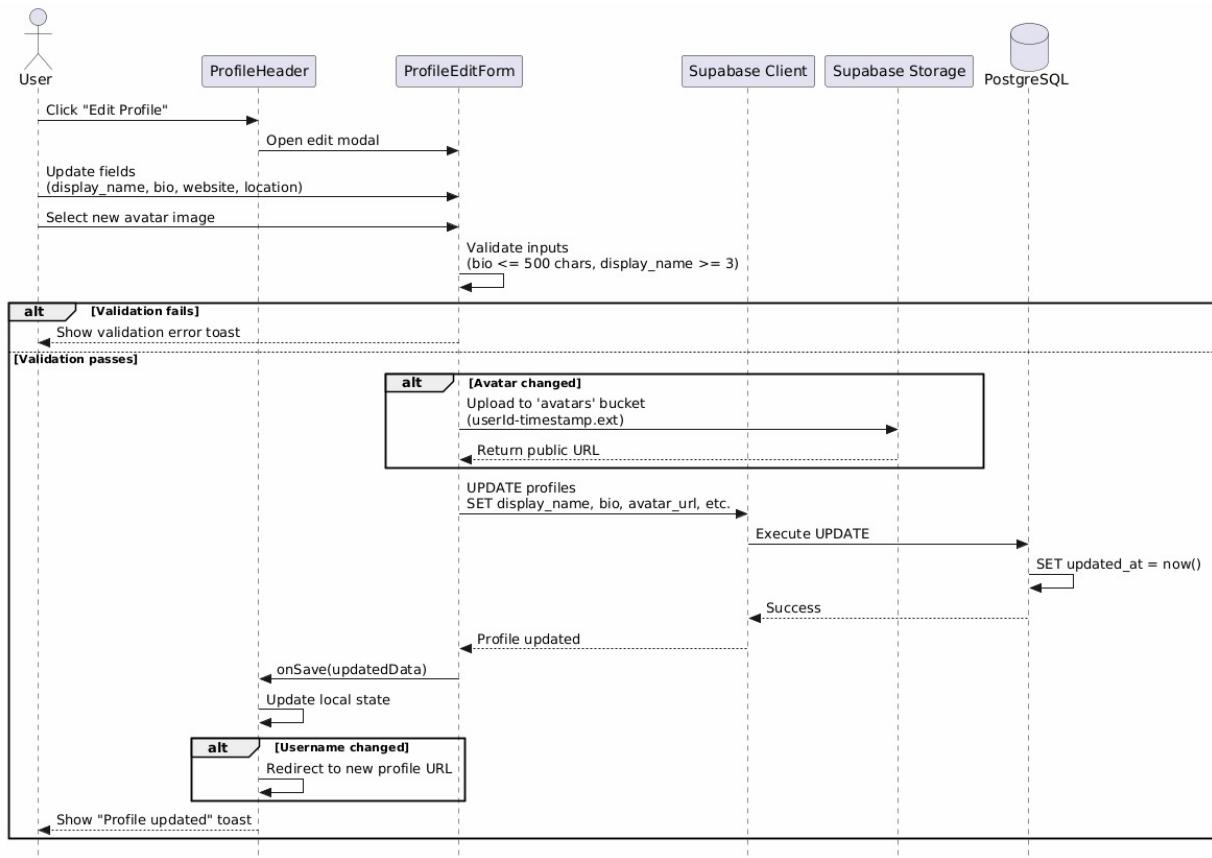


Figure 5: Edit Profile Sequence Diagram

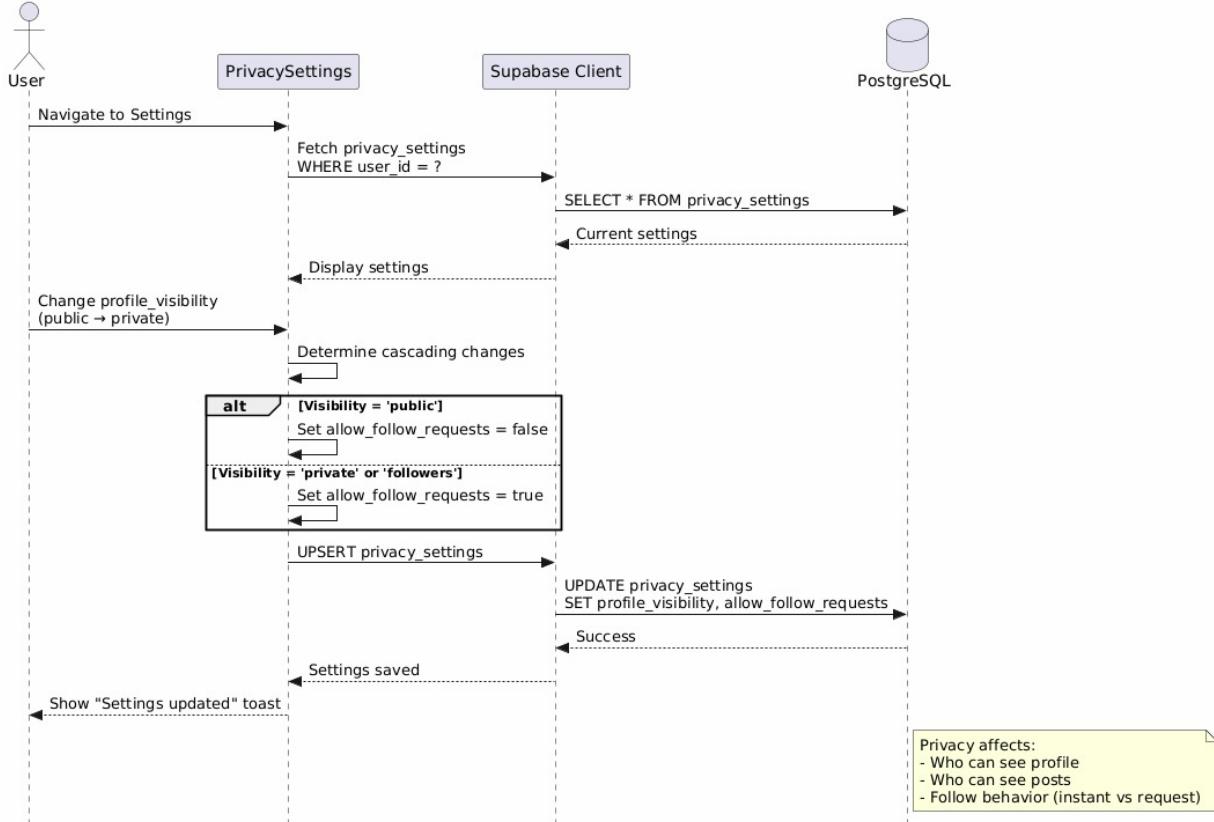


Figure 6: Privacy Settings & Visibility Flow

1.3 Social Graph (Follow/Unfollow)

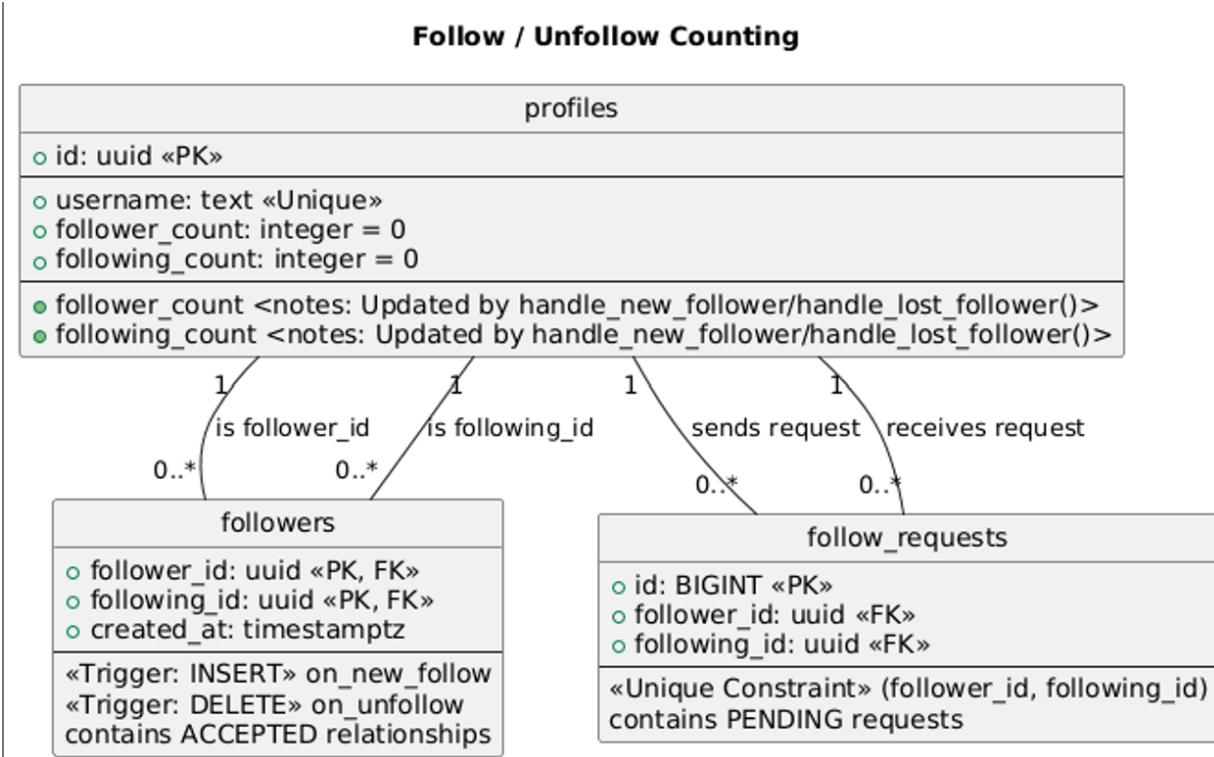


Figure 7: Follow/Unfollow Class Diagram

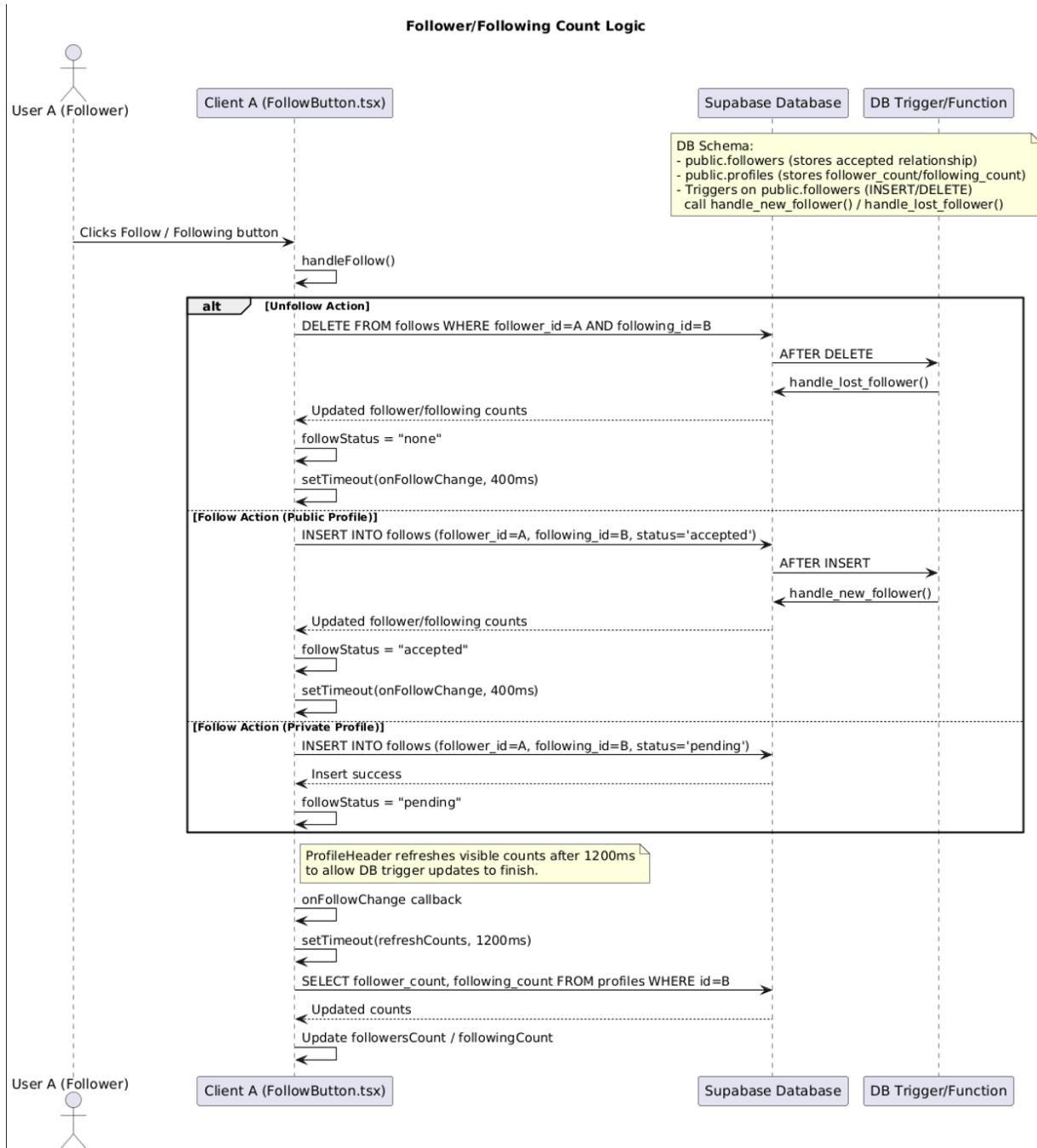


Figure 8: Follow/Unfollow Logic Sequence

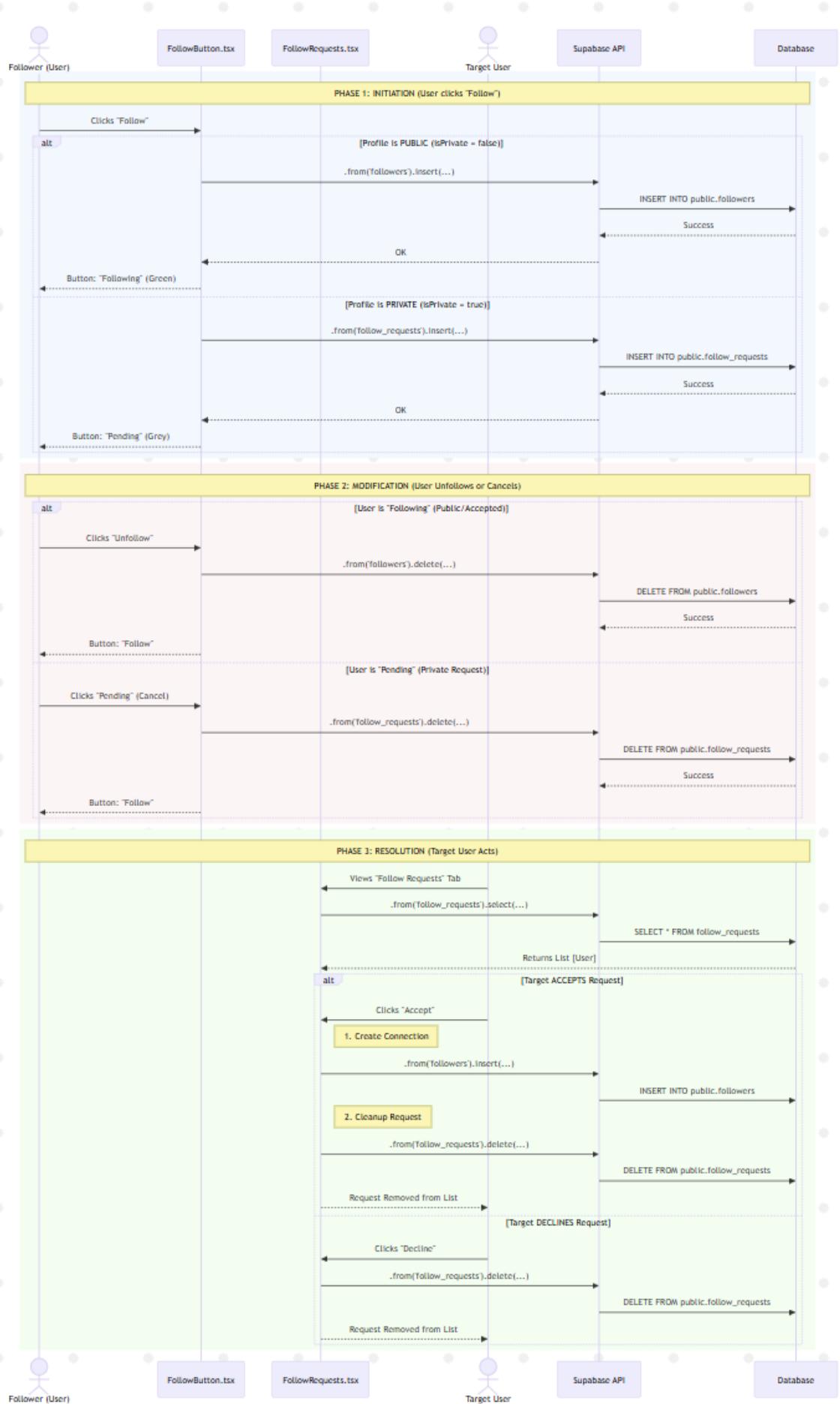


Figure 9: Follow Requests & Private Profiles Sequence ⁹

Create Post - Class Diagram

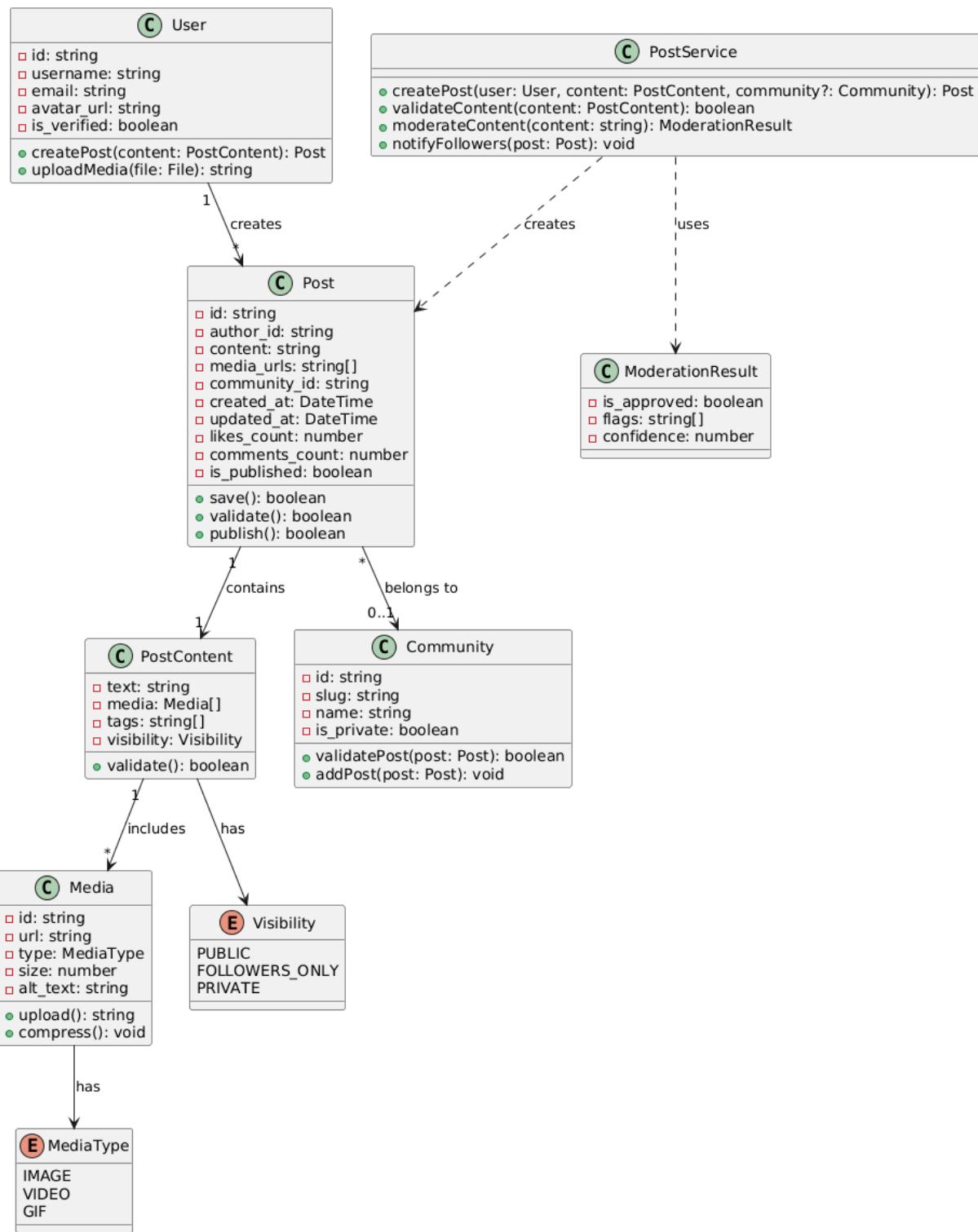


Figure 10: Create Post Class Diagram

1.4 Content Creation (Core)

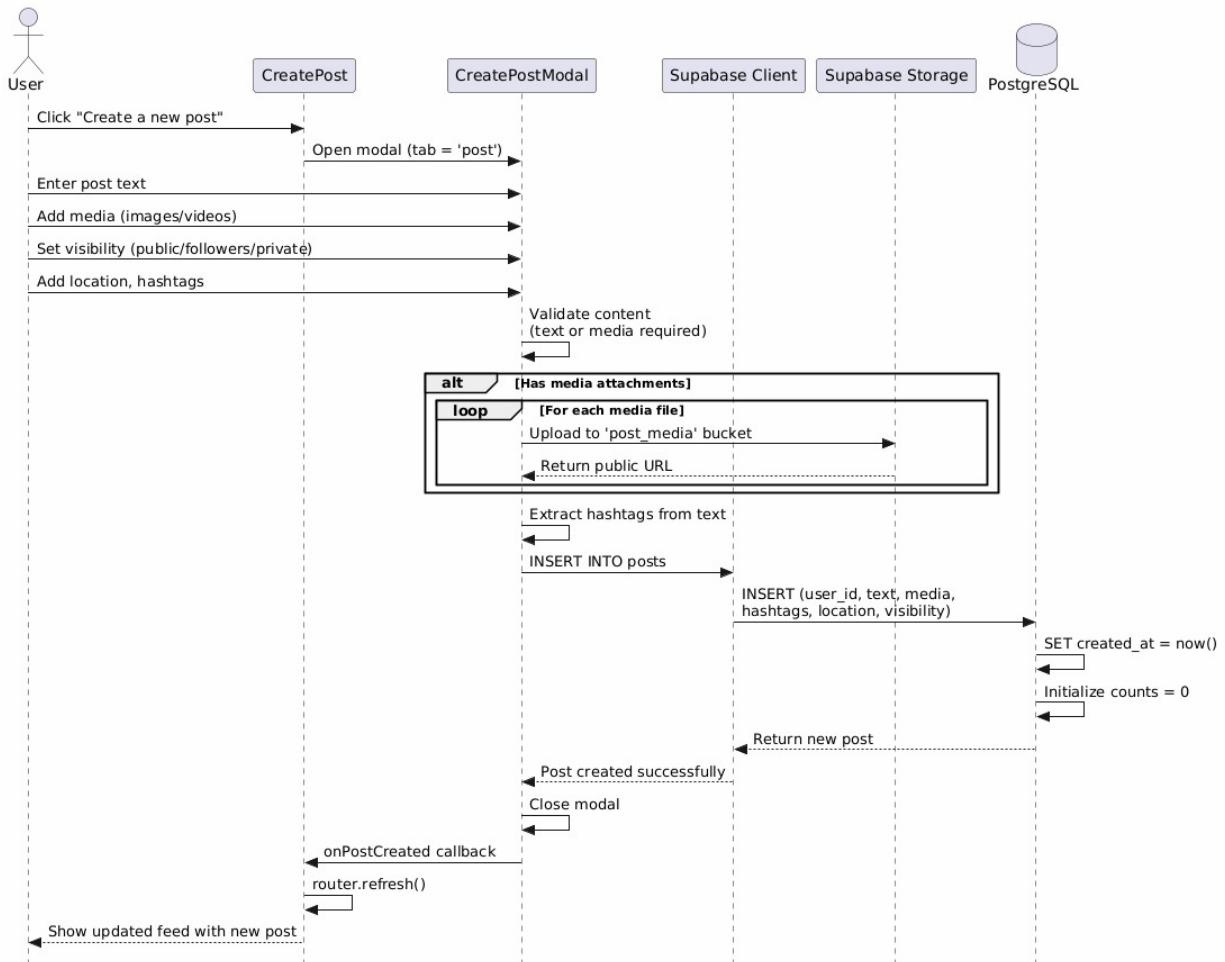


Figure 11: Create New Post Sequence Diagram

2 Sprint 2: Feed, Engagement & Notifications MVP

Sprint Goal: Deliver a dynamic content consumption experience with full engagement features and basic notifications.

2.1 Home Feed & Suggestions

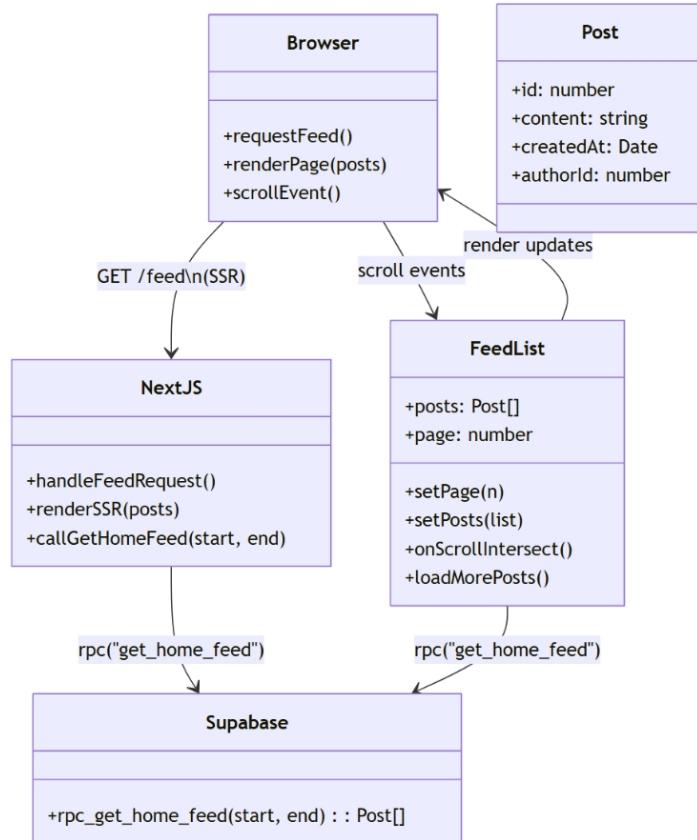


Figure 12: Feed Architecture Class Diagram

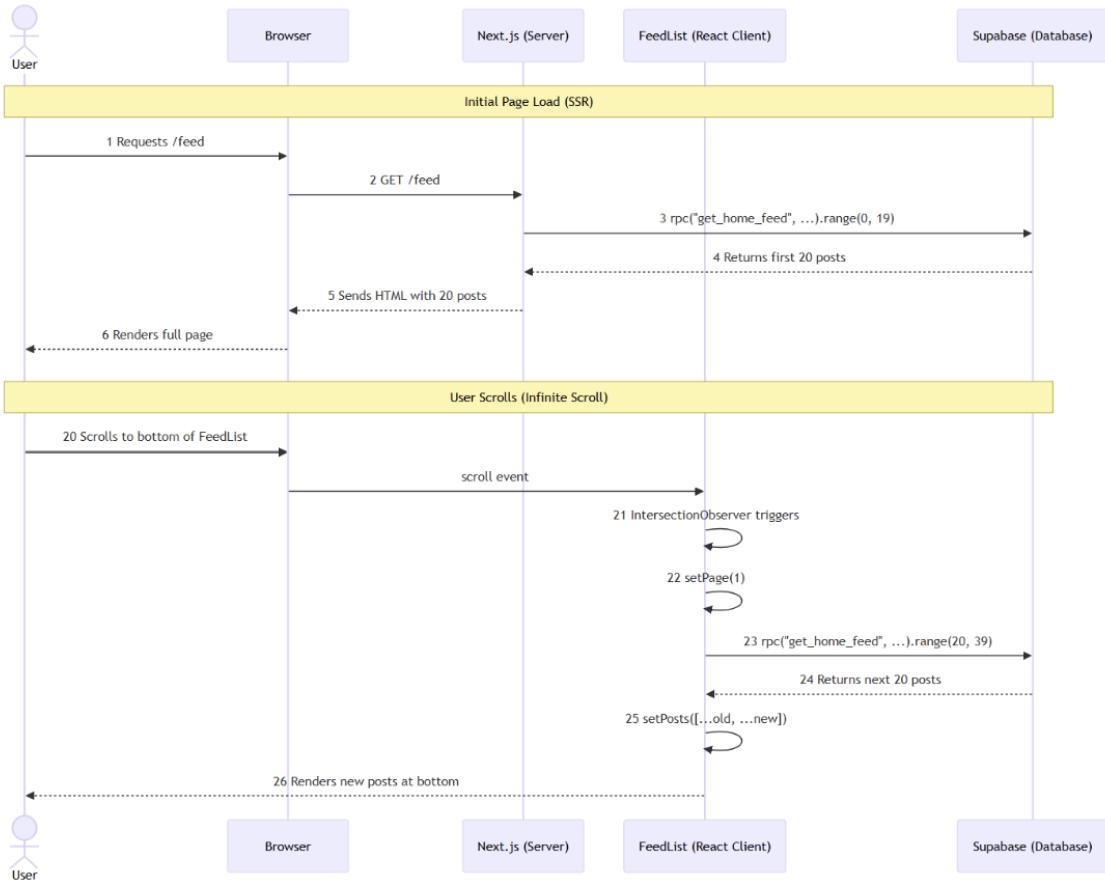


Figure 13: Feed Loading & Infinite Scroll Sequence

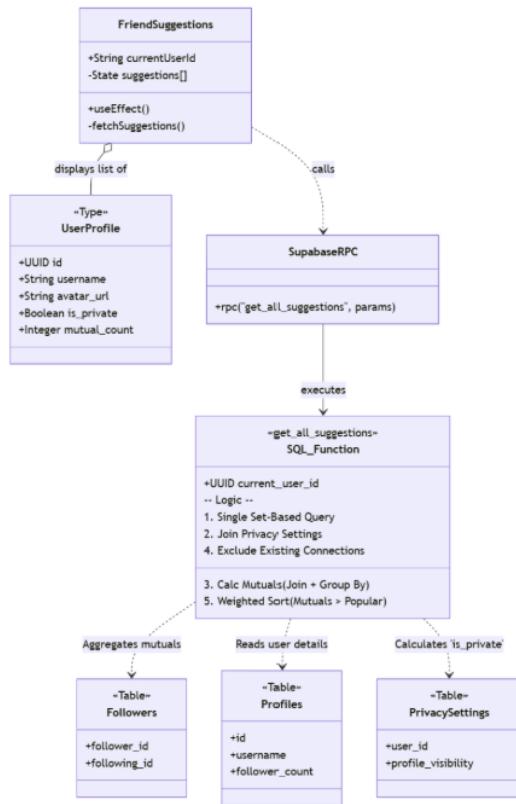


Figure 14: Friend Suggestions Class Diagram

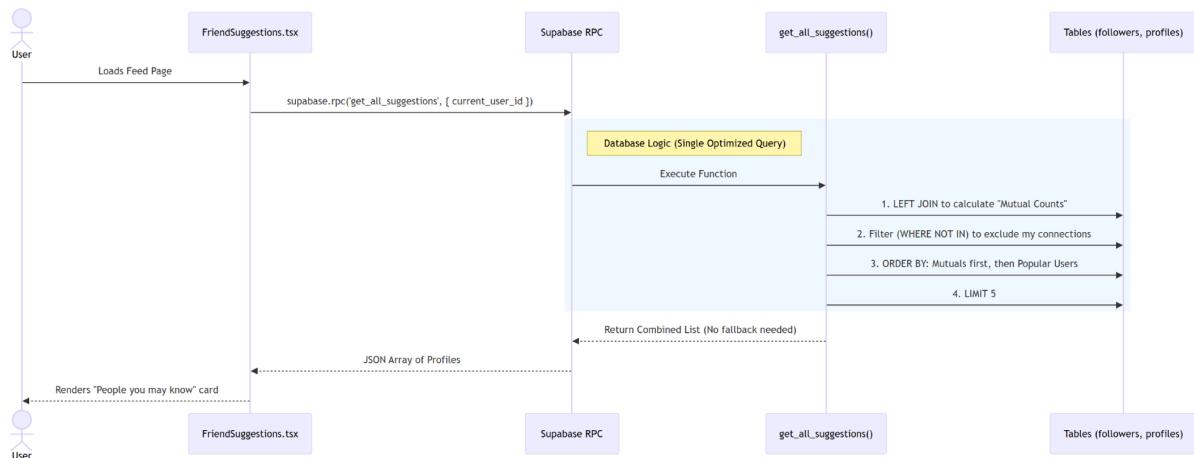


Figure 15: Friend Suggestions Sequence Diagram

2.2 Mutual Connections

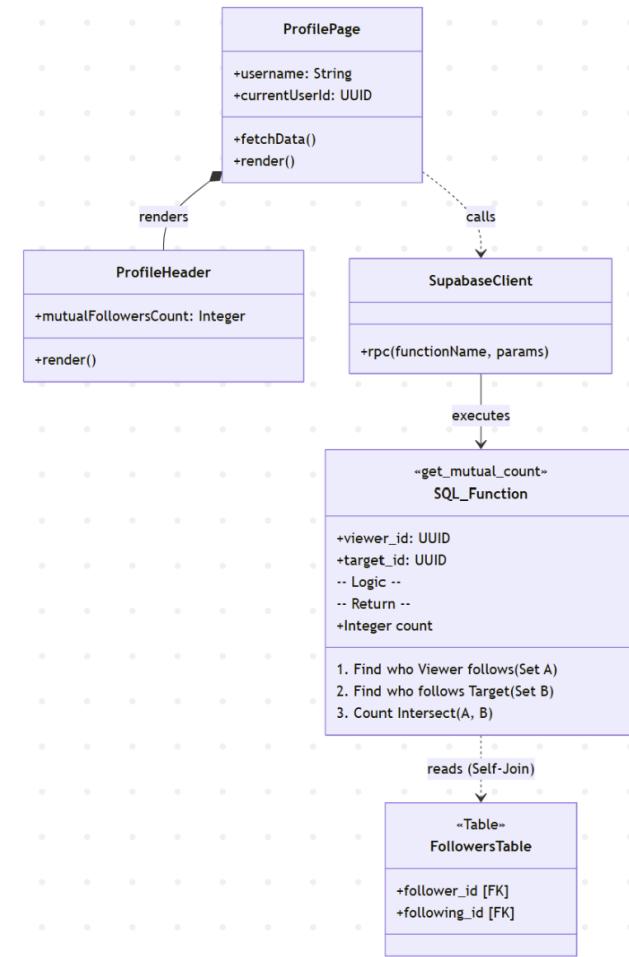


Figure 16: Mutual Connections Class Diagram

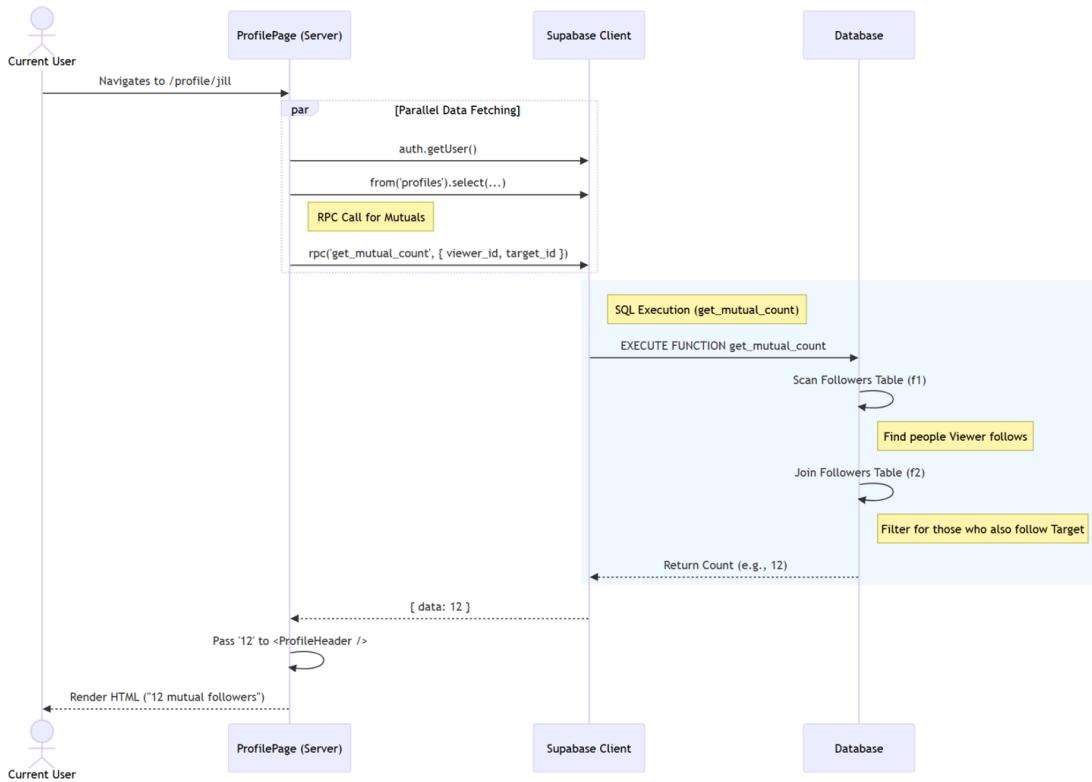


Figure 17: Mutual Connections Data Fetching

2.3 Engagement (Likes, Comments, Bookmarks)

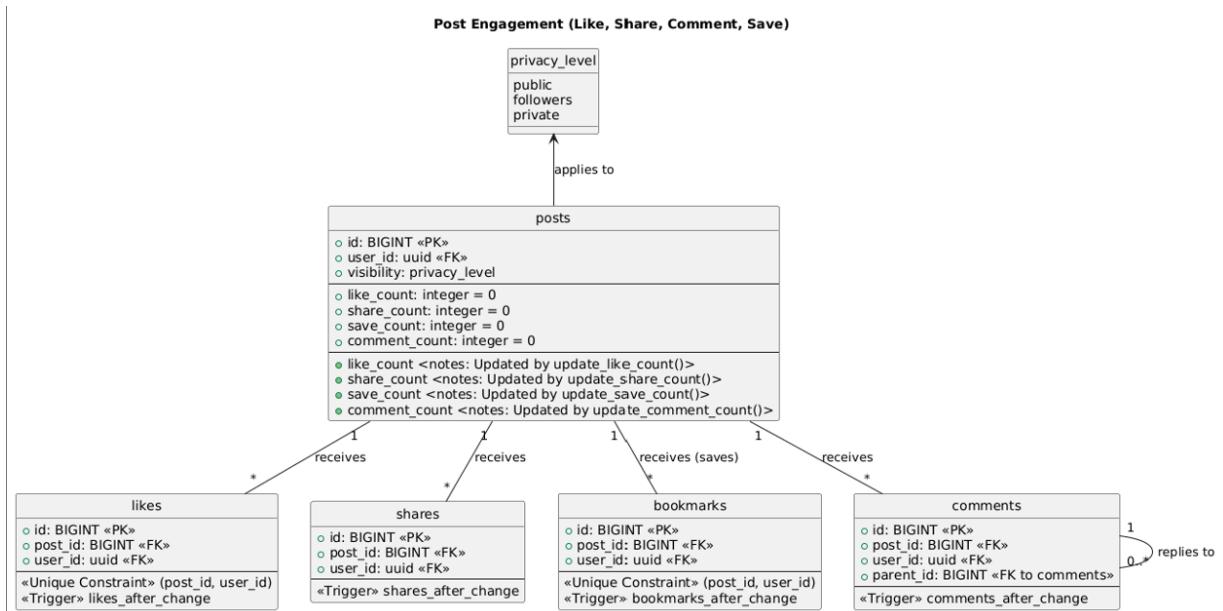


Figure 18: Post Engagement Entities

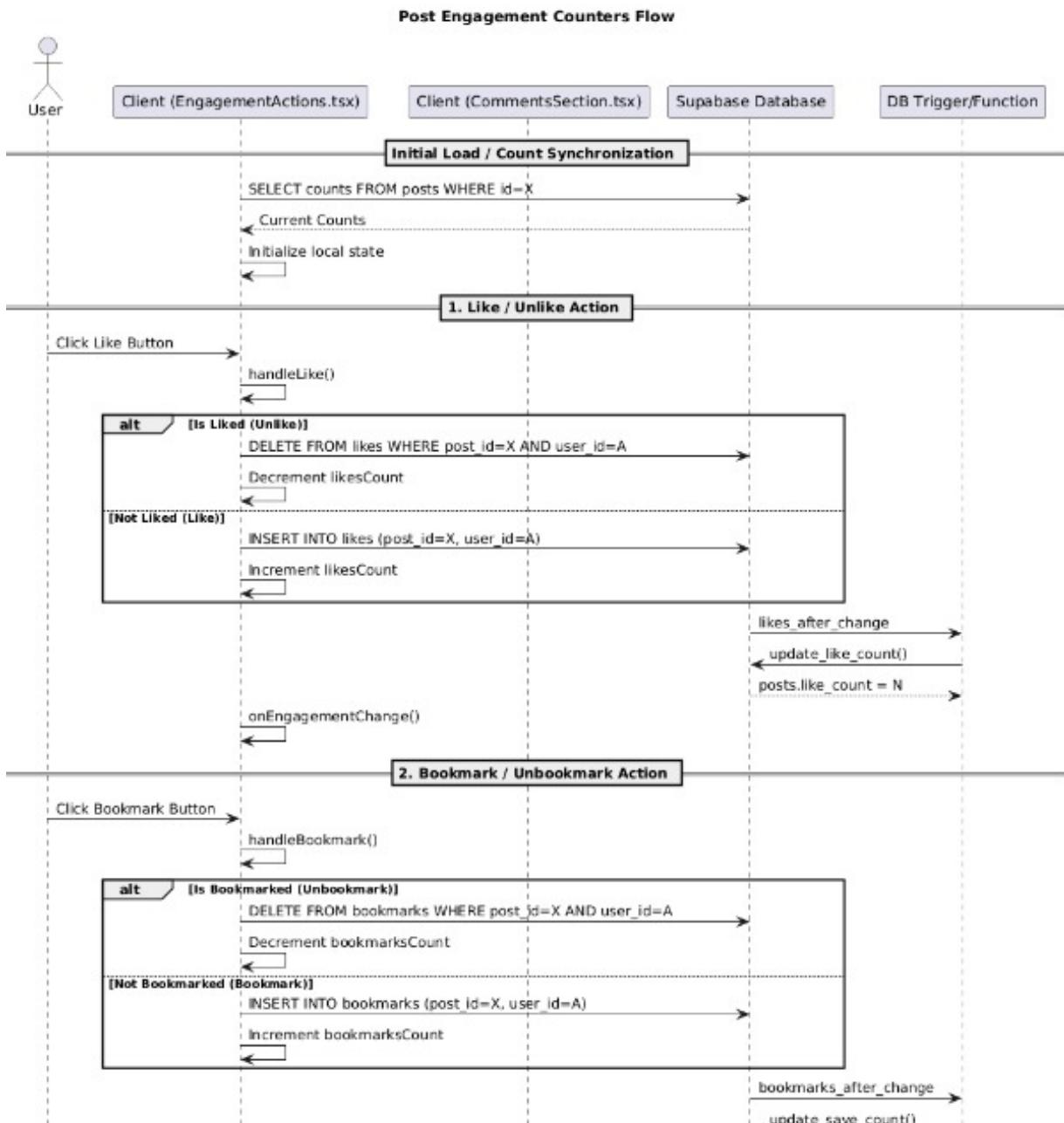


Figure 19: Post Engagement Counters Flow (Part 1)

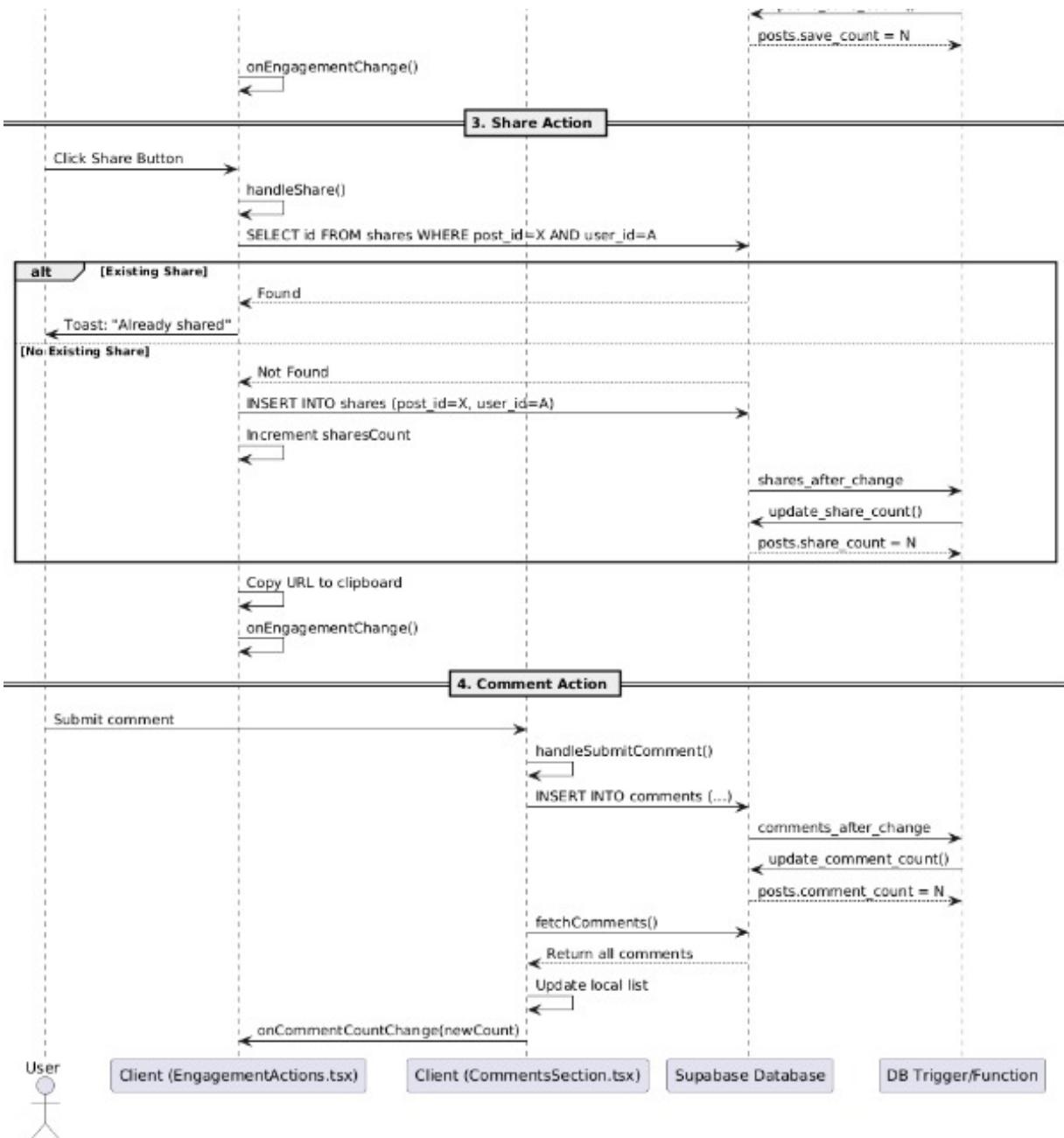


Figure 20: Post Engagement Counters Flow (Part 2)

2.4 Notifications & Post Management

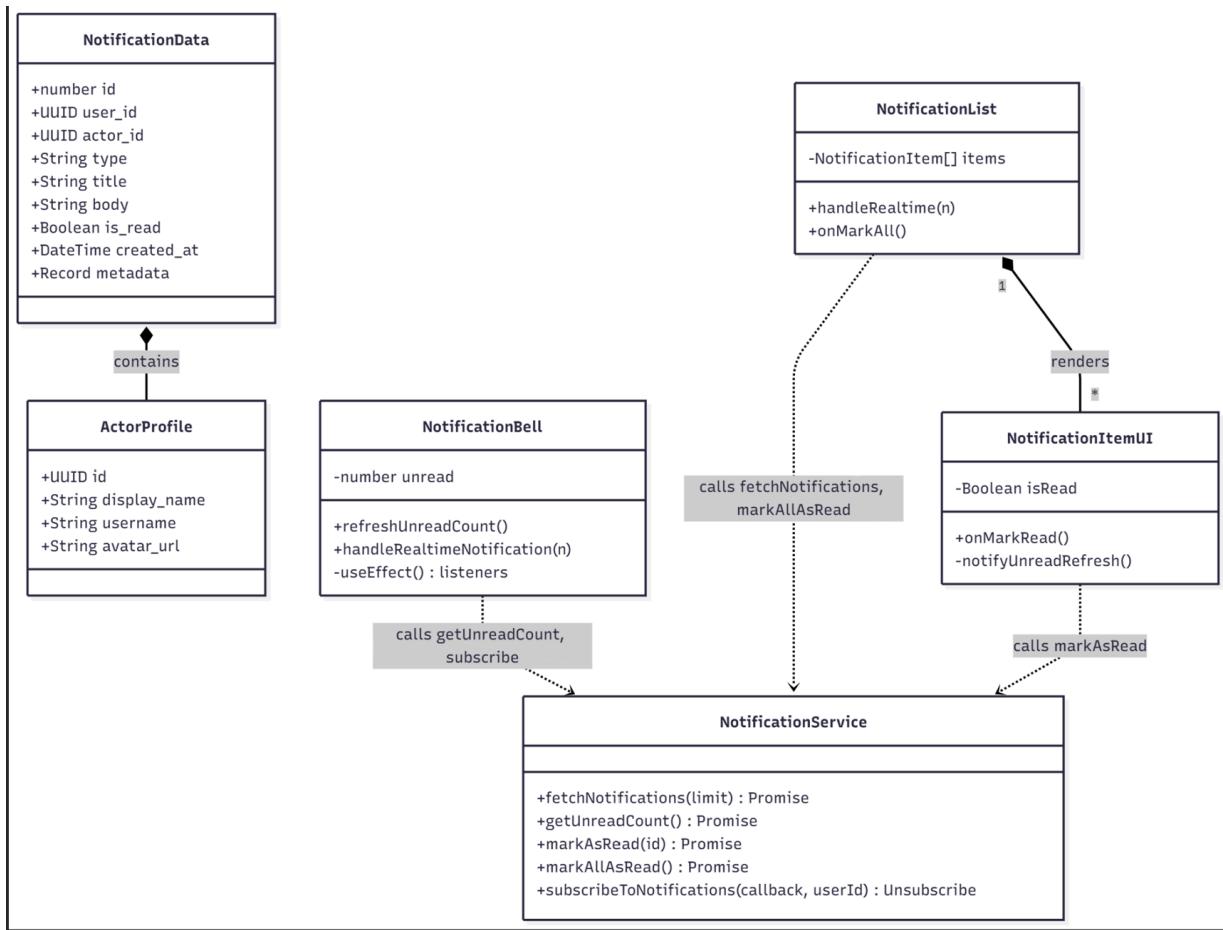


Figure 21: Notification System Class Diagram

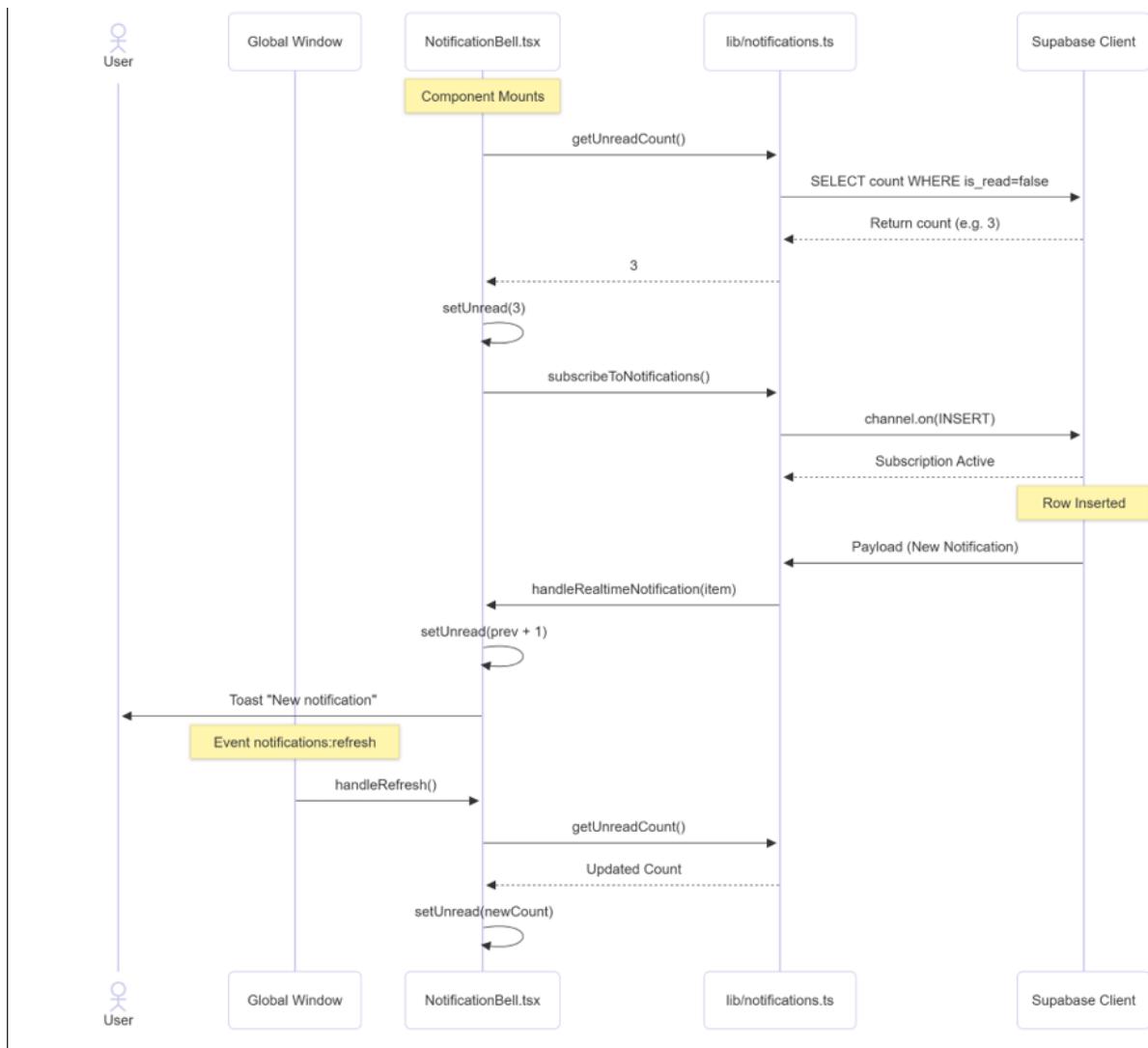


Figure 22: Real-time Notification Sequence

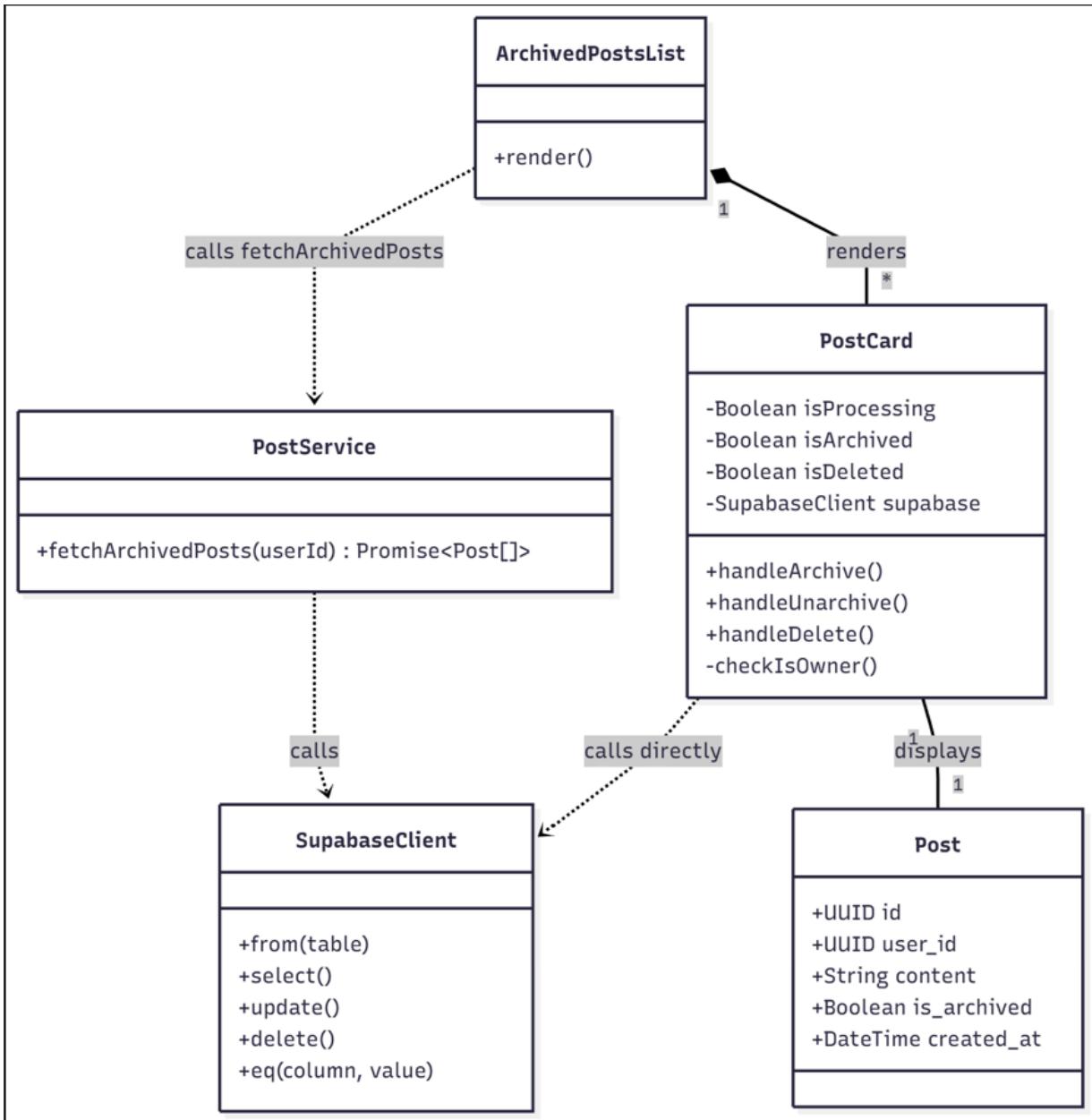


Figure 23: Post Archive/Delete Class Diagram

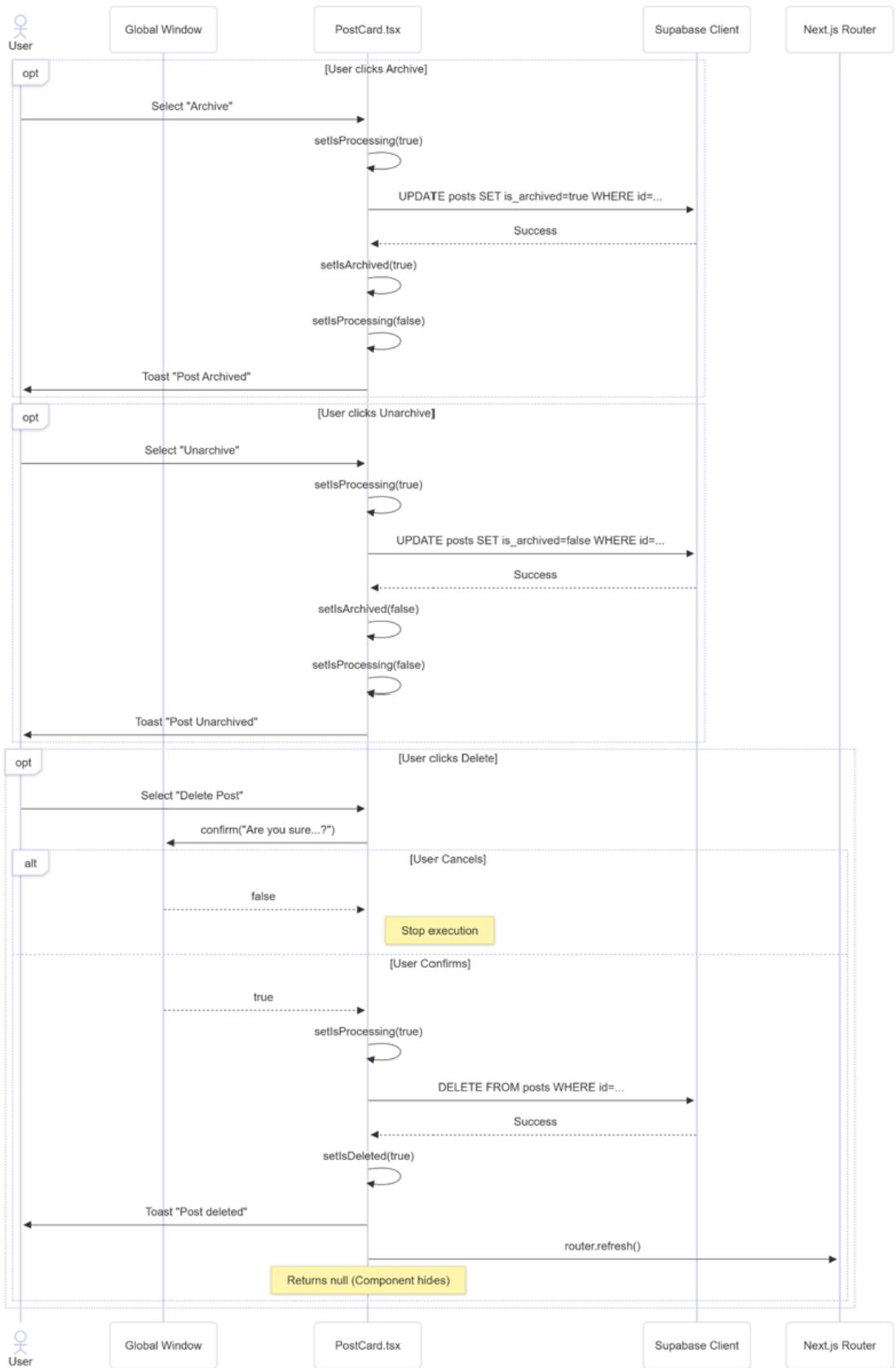


Figure 24: Archive & Delete Flow Sequence

3 Sprint 3: Paid Communities, Stories & Content Collaboration

Sprint Goal: Enable community-based interactions, story-sharing, and multi-user content workflows.

3.1 Paid Communities

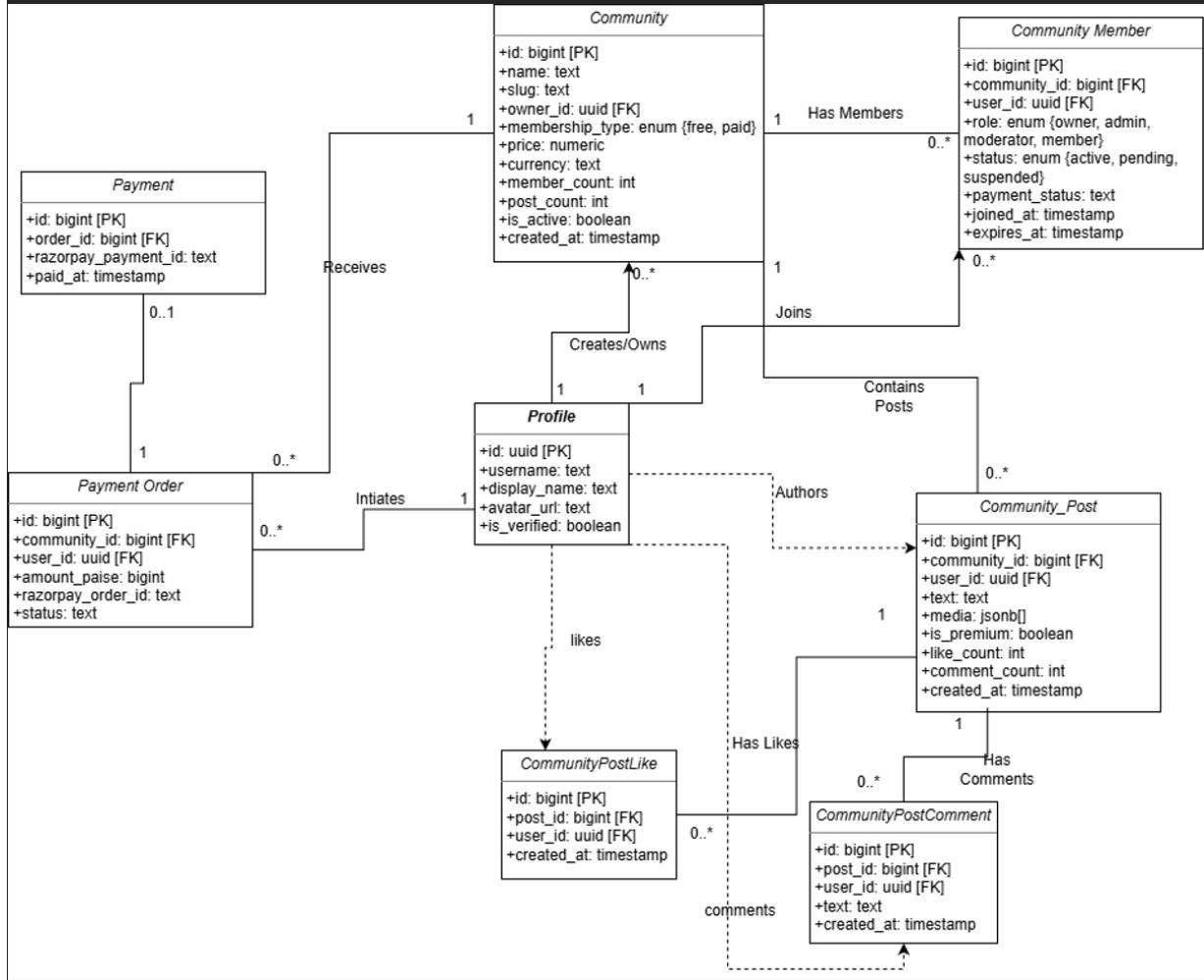


Figure 25: Community Class Diagram

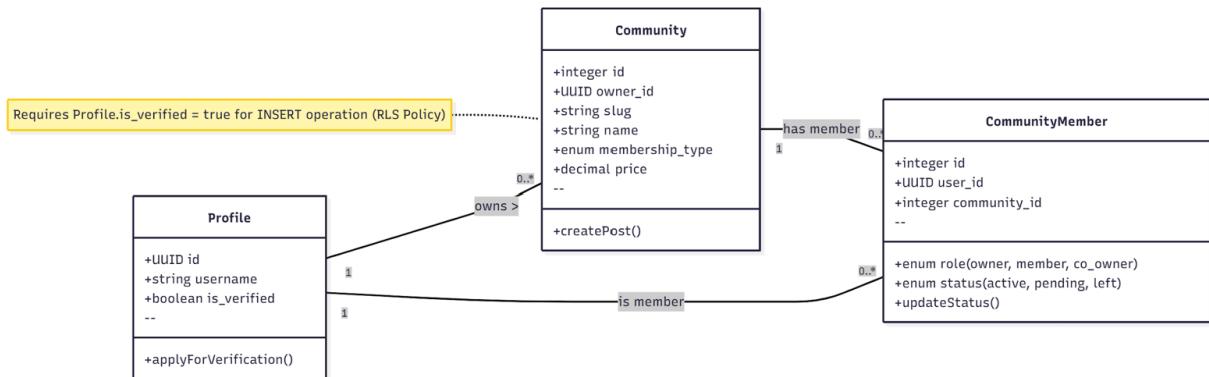


Figure 26: Community Creation & Verification Check

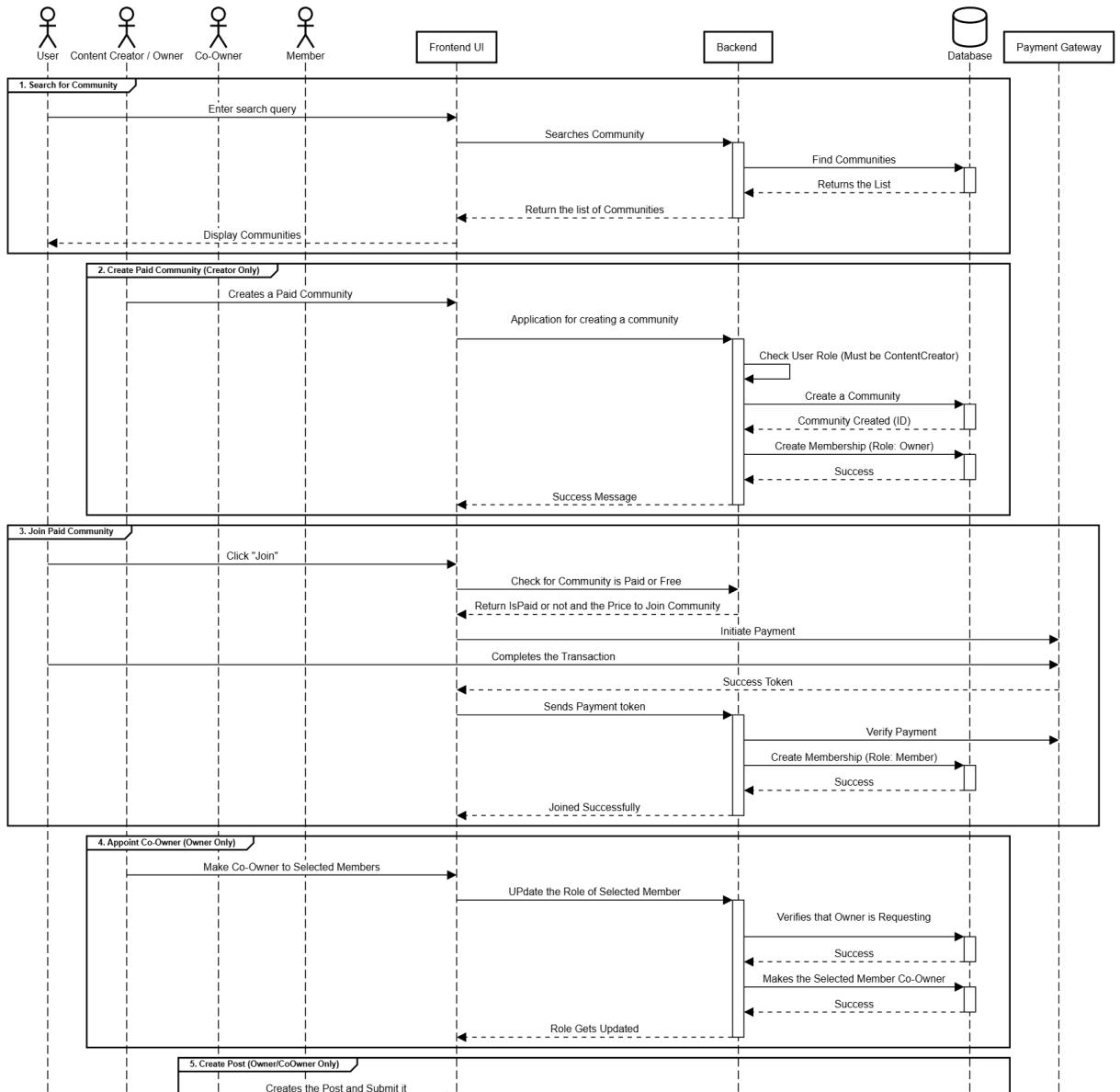


Figure 27: Community Workflows (Part 1)

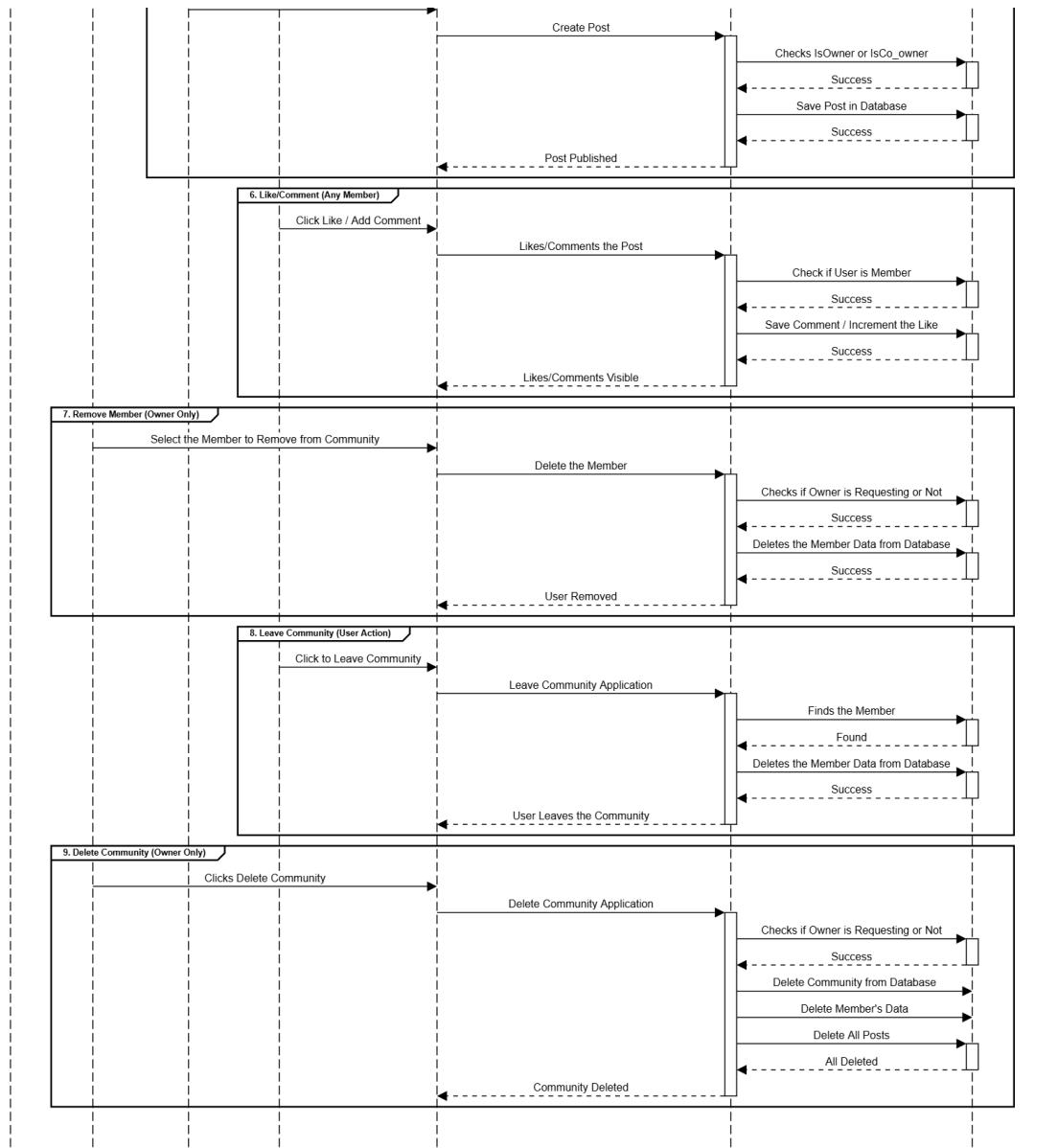


Figure 28: Community Workflows (Part 2)

3.2 Stories

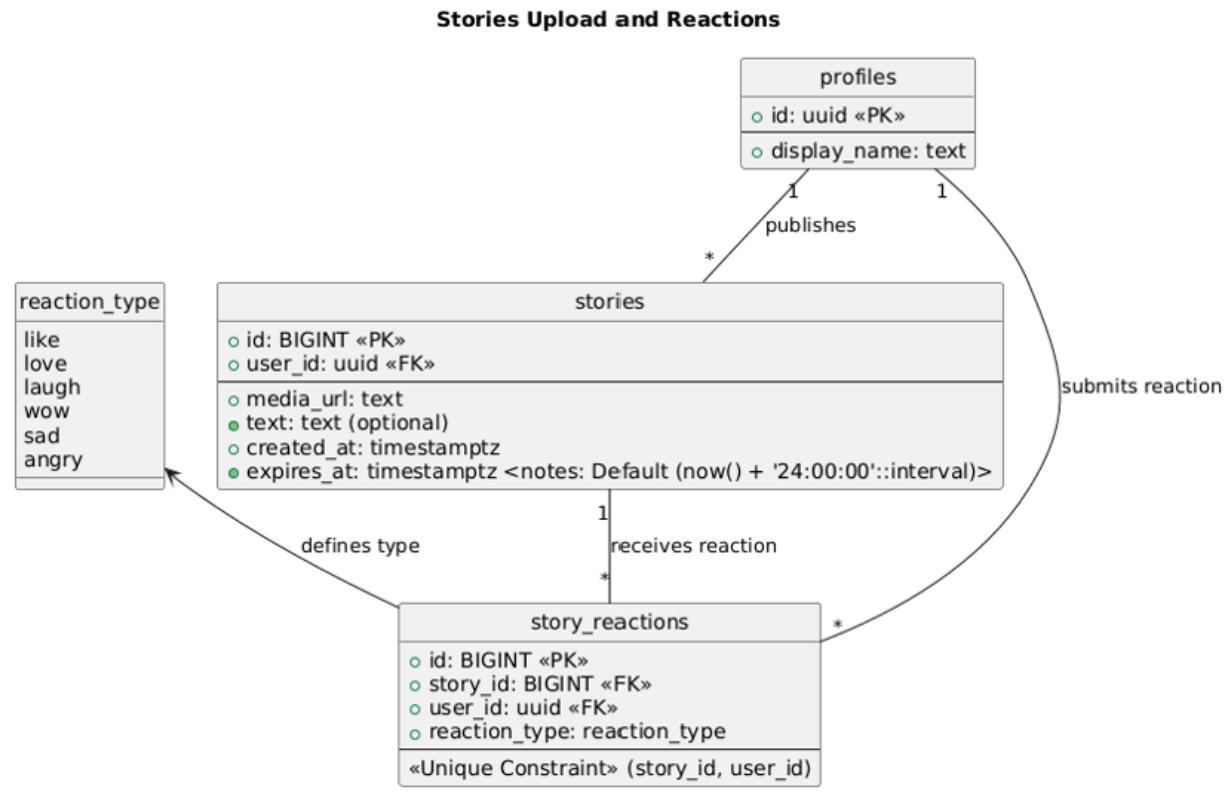


Figure 29: Stories & Reactions Class Diagram

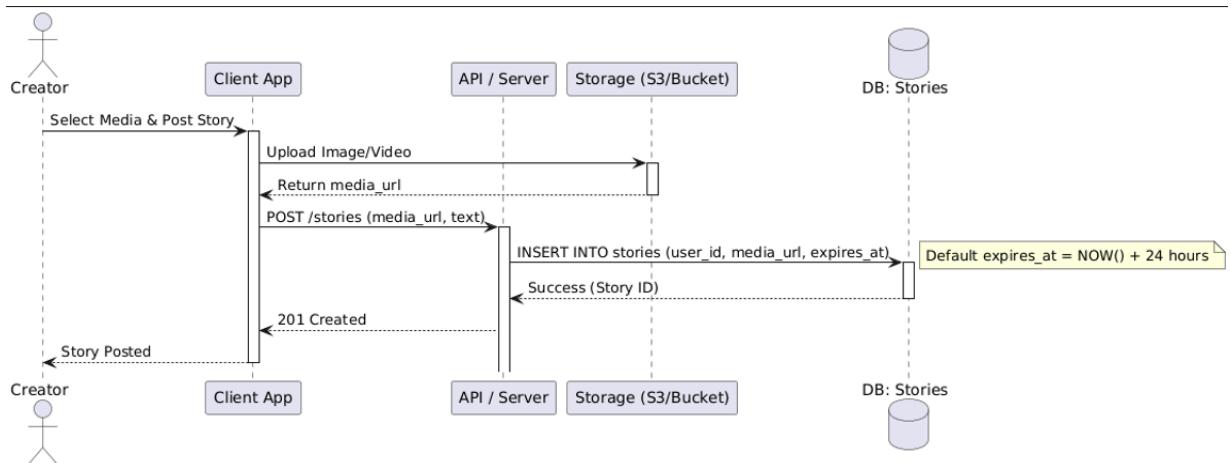


Figure 30: Upload Story Sequence

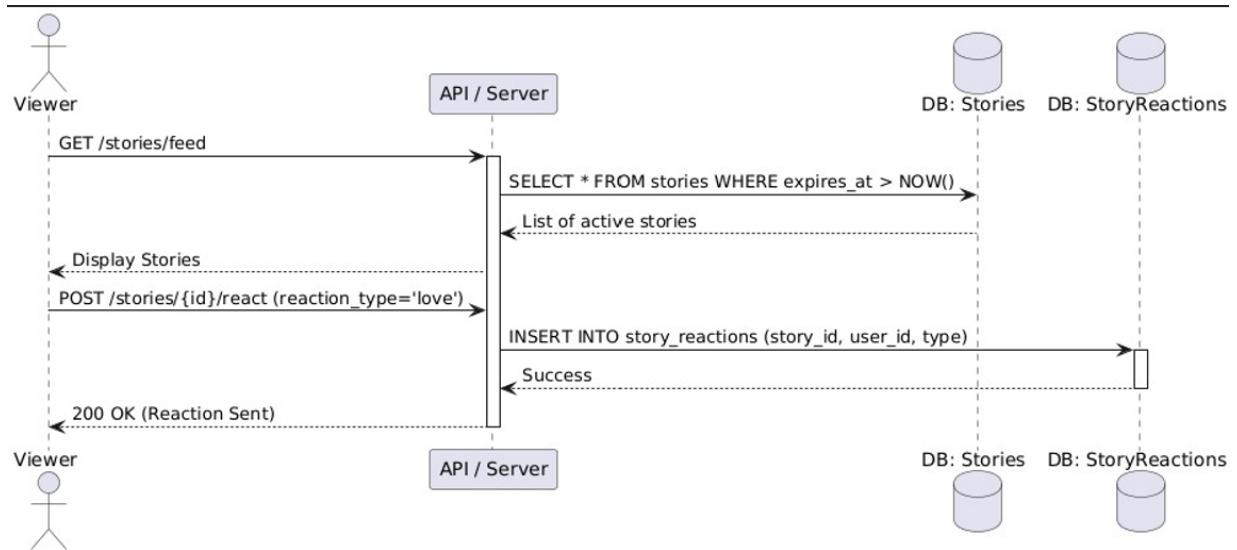


Figure 31: Story Reaction Sequence

3.3 Content Collaboration

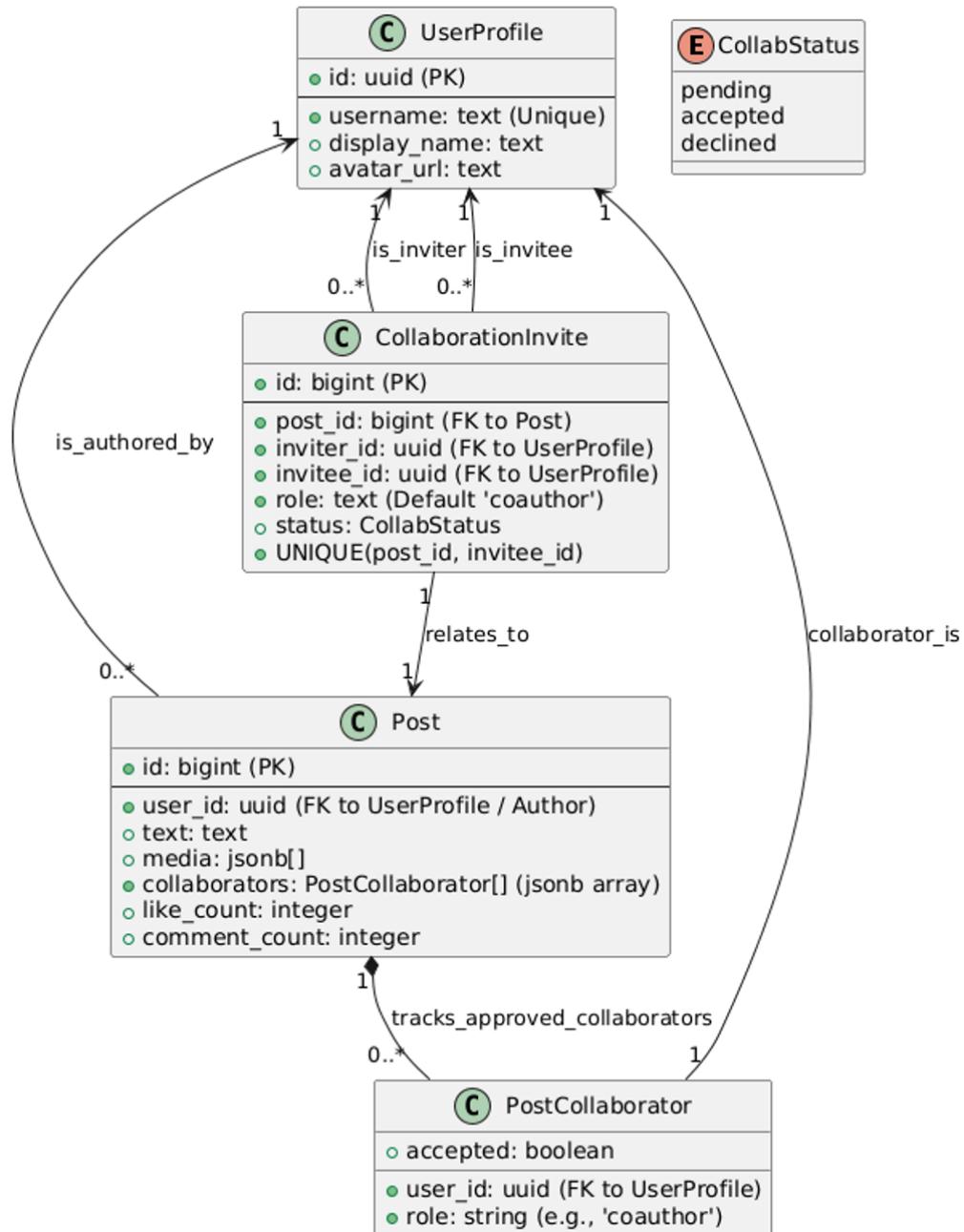


Figure 32: Collaboration Class Diagram

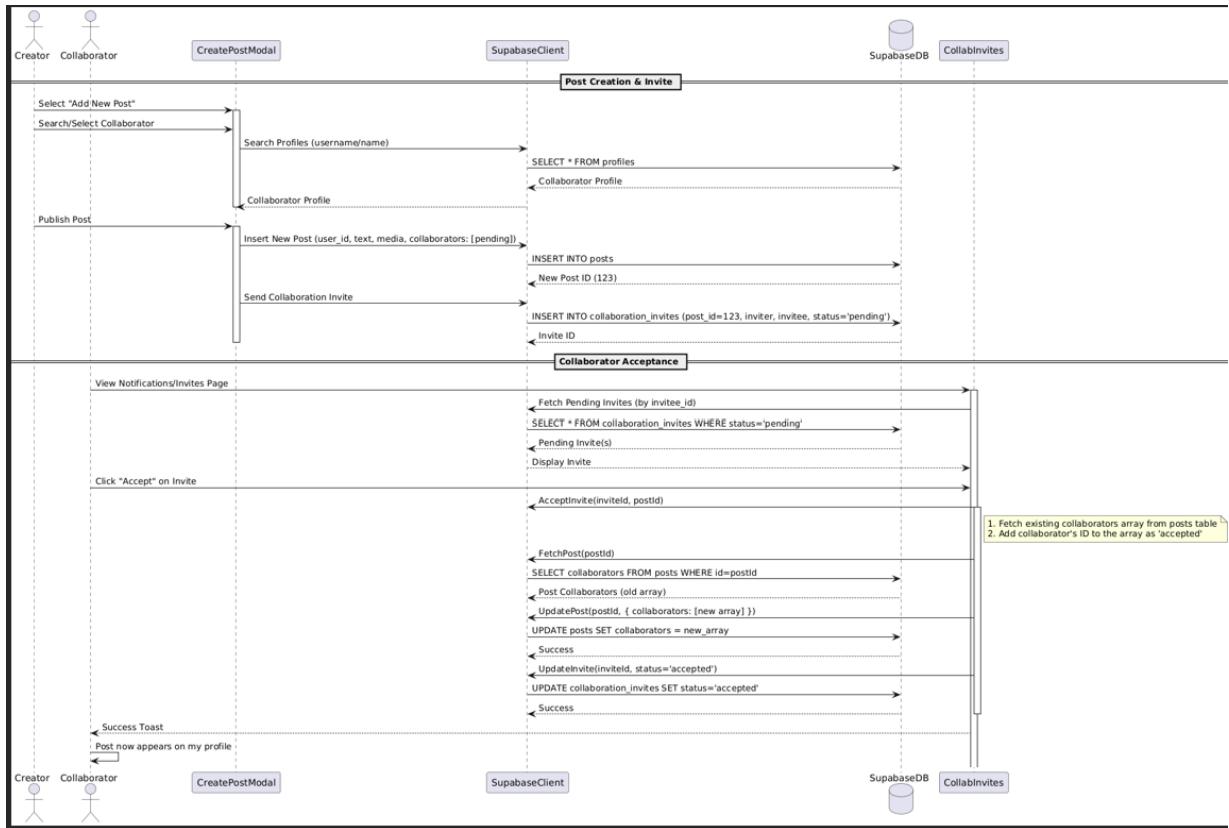


Figure 33: Collaboration Invite & Accept Flow

4 Sprint 4: Direct Messaging & Role-Based Systems

Sprint Goal: Introduce private communication and privilege rules for content creators.

4.1 Direct Messaging

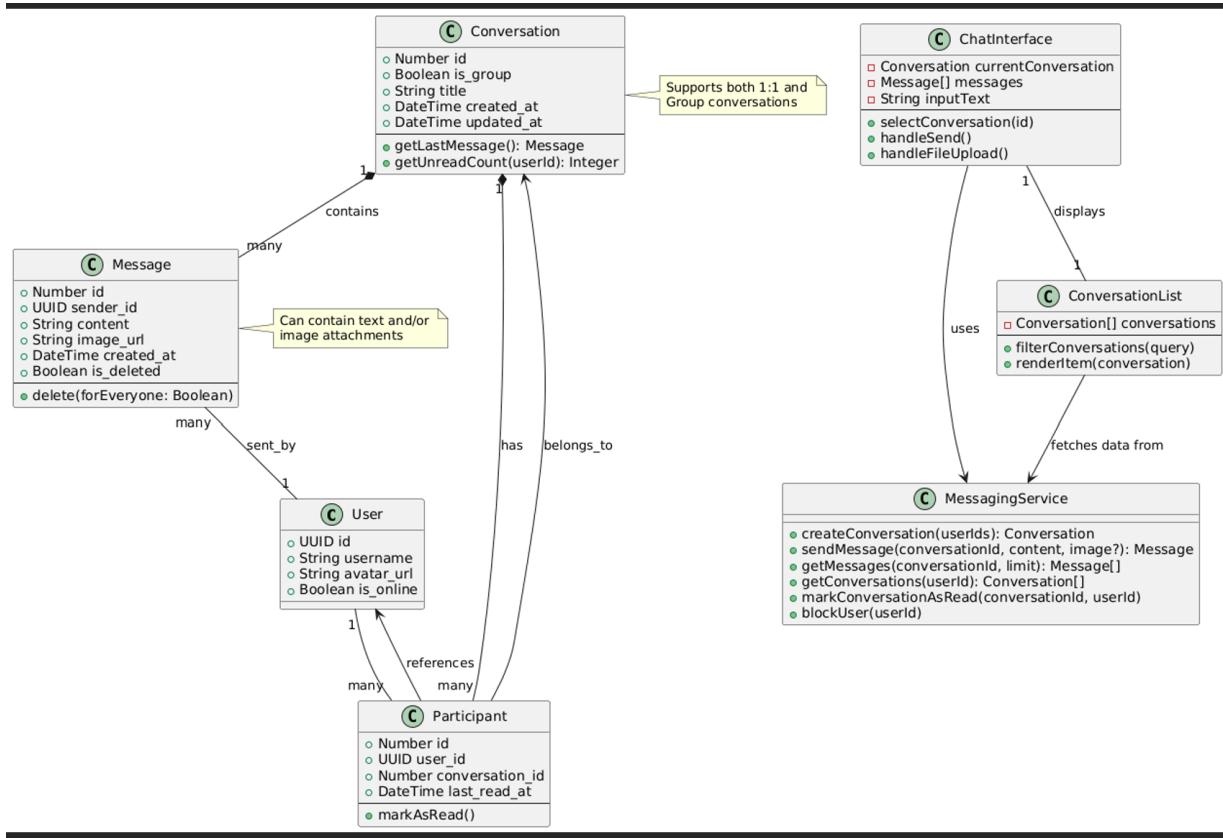


Figure 34: Messaging System Class Diagram

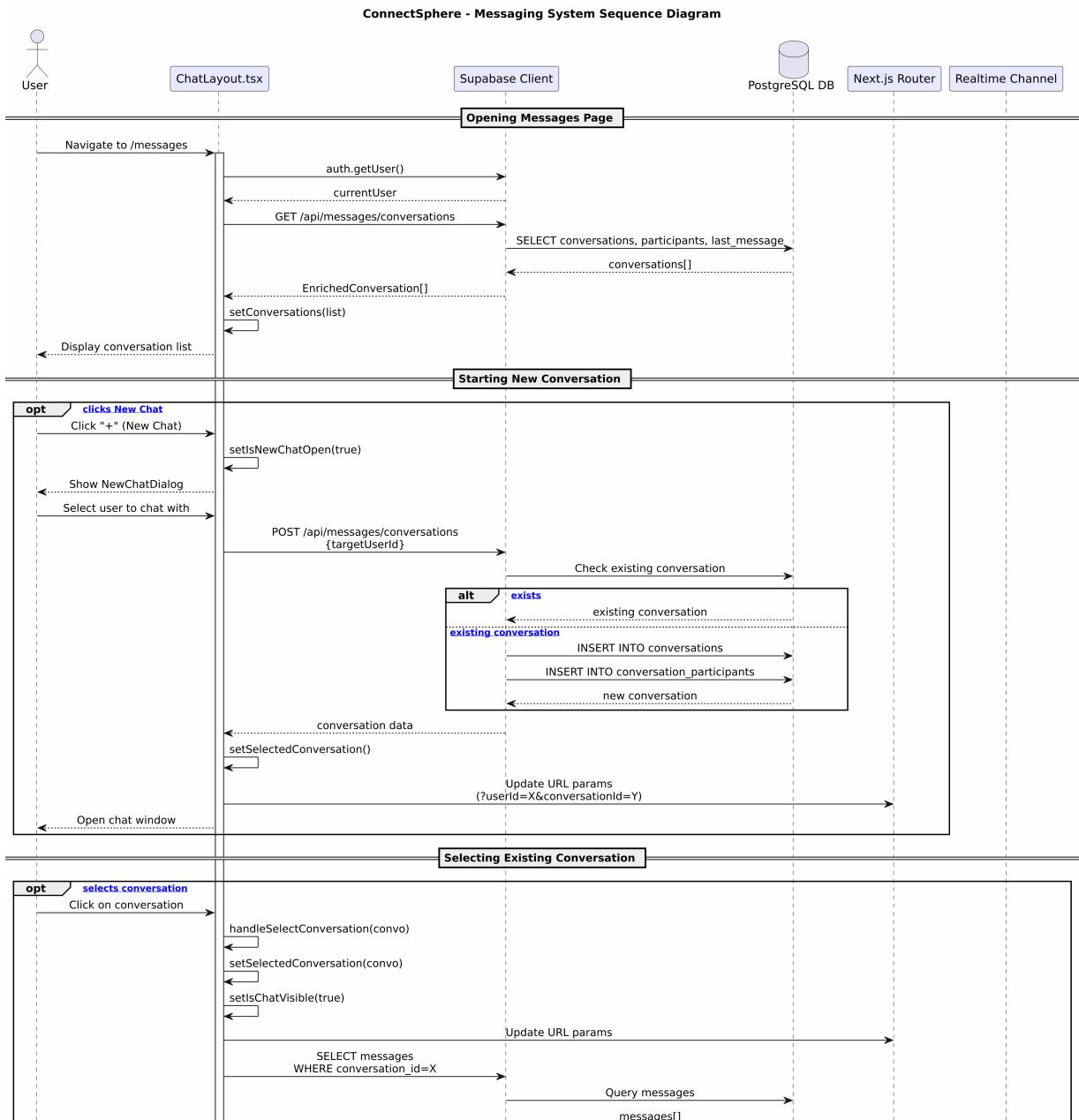


Figure 35: Messaging System Sequence (Part 1/4)

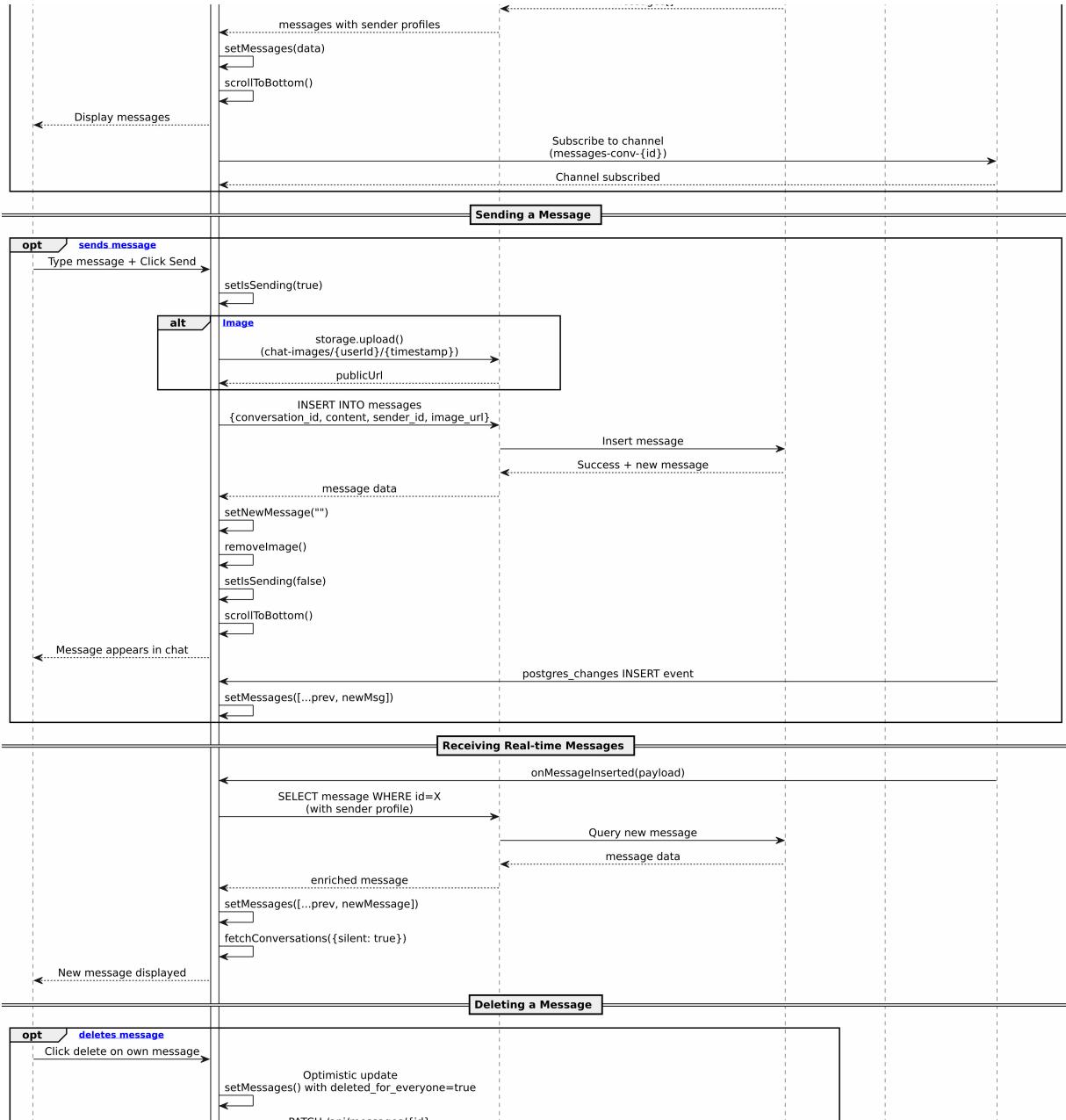


Figure 36: Messaging System Sequence (Part 2/4)

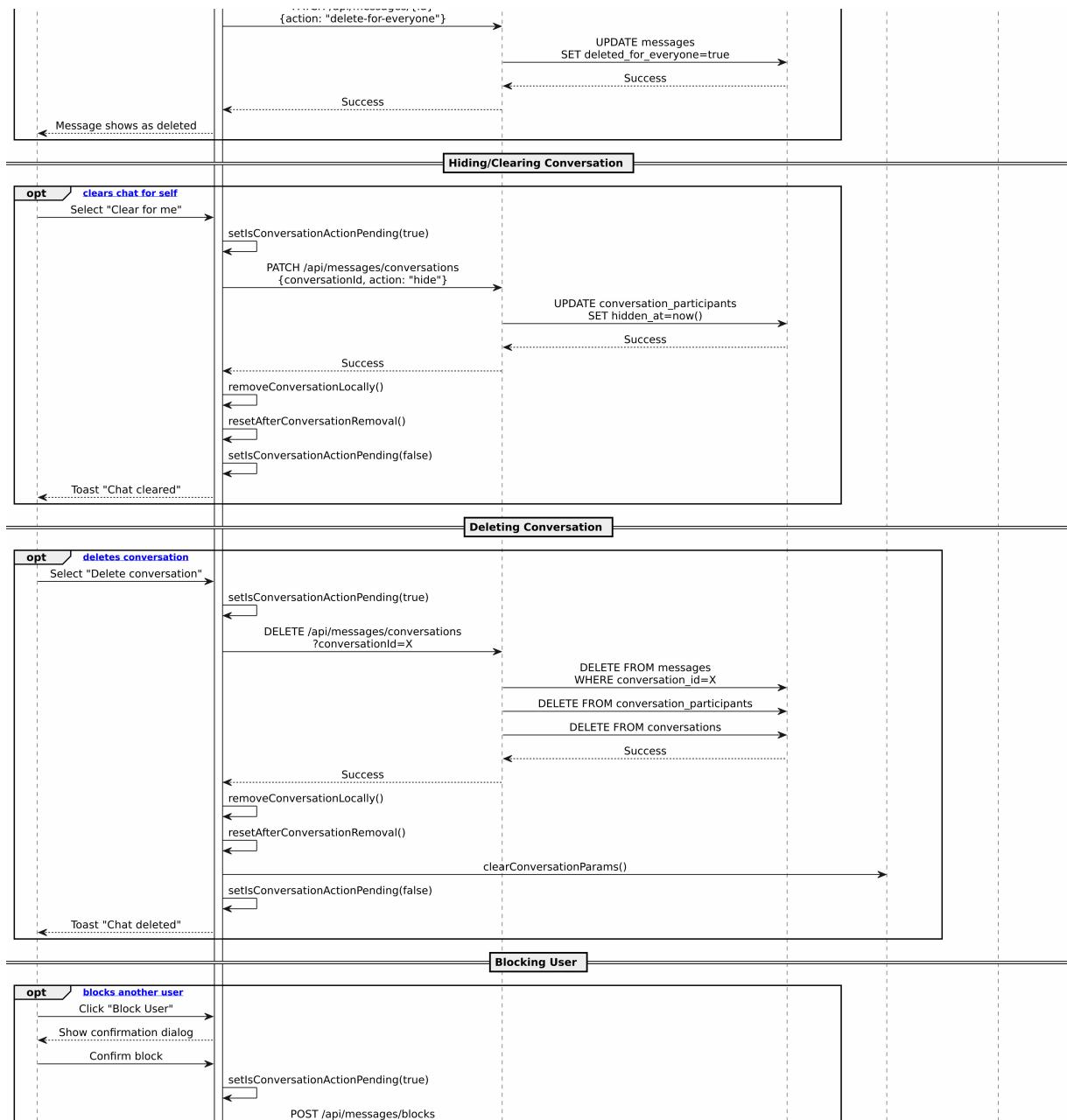


Figure 37: Messaging System Sequence (Part 3/4)

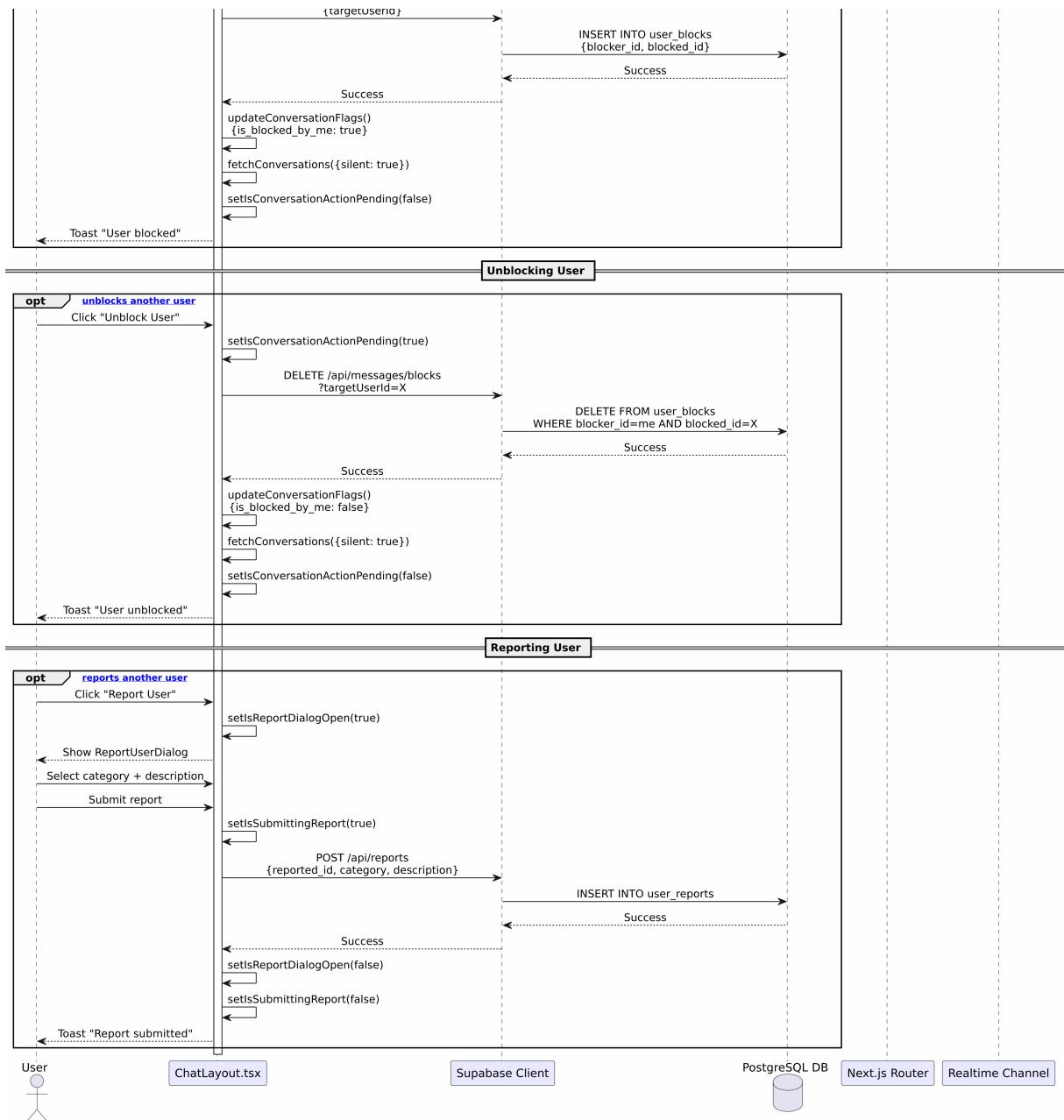


Figure 38: Messaging System Sequence (Part 4/4)

5 Sprint 5: Reporting, Moderation & Creator Dashboard

Sprint Goal: Enable safety, moderation, analytics, and administrative tools.

5.1 Reporting & Moderation

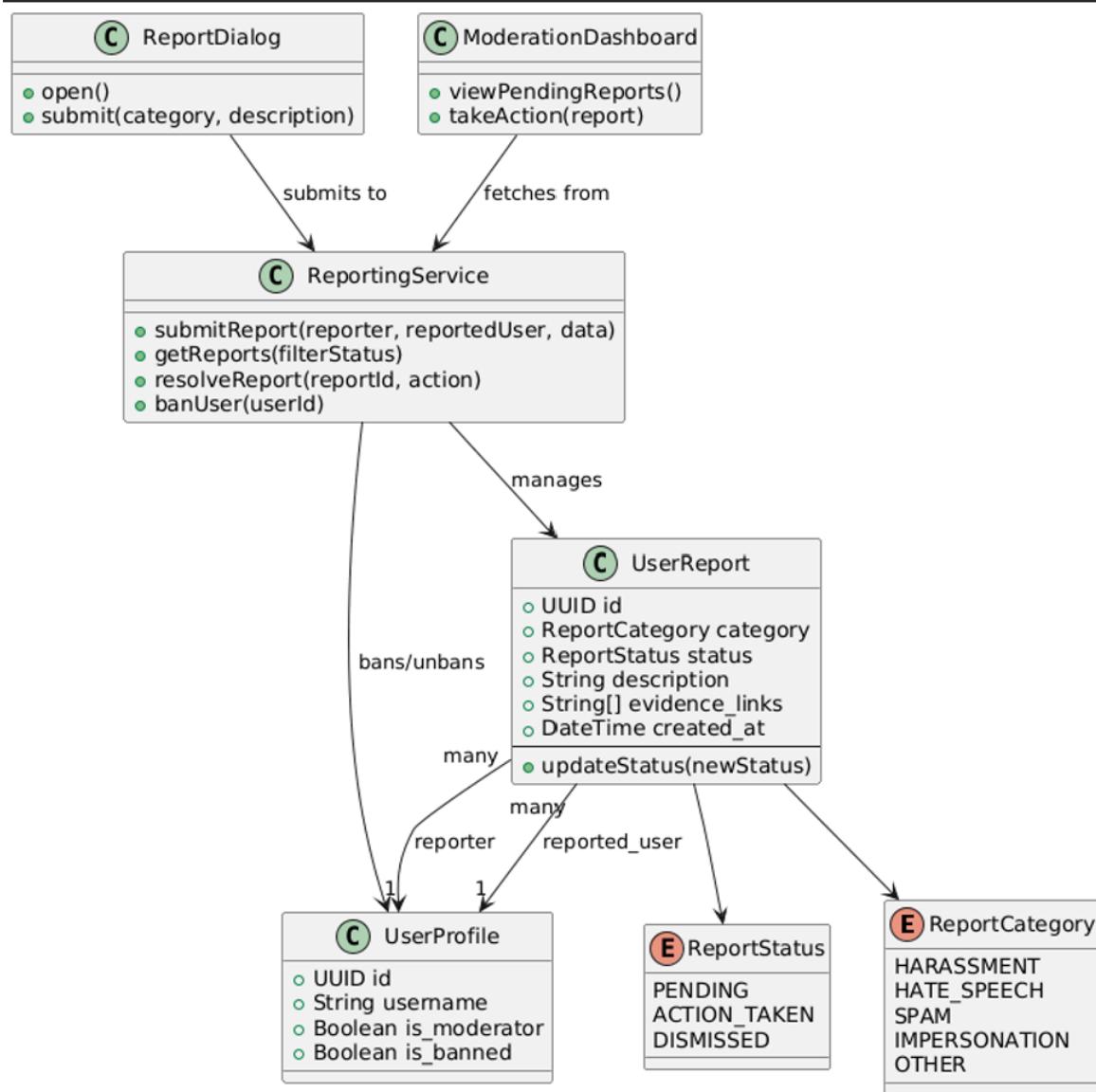


Figure 39: Reporting System Class Diagram

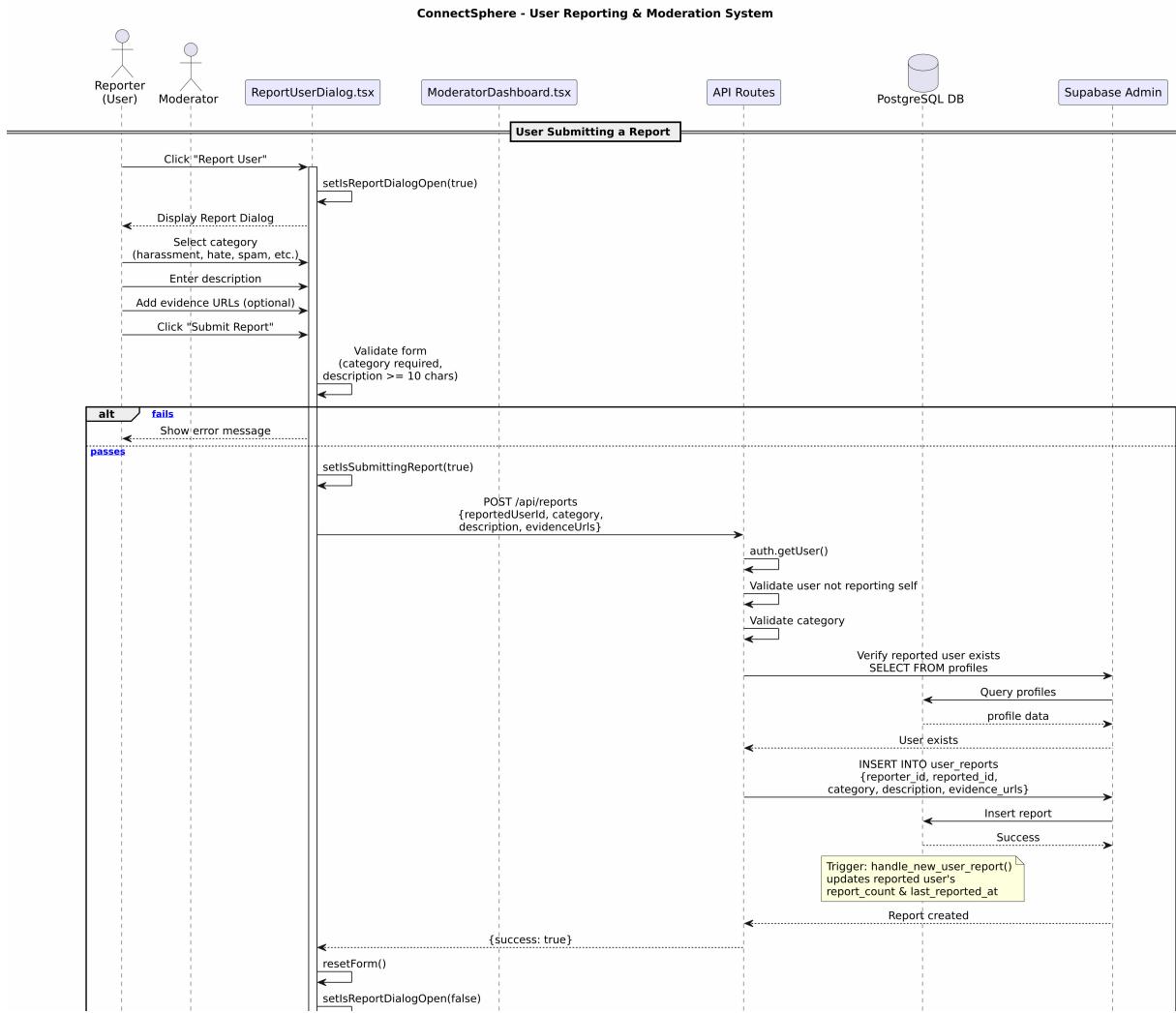


Figure 40: Reporting Workflow Sequence (Part 1/4)

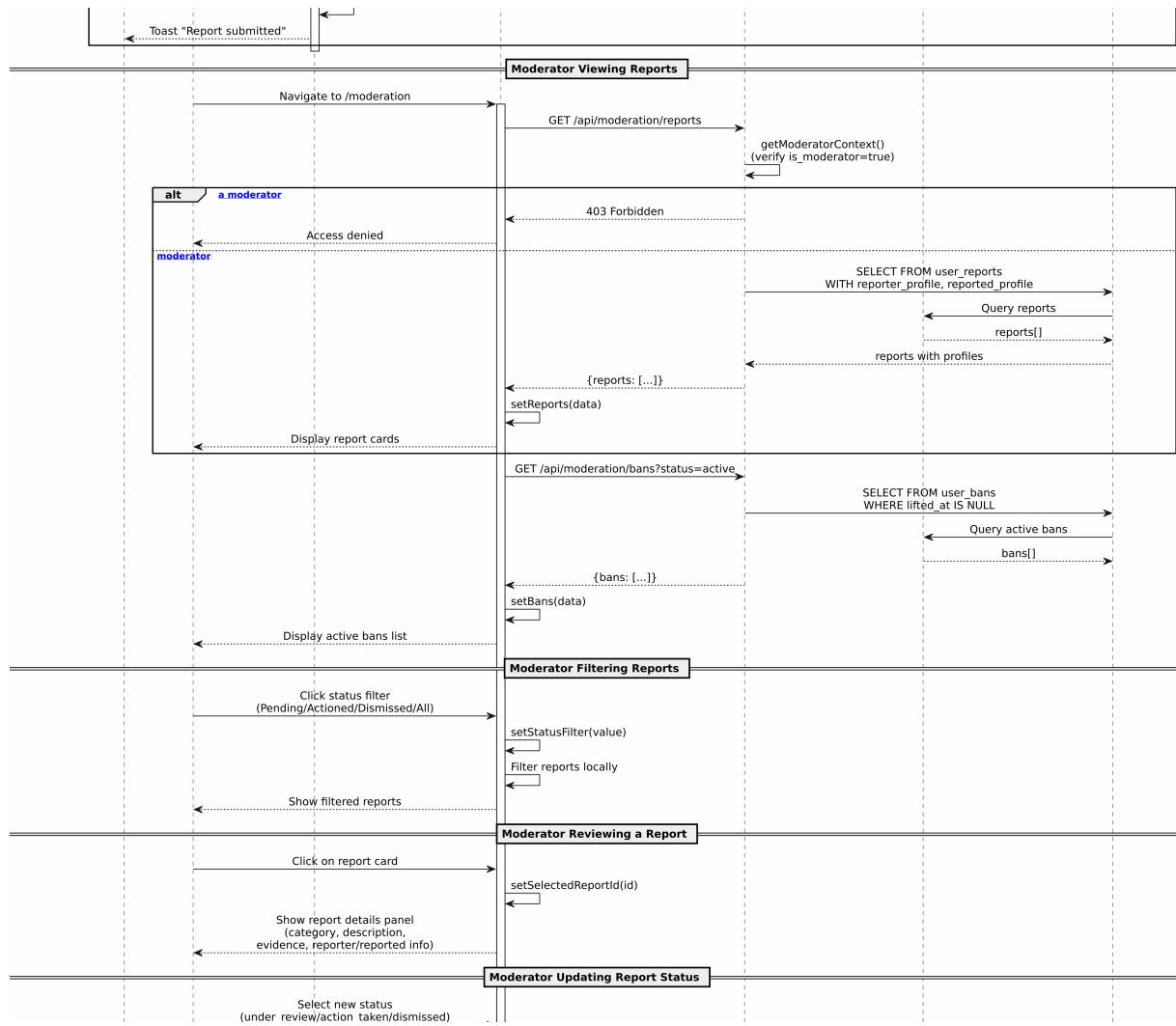


Figure 41: Reporting Workflow Sequence (Part 2/4)

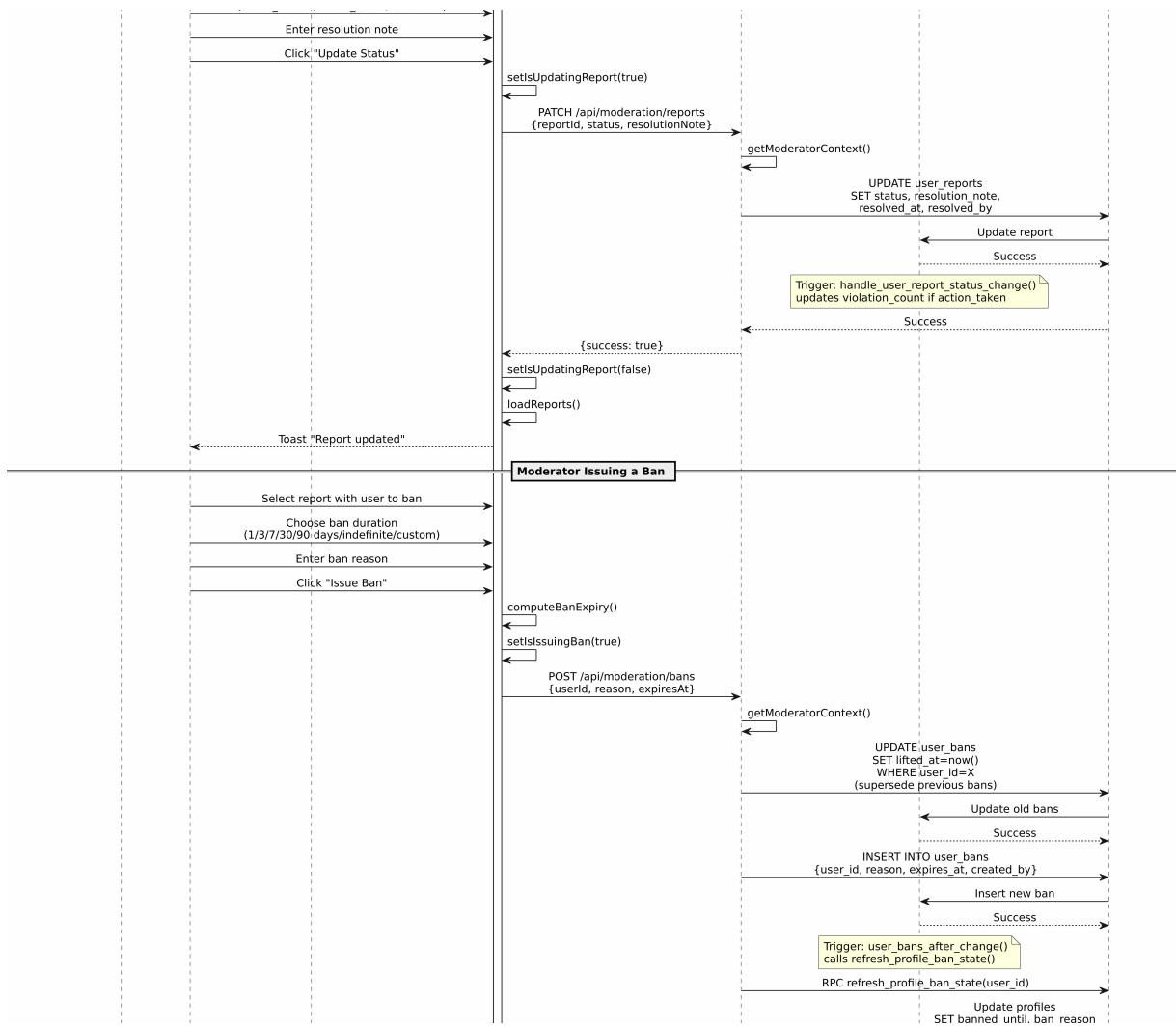


Figure 42: Reporting Workflow Sequence (Part 3/4)

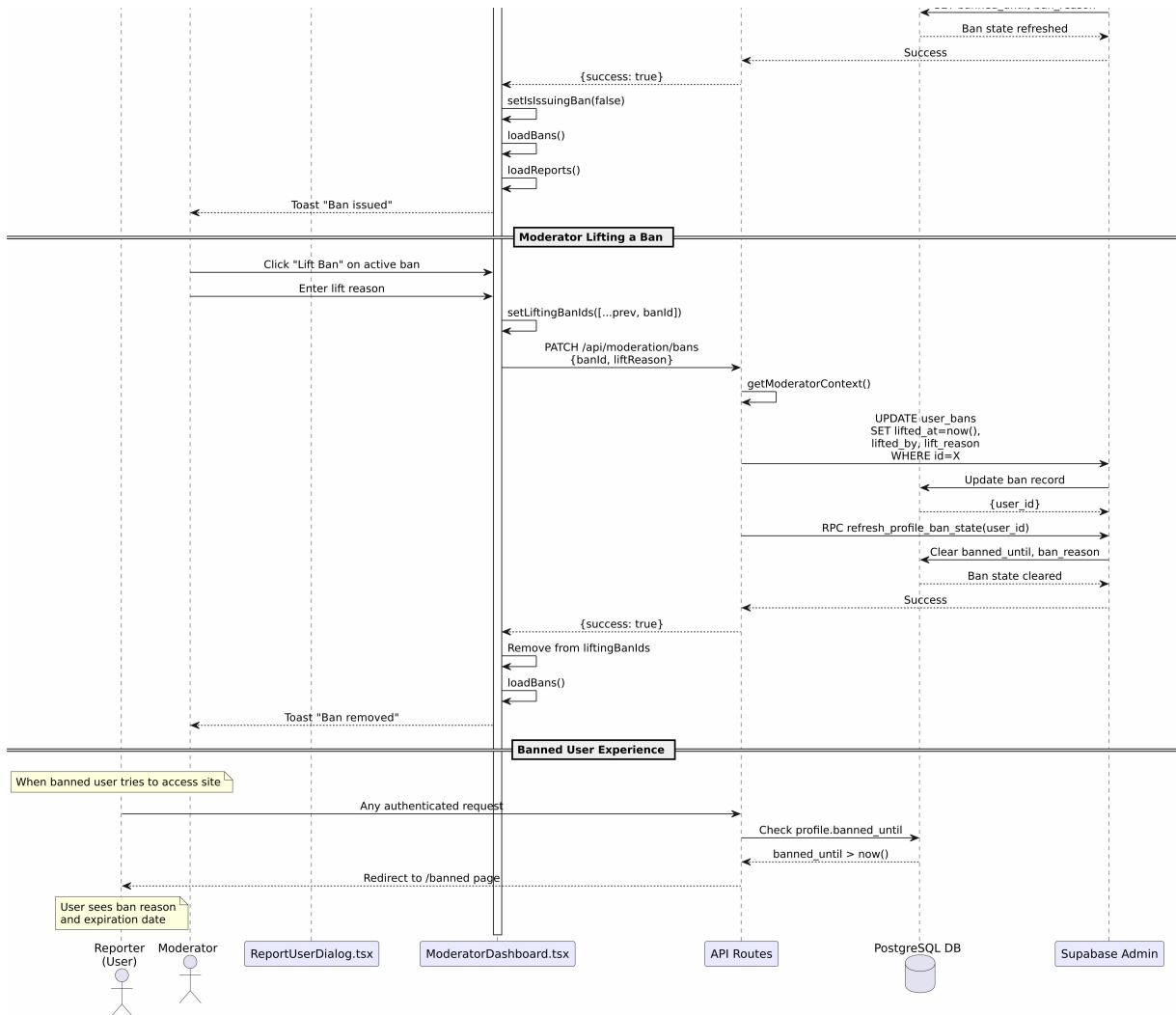


Figure 43: Reporting Workflow Sequence (Part 4/4)