

System Design Document (SDD)

Feedback & Review System

1. Purpose

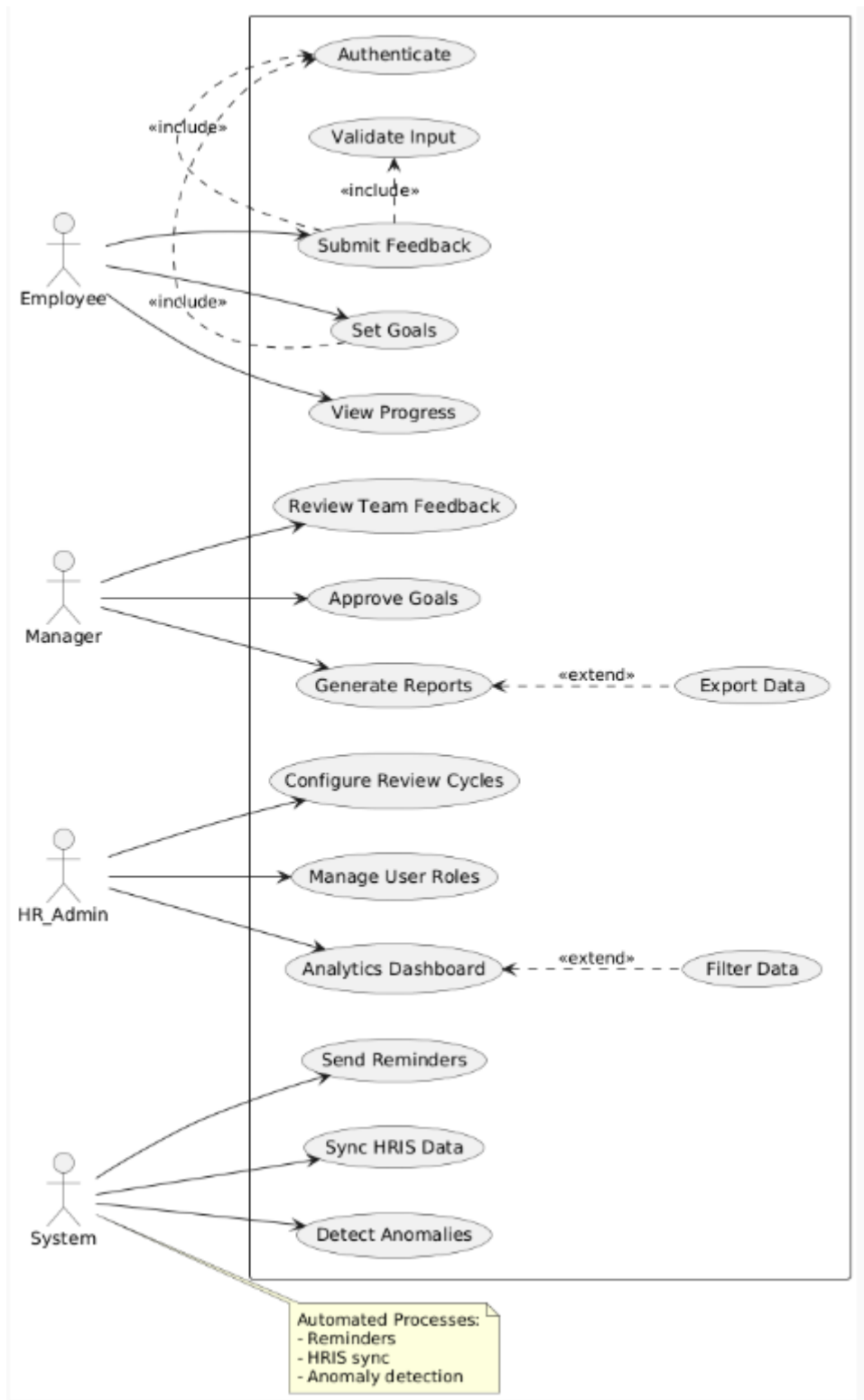
Automate 360° feedback via REST APIs with JWT authentication

- Track OKRs using event-driven microservices
- Generate real-time analytics with Redis caching
- Enforce RBAC through JWT claims and database policies

2. Use Case Diagram

Key Use Cases:

- **Employees:** Submit feedback, track goal progress.
- **Managers:** Approve goals, generate team reports.
- **HR Admins:** Configure cycles, analyse org-wide data.
- **System:** Automated reminders & HRIS syncs.



3. System Overview

A cloud-based performance management system enabling:

- **360° feedback** (peer/manager/subordinate reviews)
- **Goal tracking** (OKRs/KPIs with progress monitoring)

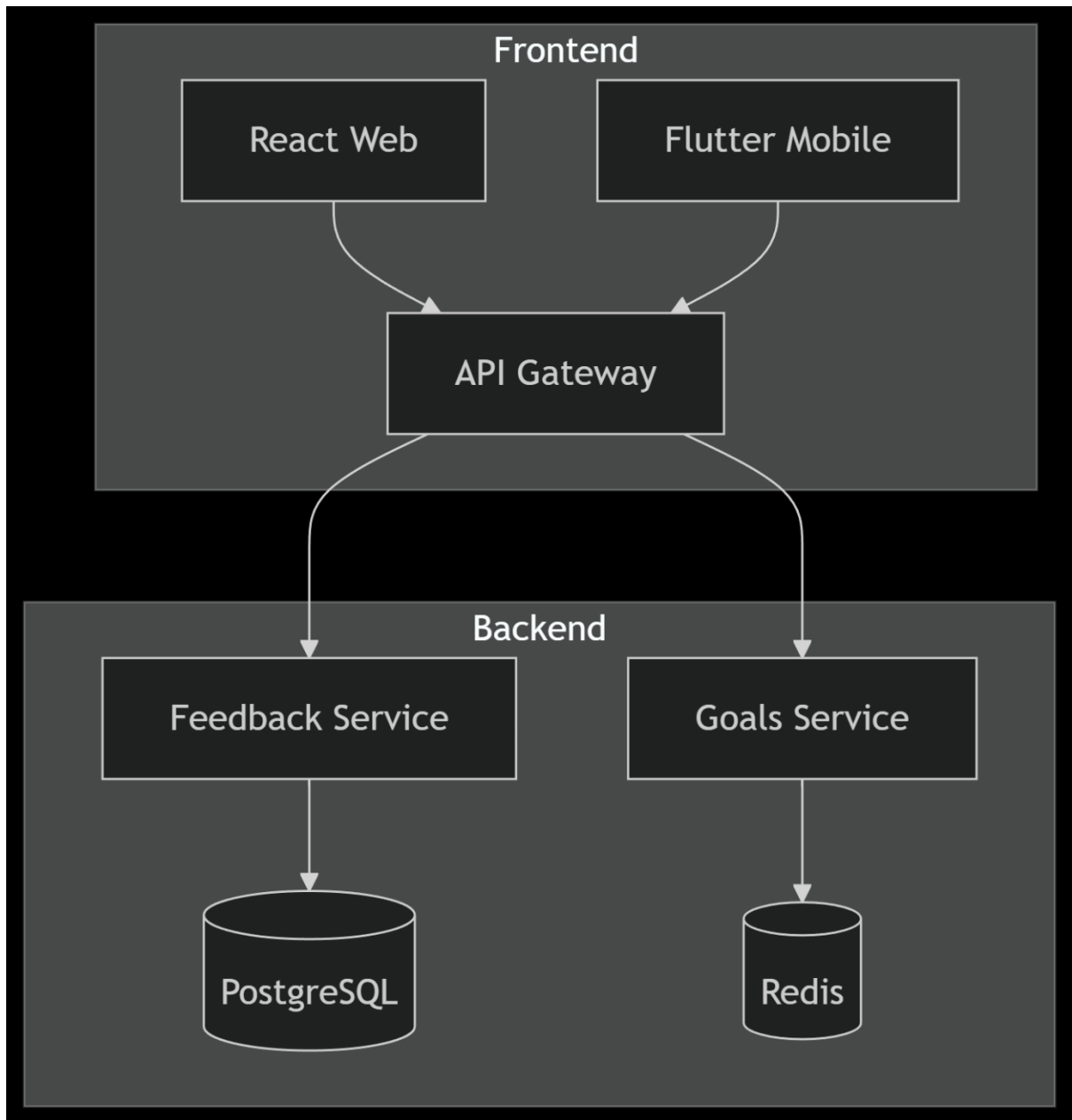
- **Automated review cycles** (quarterly/annual evaluations)
- **HR analytics** (sentiment analysis, completion rates)

Tech Stack:

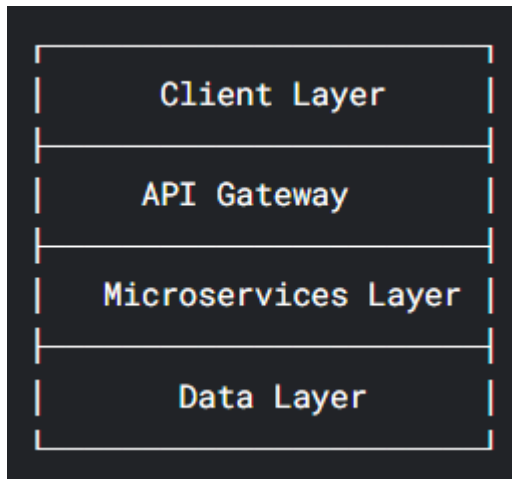
- Frontend: React.js (web) + Flutter (mobile)
- Backend: Node.js/Django (REST API)
- Database: PostgreSQL (structured data) + Redis (caching)
- Integrations: Slack/Teams notifications, HRIS sync (BambooHR/Workday)

Key Differentiators:

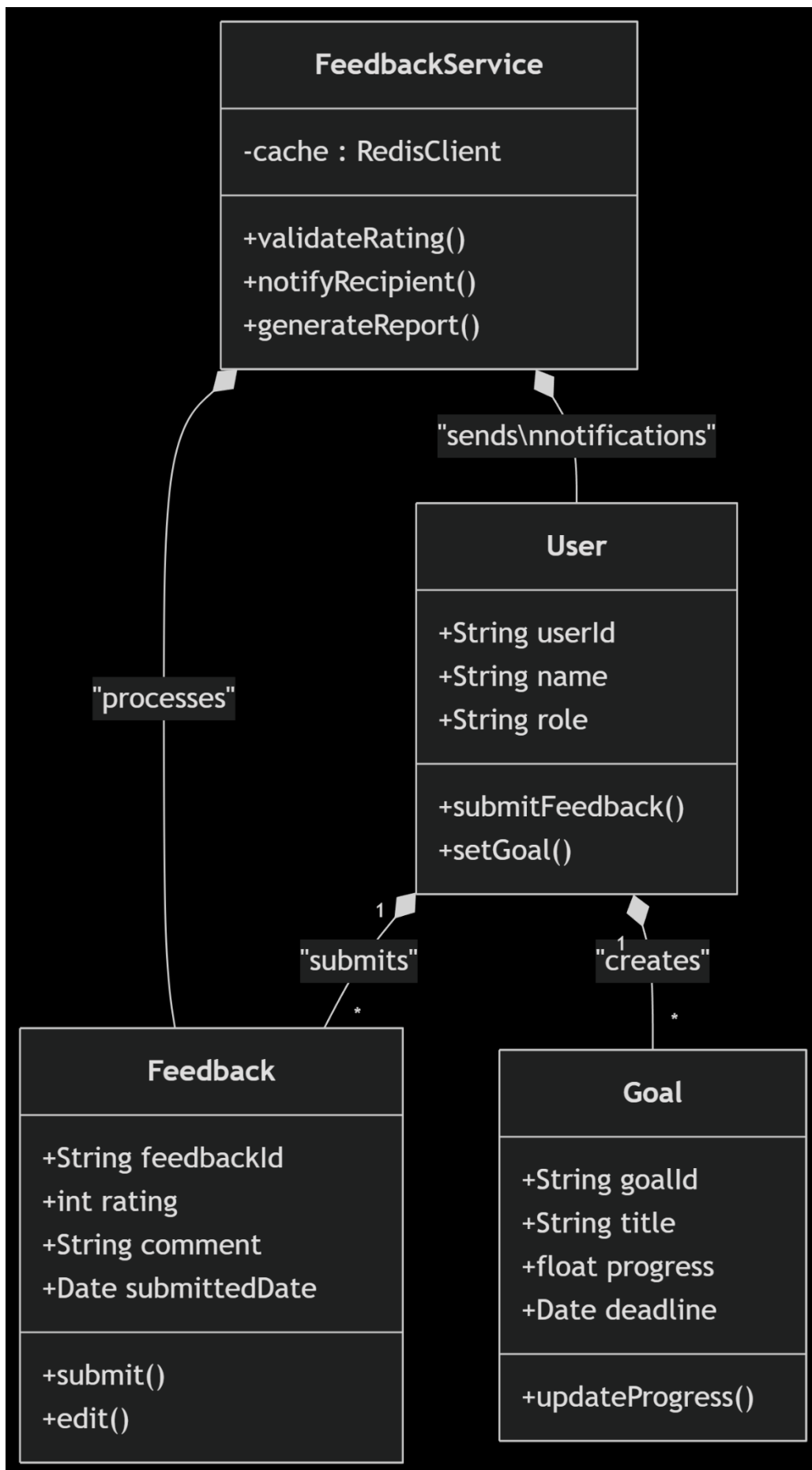
- AI-powered feedback suggestions
- Real-time progress dashboards
- Configurable review workflows



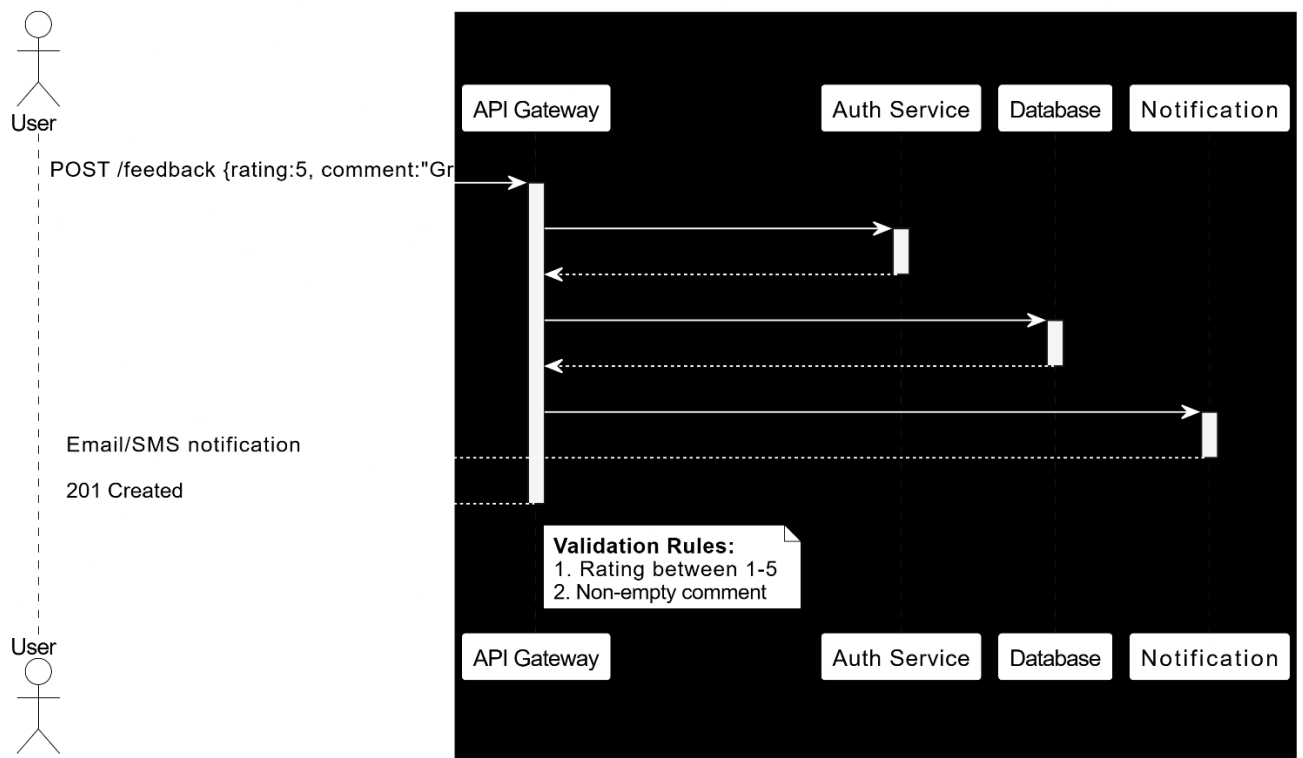
4. Architecture Design



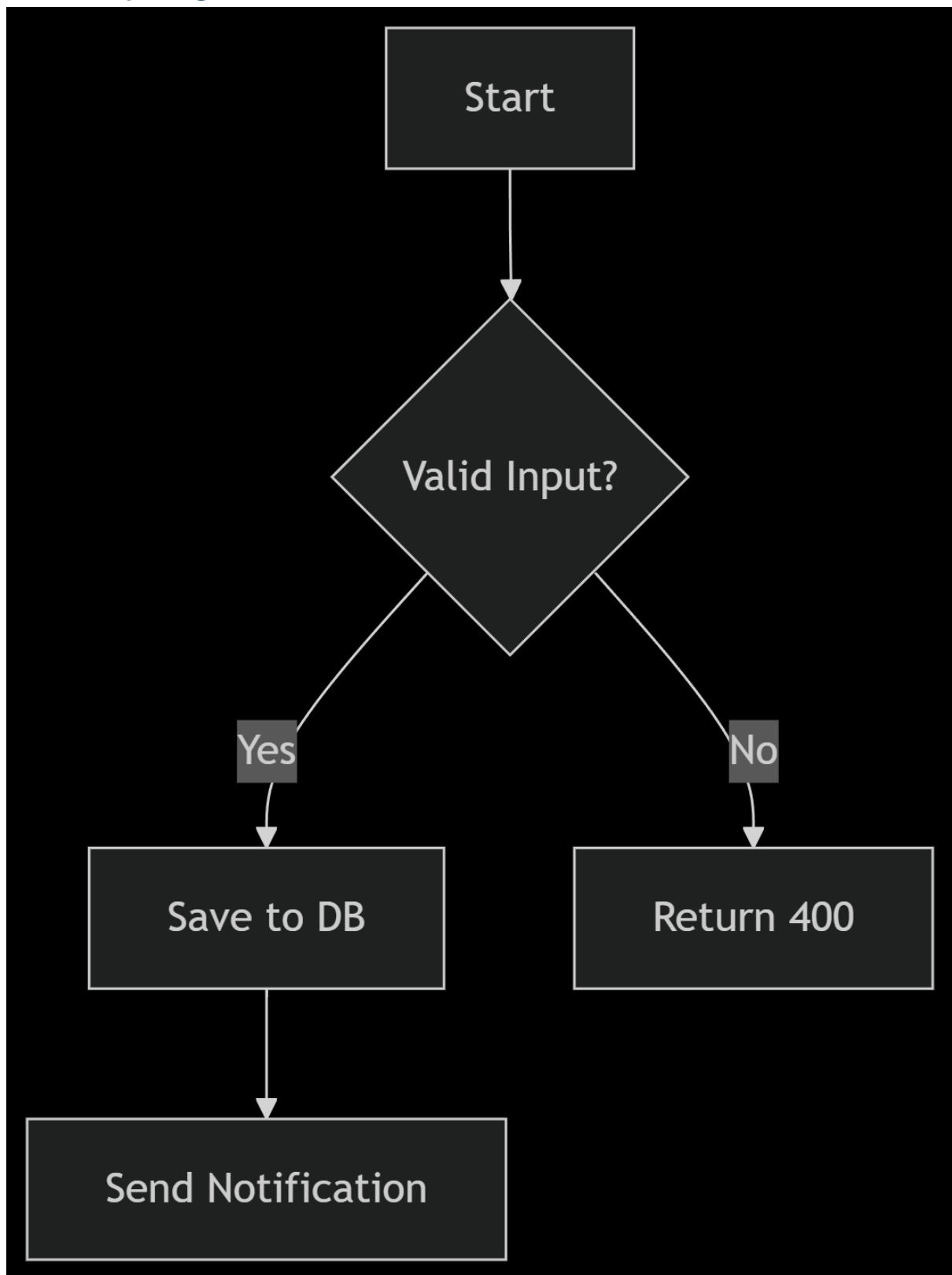
5. Class Diagram



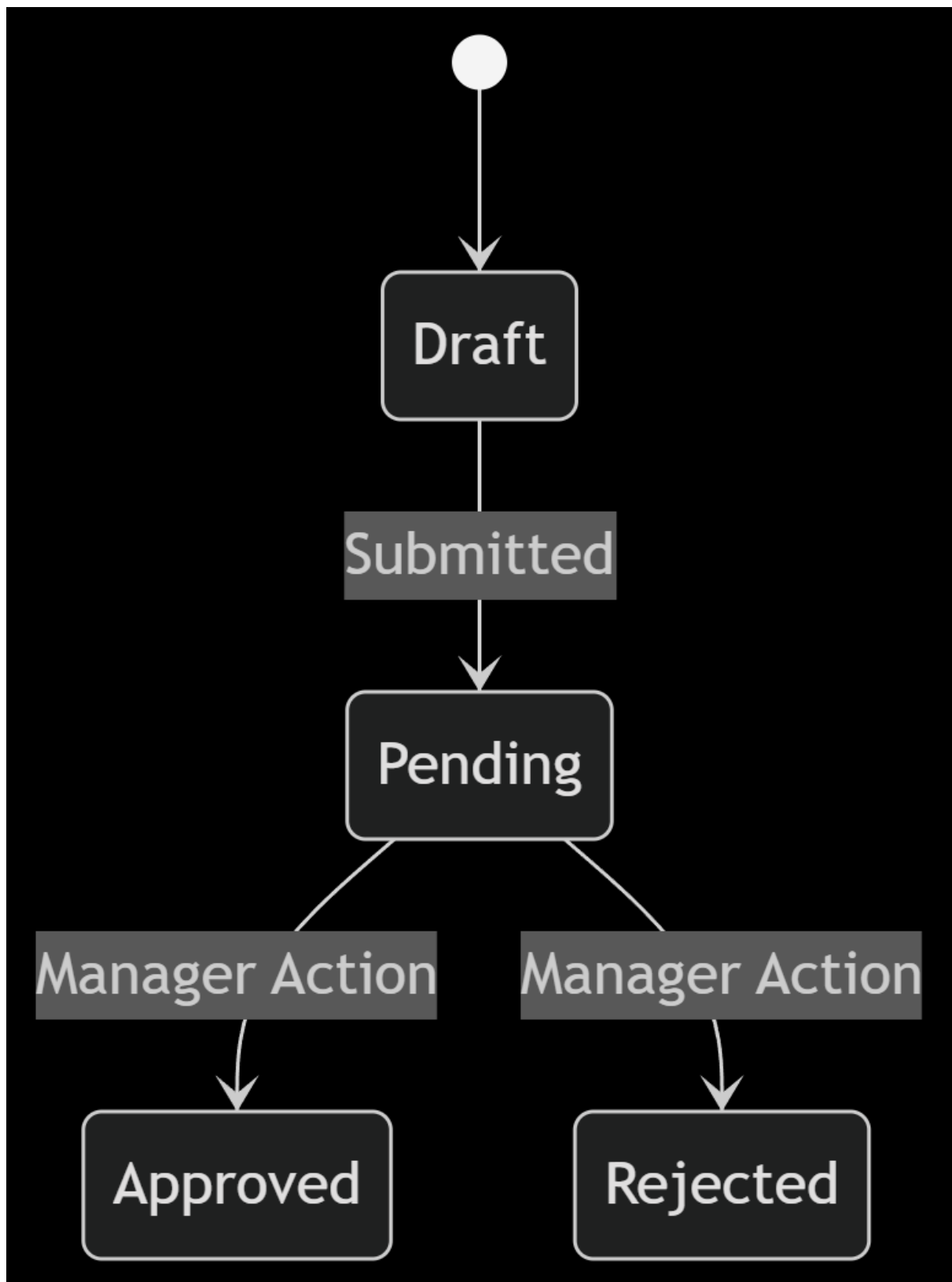
6. Sequence Diagram



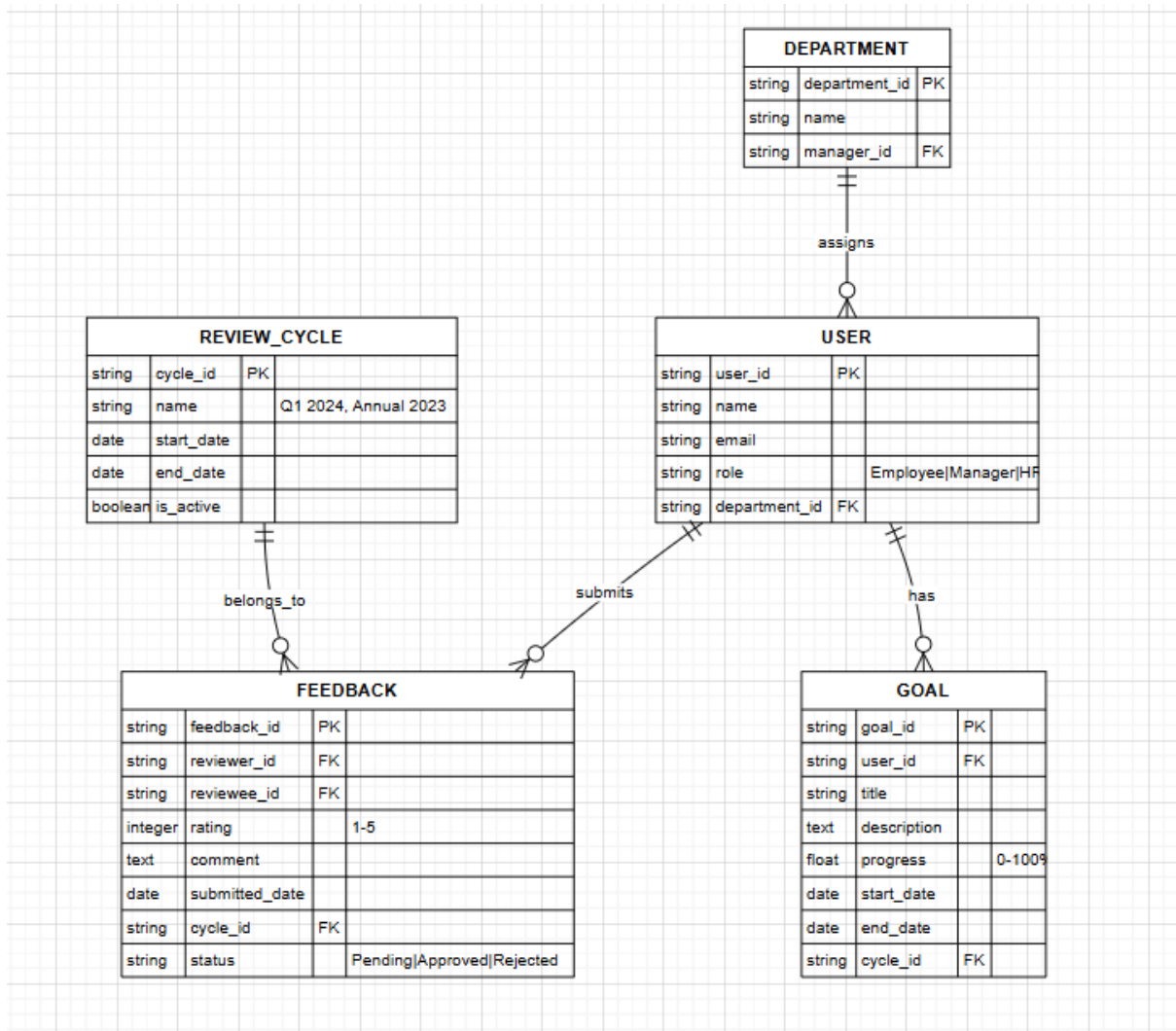
7. Activity Diagram



8. State Diagram



9. ER Diagram



10. Technology Stack

Layer Technology

Frontend: React, Flutter

Backend: Node.js (Express)

Database: PostgreSQL

Cache: Redis

Auth: JWT, OAuth 2.0

Deployment: Docker, AWS ECS

11. Deployment Architecture

