

TECHNICAL ARCHITECTURE DOCUMENTATION

Employee Management

Technical Architecture & System Documentation

Employee Management System (EMS)

1. Infrastructure & Tech Stack Rationale

1.1 Core Architecture

The system is designed to handle large volumes of data and support a distributed architecture.

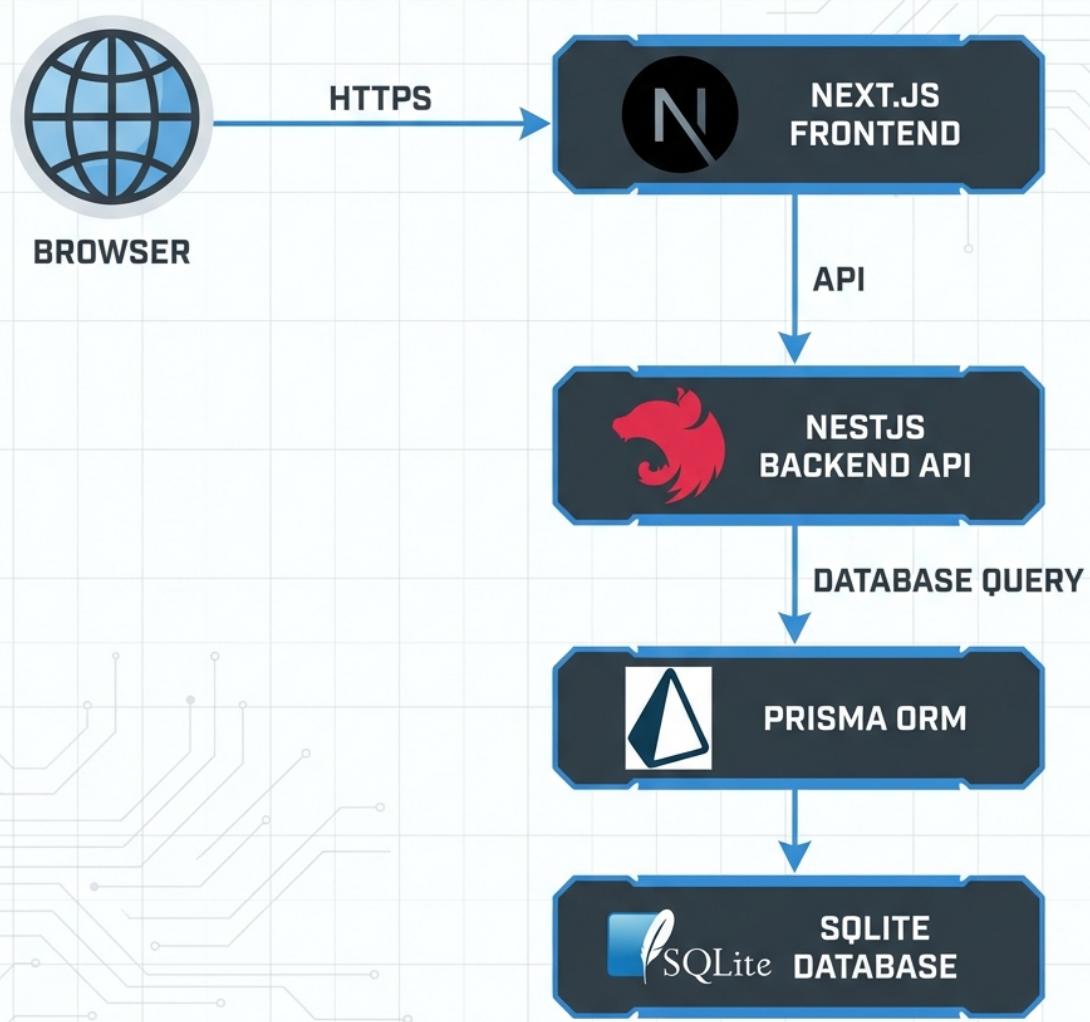
1.2 The Stack

| Components include:

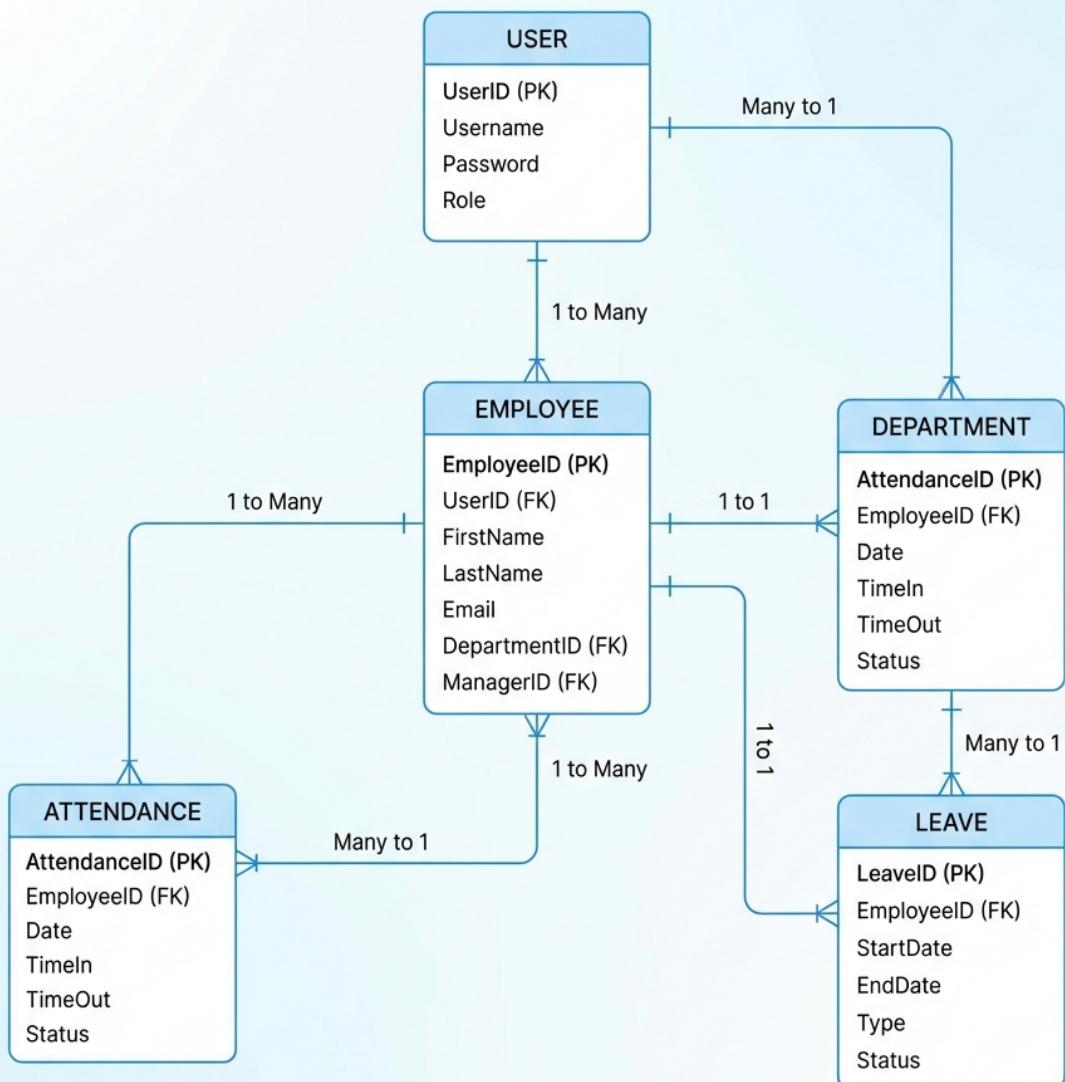
2. System Flow & Diagrams

2.1 High-Level System Architecture

WEB APPLICATION ARCHITECTURE

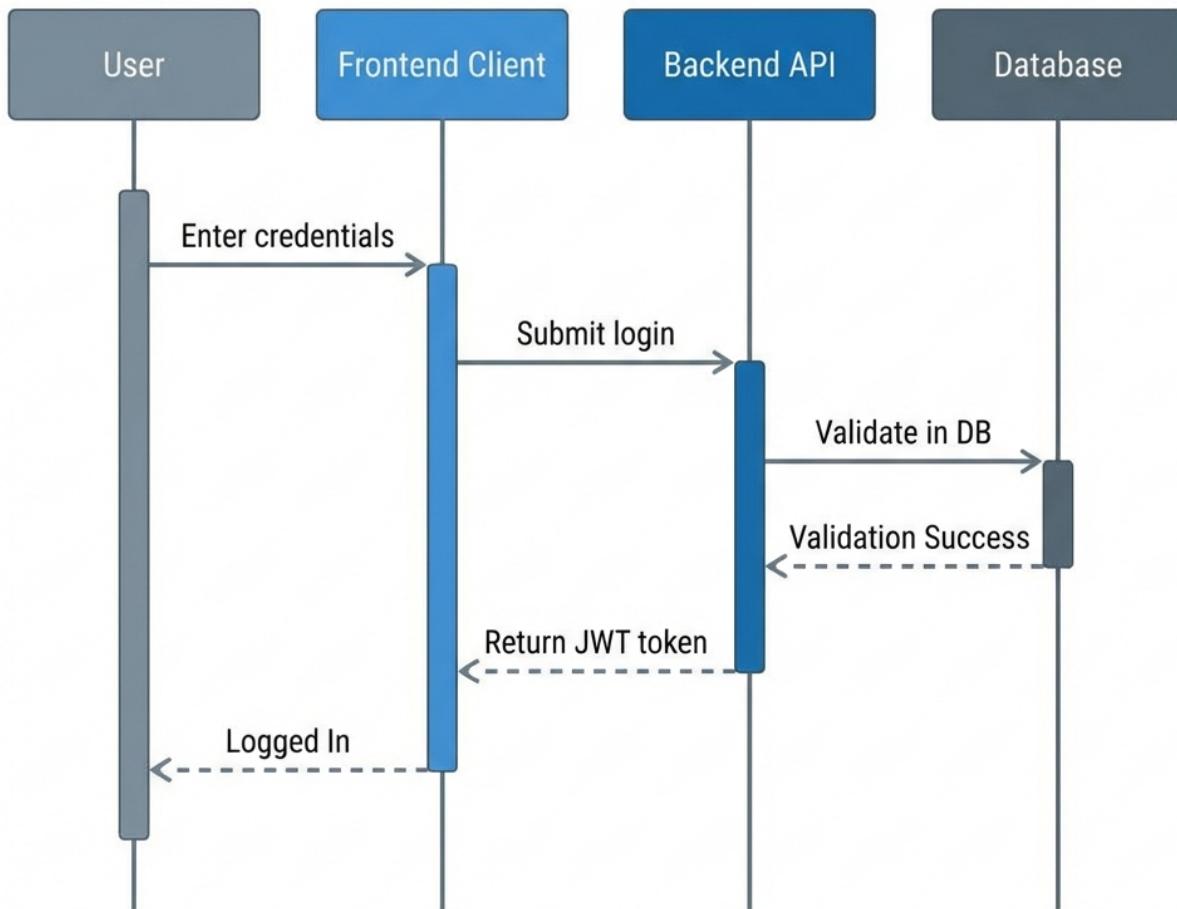


2.2 Database Entity Relationship (ER) Diagram



2.3 Authentication Flow

SEQUENCE DIAGRAM: AUTHENTICATION FLOW



3. Core Logic Implementation

3.1 Role-Based Access Control (RBAC)

The system
(like deleting)

Access Matrix:

- **ADMIN**

3.2 Attendance Logic

- **Constraints**

3.3 Leave Workflow

1. **Initiation**

4. Performance Optimization

4.1 Turbopack

By leveraging
incremental

4.2 SQLite in Production VS Development

While SQLite
transition to
`DATABASE`

5. Maintenance & Scaling

- **Migration

6. Conclusion

The EMS is
Safety**, **M
and develop