

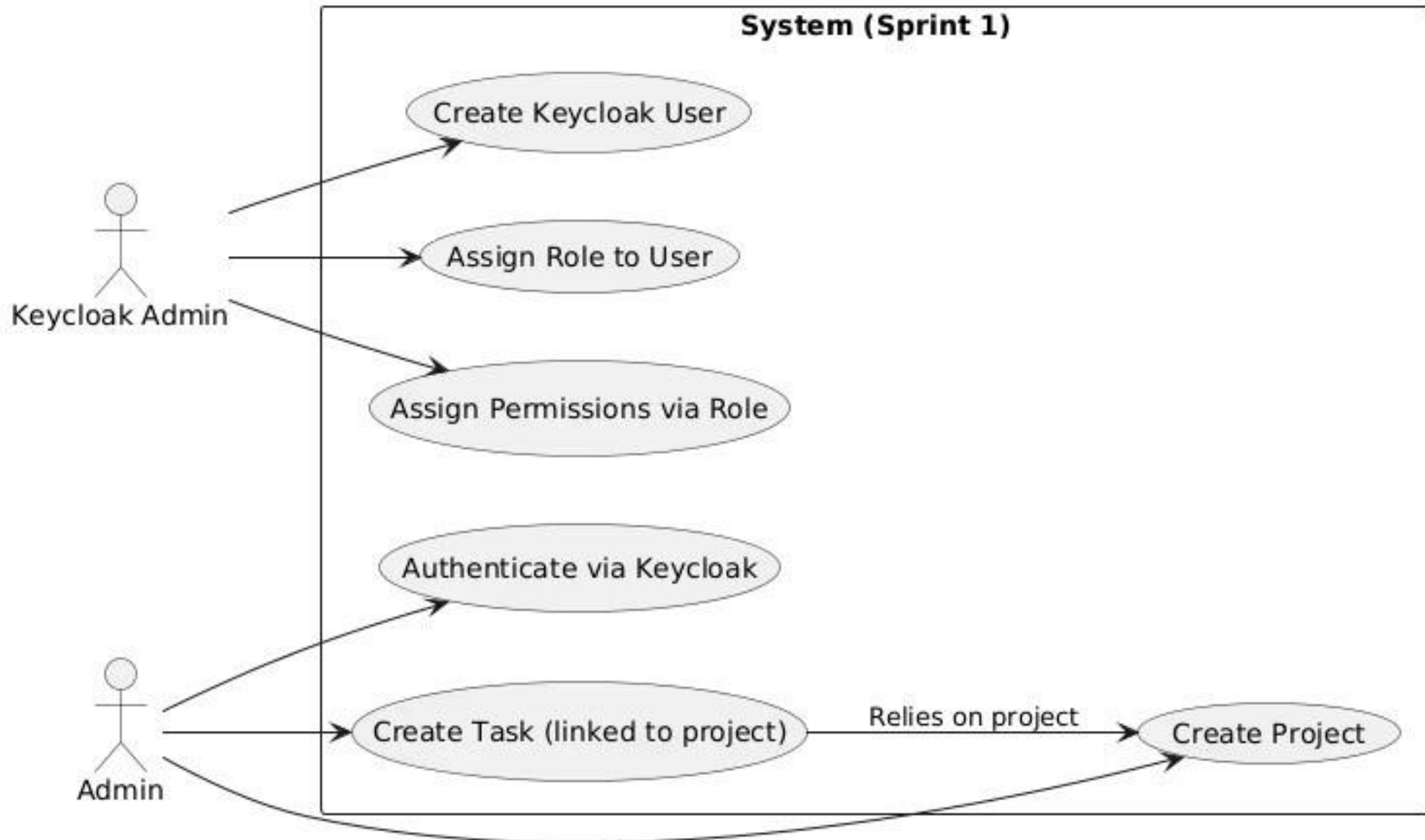


Role-Based Task Management System: Sprint 1 Analysis and Design

This document outlines the analysis and design components for Sprint 1 of the Role-Based Task Management System. It covers authentication setup using Keycloak, project and task creation, and RBAC implementation. Key diagrams and descriptions provide a solid technical foundation.

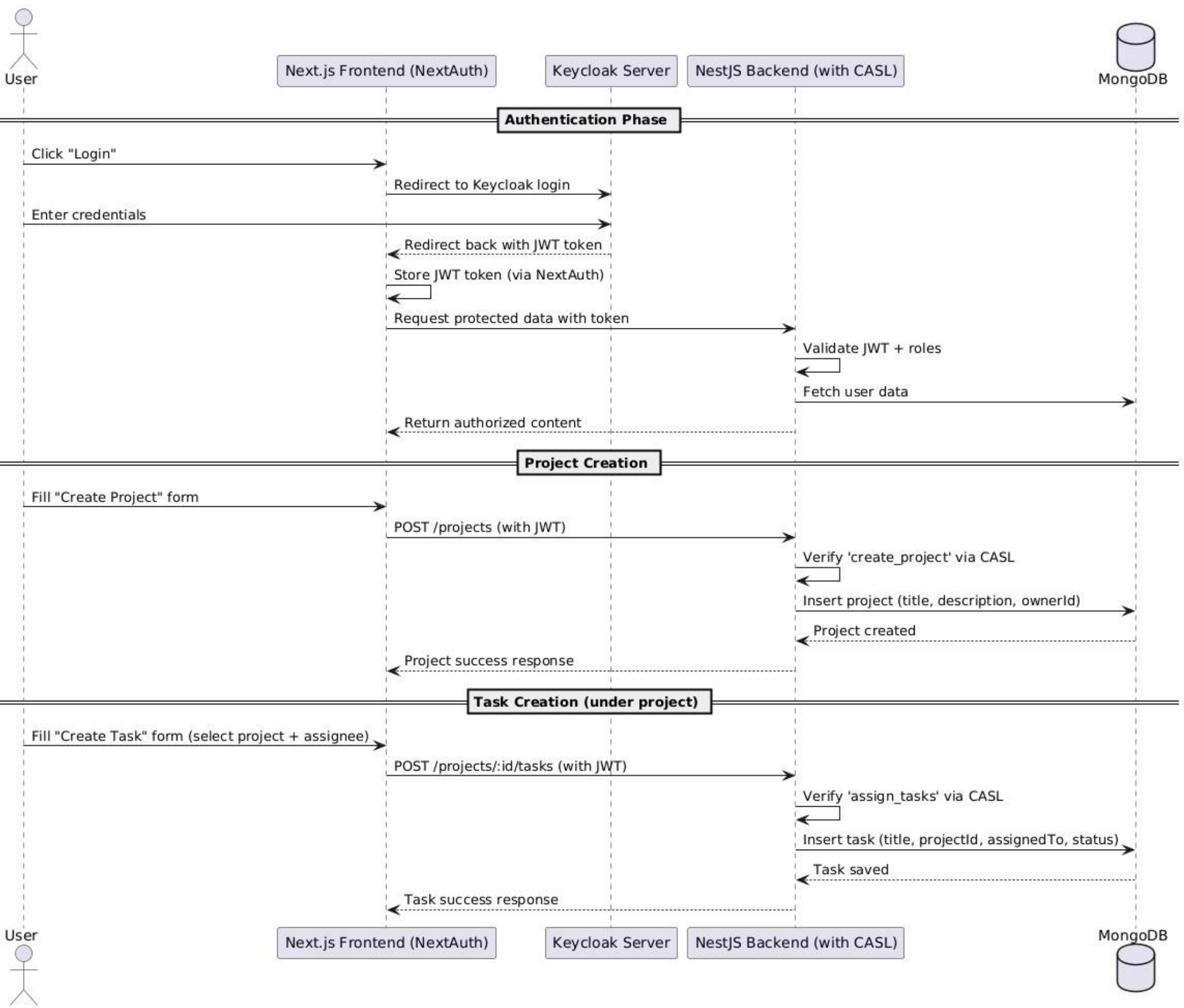
Use Case Diagram

This diagram shows the interactions between actors (Admin, Keycloak Admin) and the system during Sprint 1.



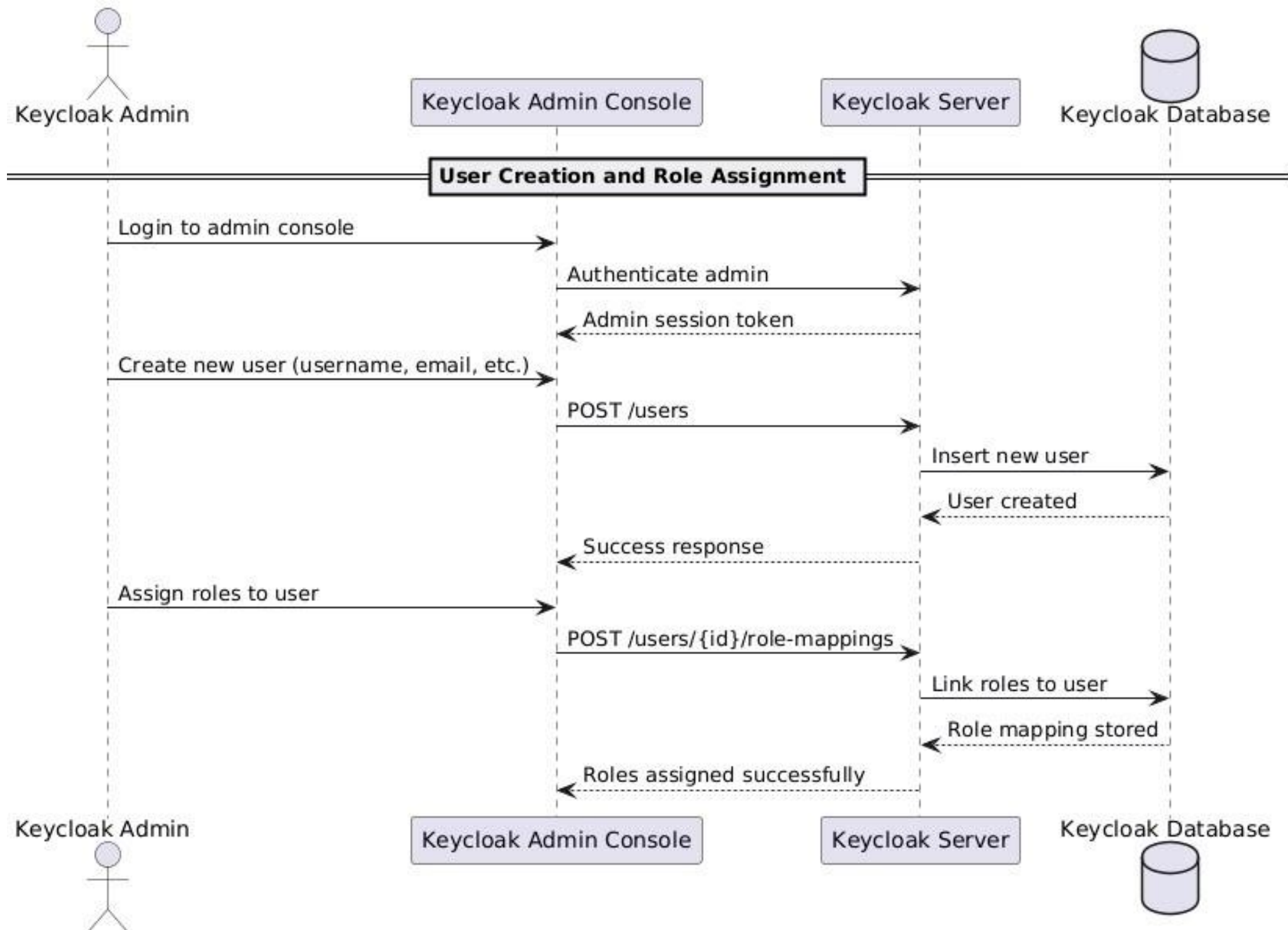
Sequence Diagram: Auth + Project & Task Creation

This diagram illustrates the flow of user authentication via Keycloak, creating a project, and creating a task under the project.



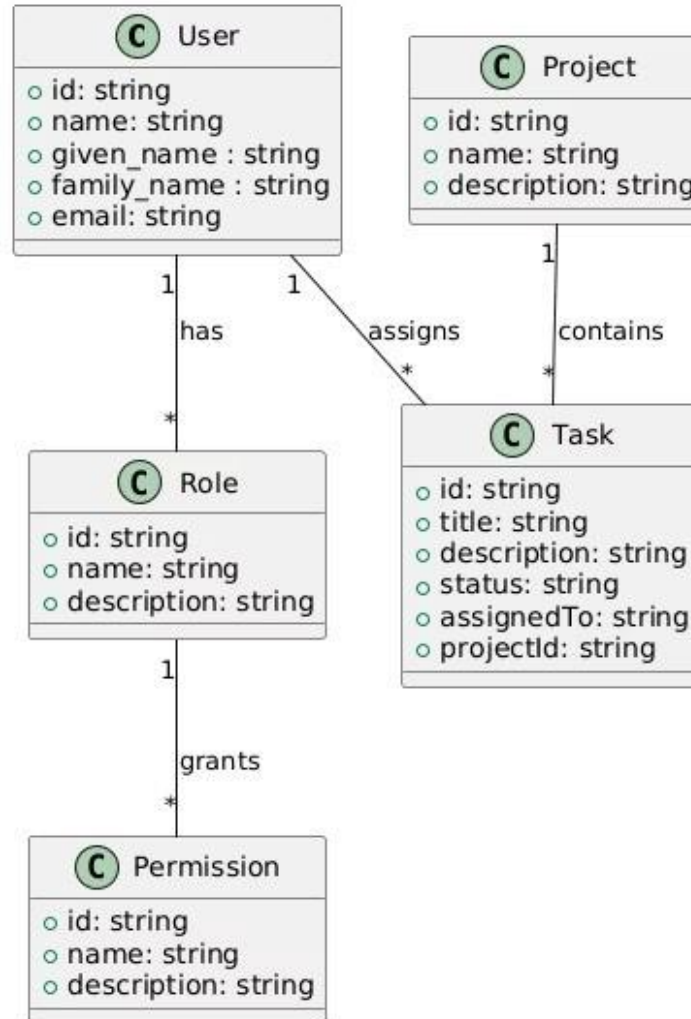
Sequence Diagram: Keycloak Admin Flow

This diagram illustrates how the Keycloak admin creates users and assigns them roles.



Class Diagram: Domain Entities

This diagram outlines the core domain entities and their relationships within the system in the sprint 1





Sprint 1 Summary

Key diagrams defining user interactions, clarifying authentication, and detailing entity implementation.

1

Use Case

Defines user interactions scoped to Sprint 1.

2

Sequence

Clarifies authentication, user management, and creation flows.

3

Class

Lays out entities to implement in the backend.



Next Steps

The diagrams provide a guide for developers during implementation and serve as references for Sprint 1 validation and testing.

1 Implementation

Developers to implement Validate implementation based on diagrams.
against diagrams.

2 Validation

3 Testing

Comprehensive testing of all flows.