PointMap
A Geospatial Mapping Tool

Low Level Design Document

Document Drafted By:

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Introduction

The Low Level Design Document will depict the technical workings of the PointMap application.

Database Tables

The following database layout is the foundation for the system's authorization, user management, and session management.
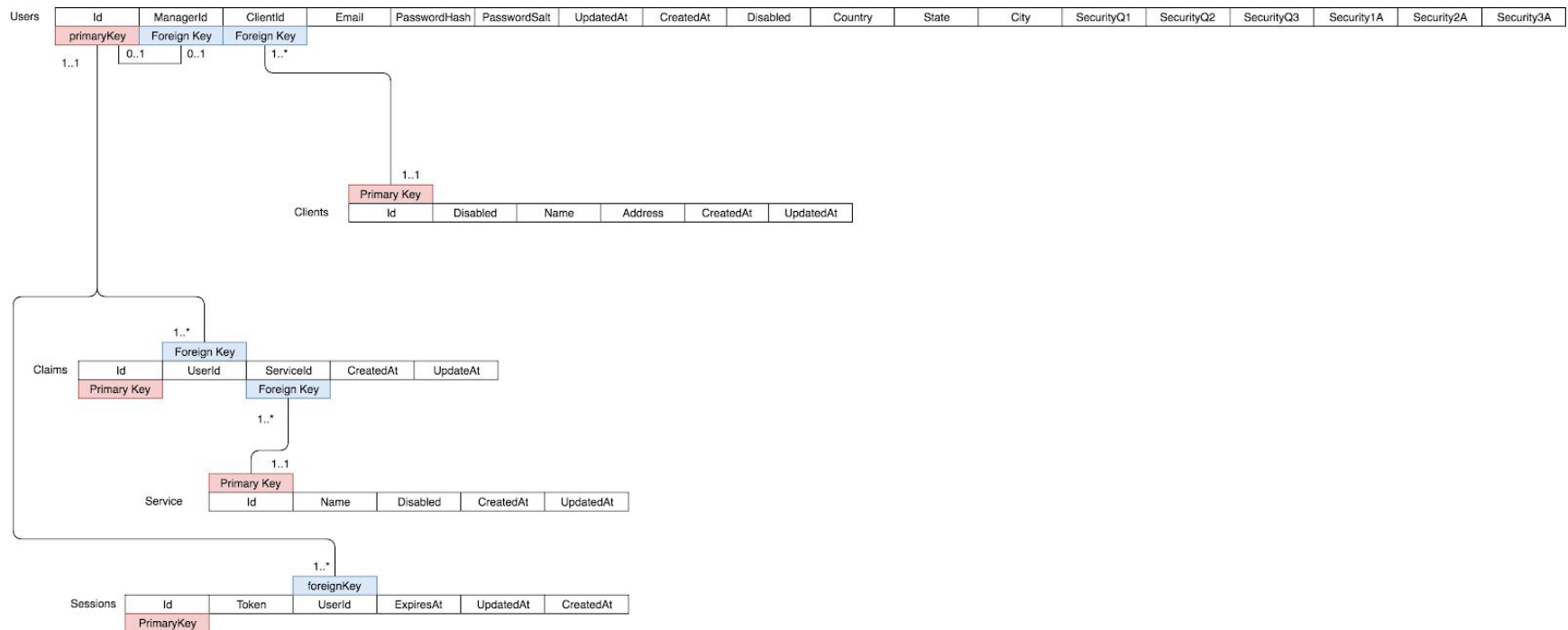
Authorization

Our application will work on a claim based access control to allow for custom user access levels. The following diagrams explain how each authorization process flows through the system.

User Authorization Diagrams

This section documents all necessary individual authorization flows that can be combined for authorization.
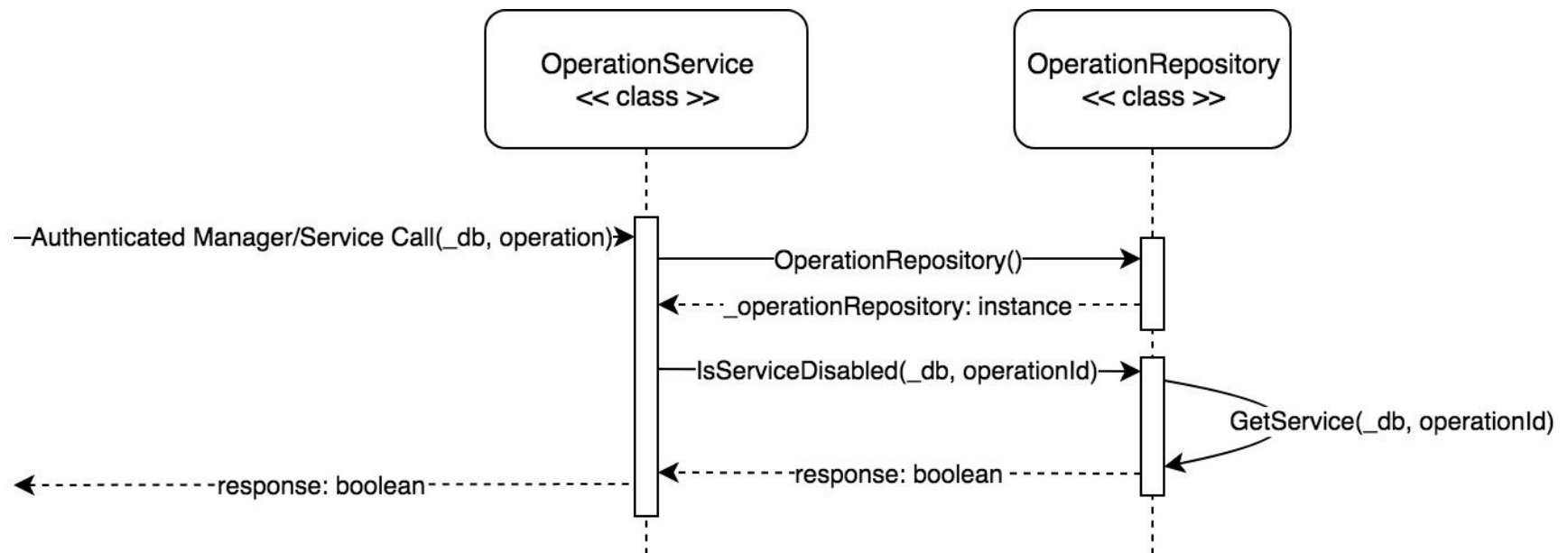
IsClientDisabled

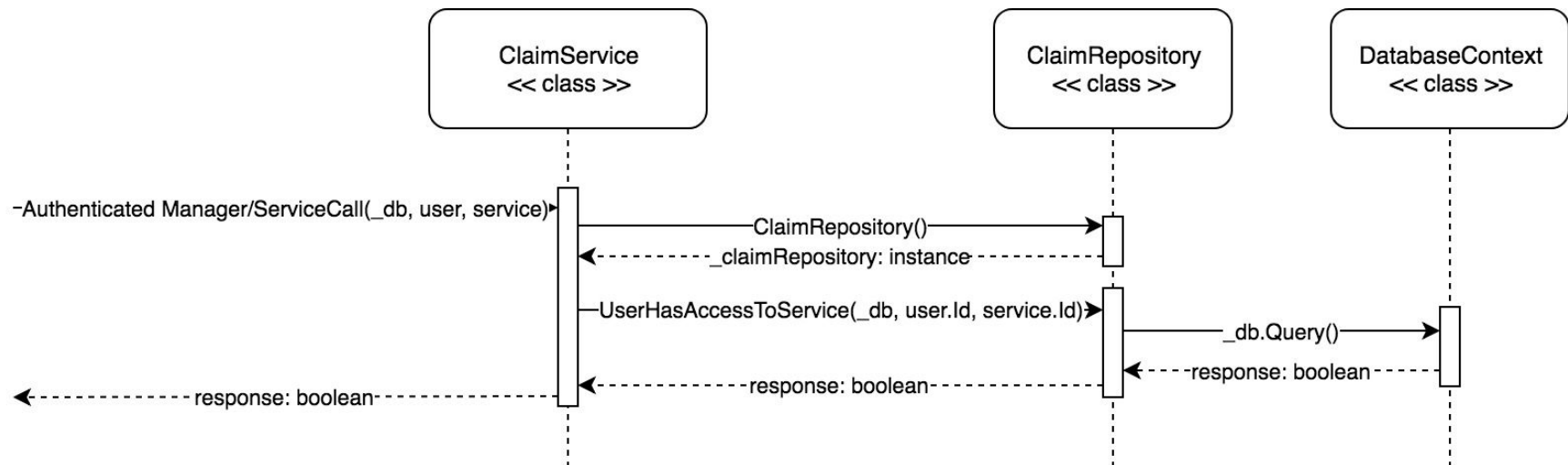The following logic flow occurs whenever the system needs to check if a client is disabled.
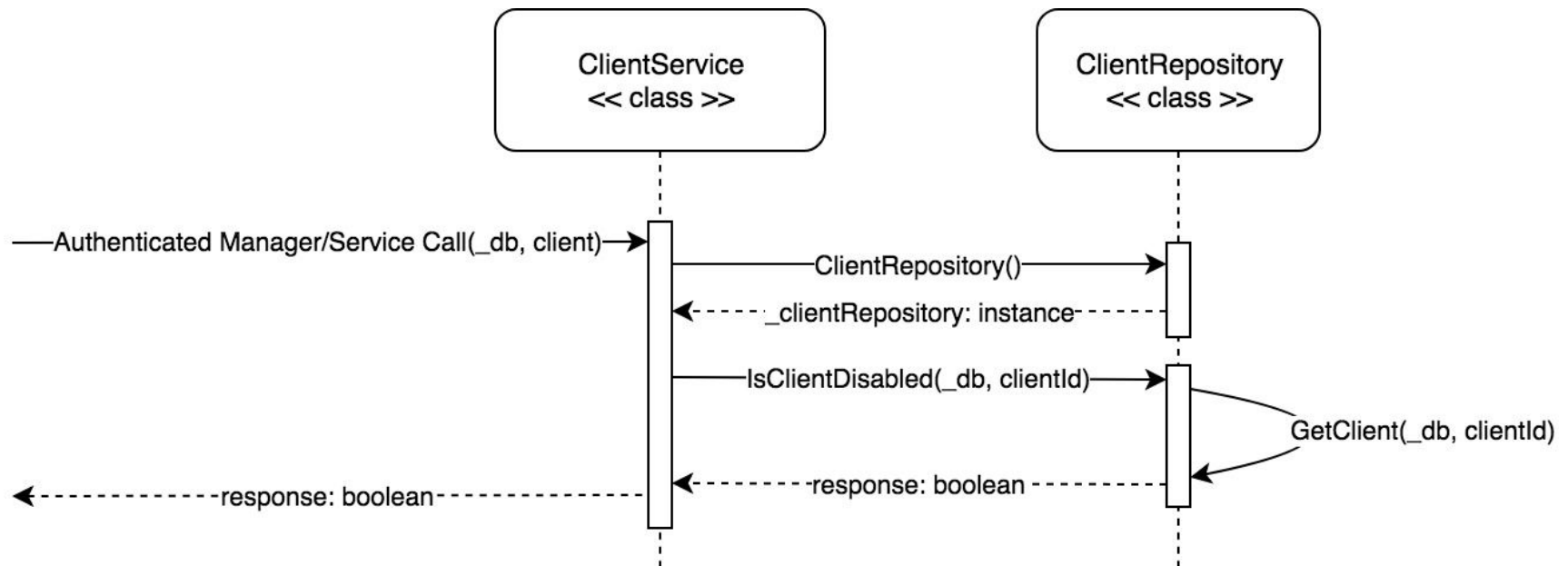
IsServiceDisabled

The following logic flow occurs whenever the system needs to check if a service or operation within a service is disabled.
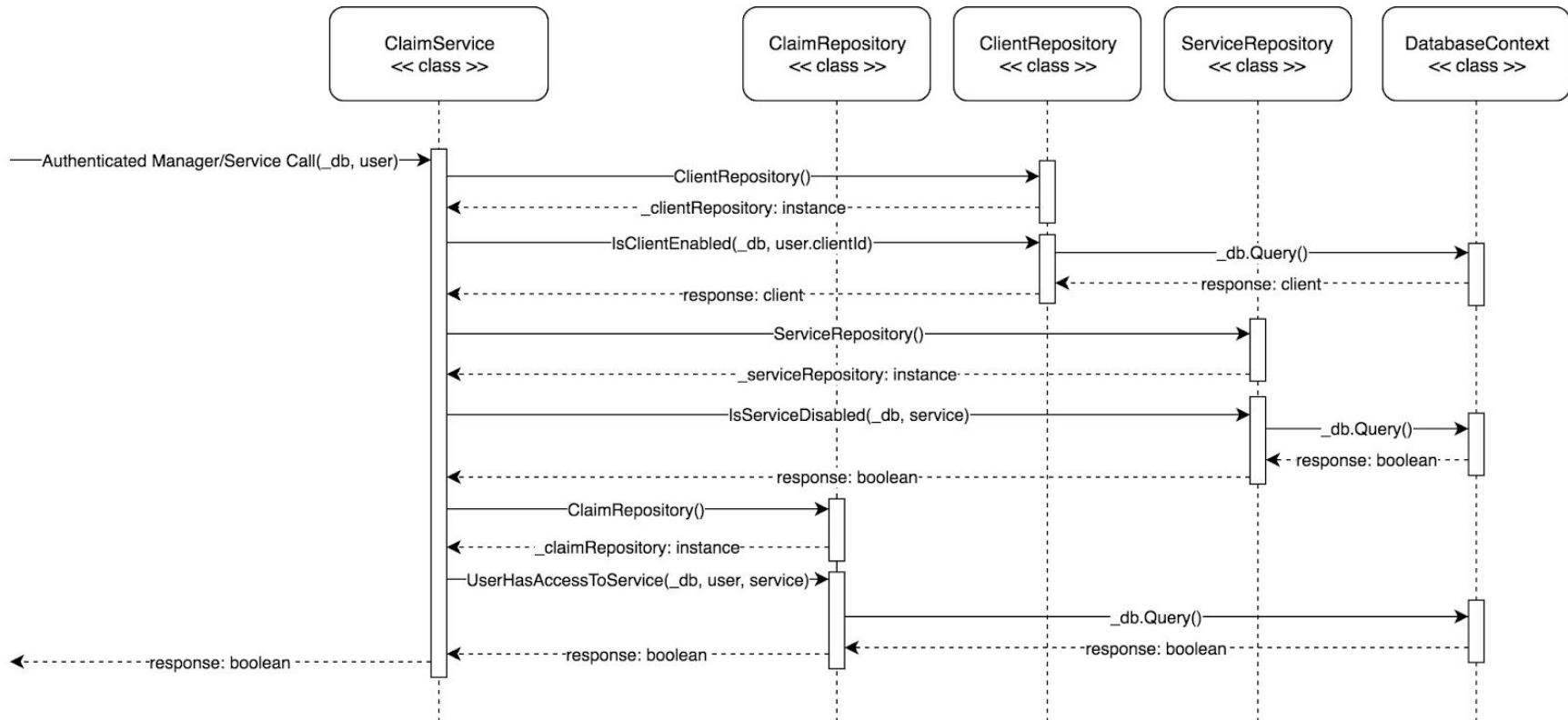
UserHasAccessToService

The following logic flow will occur whenever a user attempts to interact with an operation that is controlled by a claim.
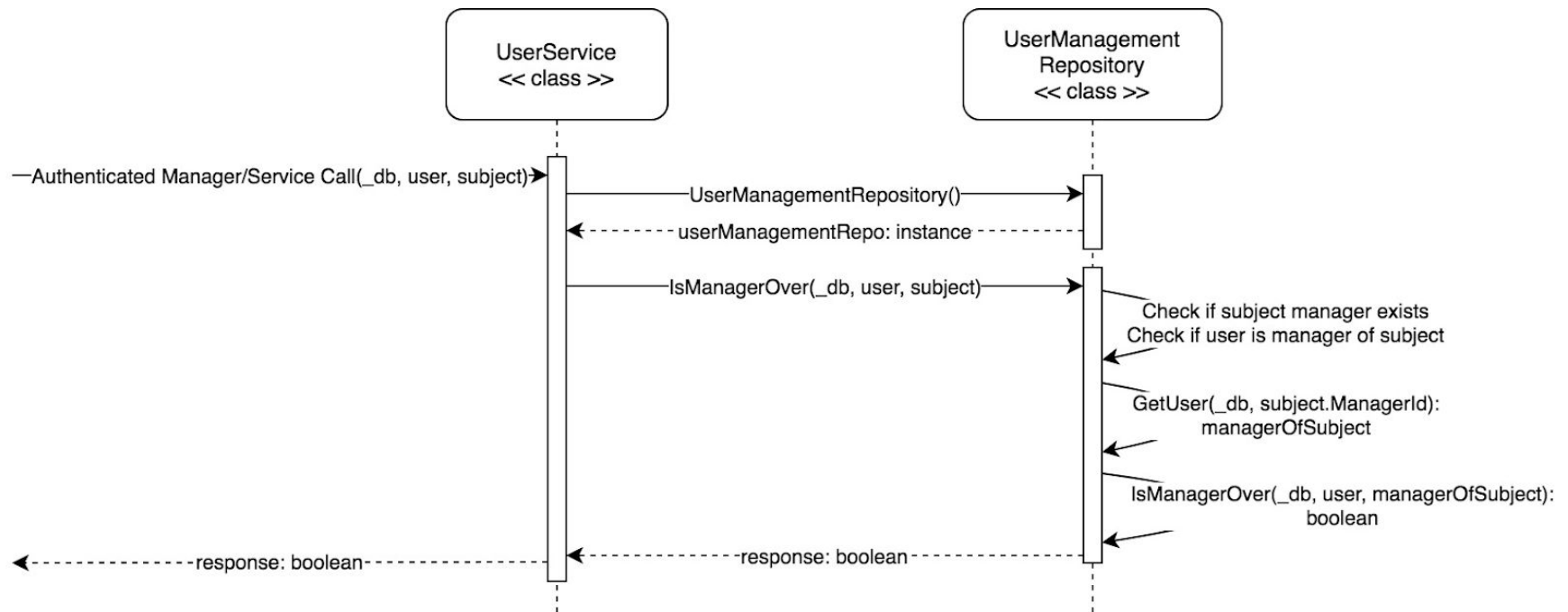
Full User to Service Diagram

The following logic flow will occur whenever a user attempts to access a service. This flow also determines which clients and services are currently enabled.
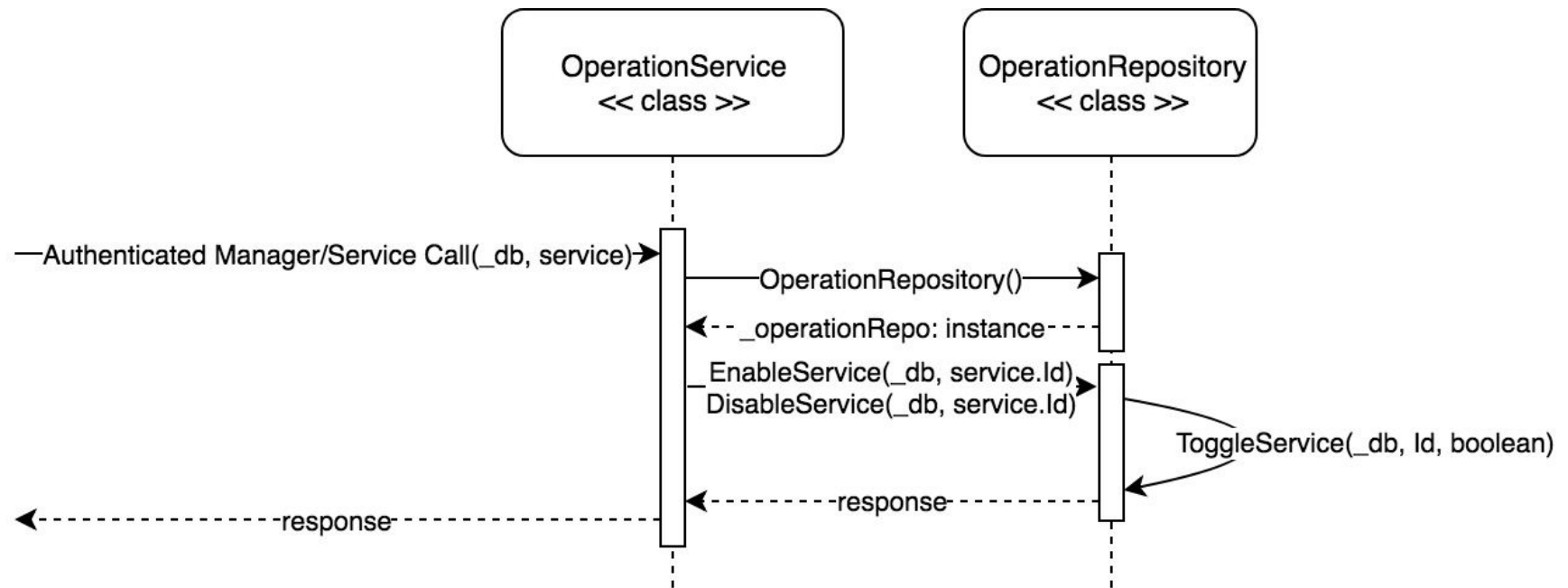
User to User Diagram

The following logic flow will occur whenever a user attempts to perform an action to or on another user.
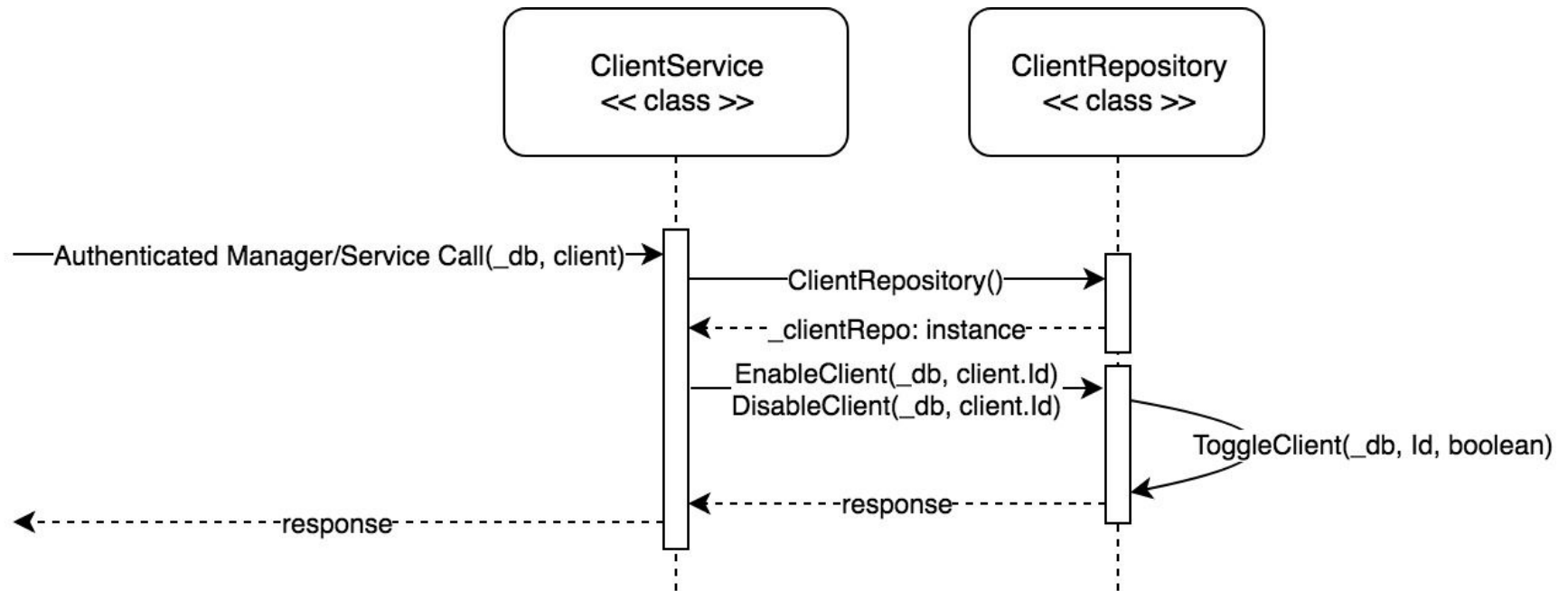
Toggling Feature Availability Diagram

The following logic flow will occur whenever the System enables or disables an offered service.

Toggling Client Availability Diagram

The following logic flow will occur whenever a client is enabled or disabled from using offered services.
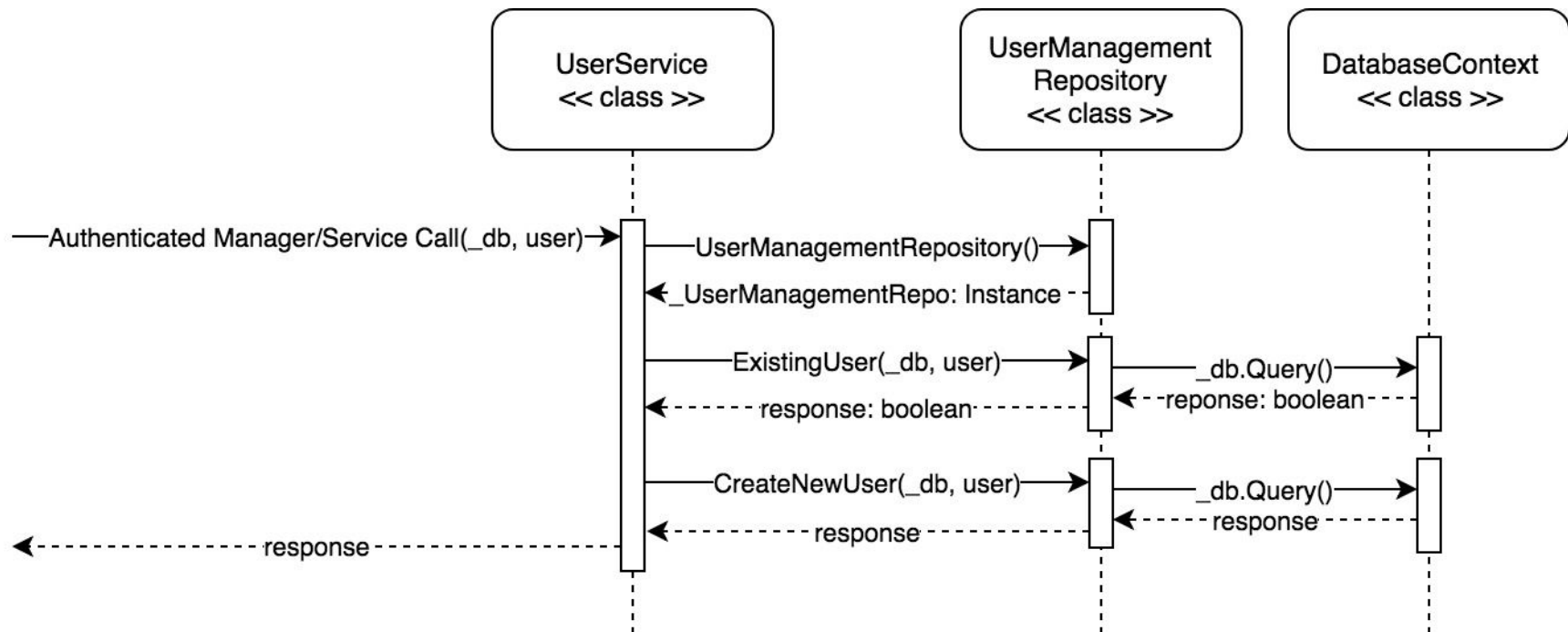
User Management

This section describes how a user will gain access to the services of the system and how user management functions in our application.
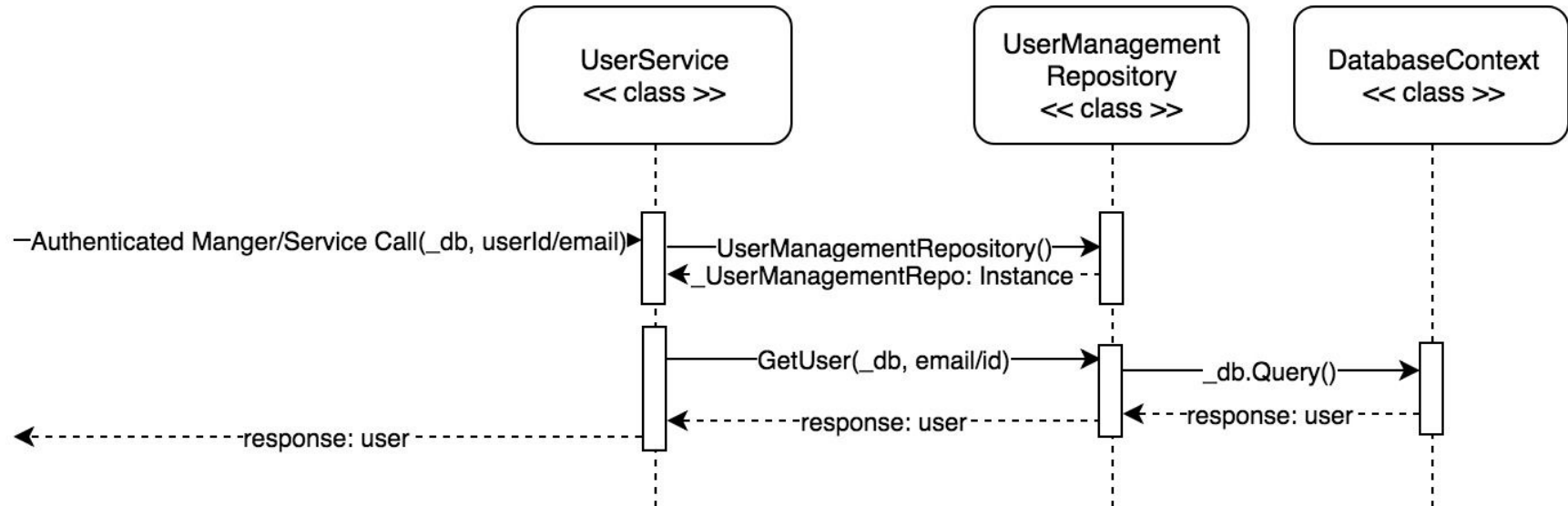
Create User Diagram

This following logic flow occurs whenever a user is created. All password creation and hashing are done prior to this logic flow.
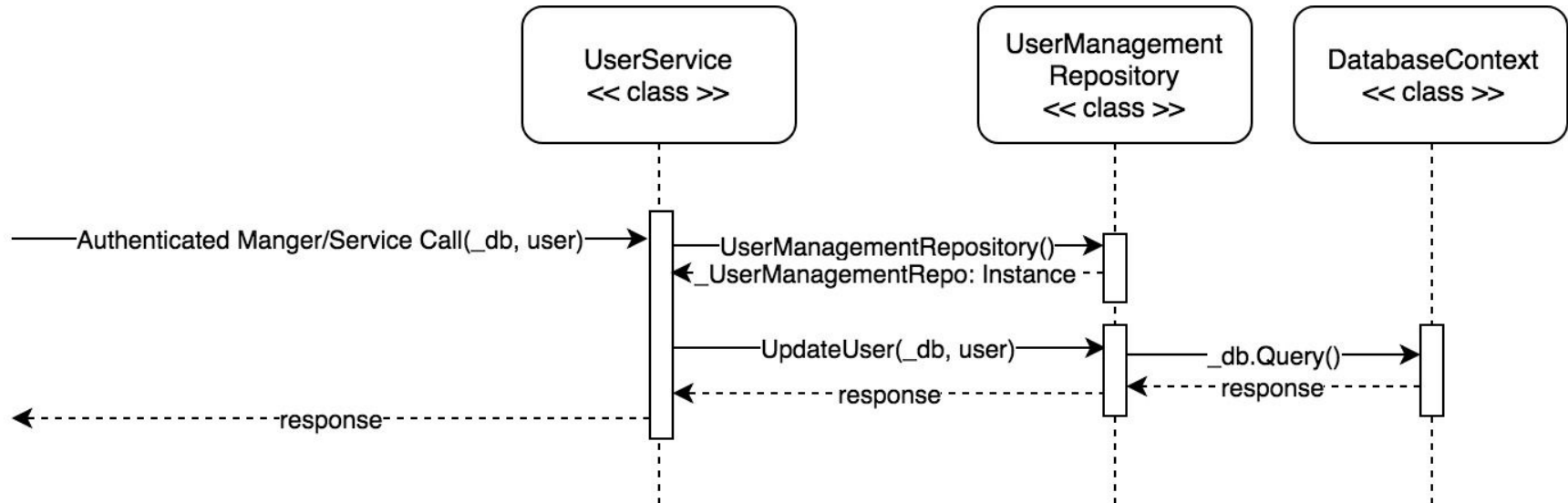
Read/Get User Diagram

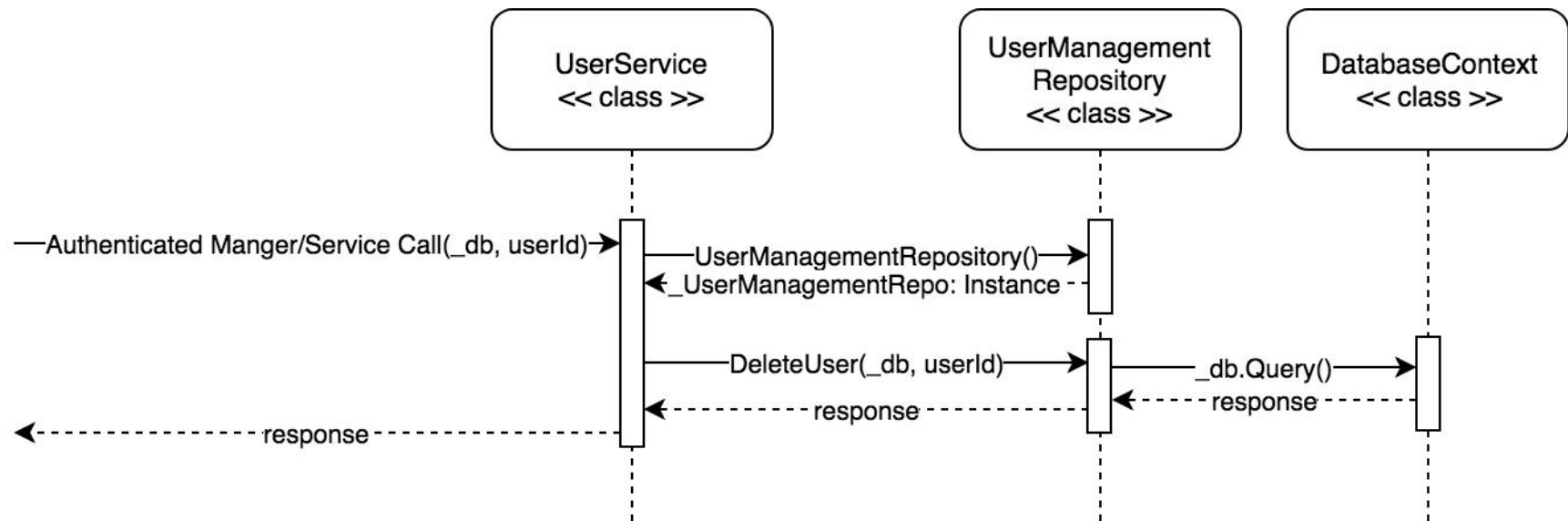The following logic flow occurs whenever a user is read.

Update User Diagram

The following logic flow occurs whenever a user is updated. This same service will also be used when toggling (enabling or disabling) a user. The user's disabled field will be modified in the manager.

Delete User Diagram

The following logic flow occurs whenever a user is deleted.

Scope Creep

The section describes how a user's password will be confirmed to not be a previously hacked password.

Bad Password Checker Diagram

The following logic flow occurs whenever a user creates a password for their account.