

Sprint 0 Documentation

Project Details

Project Name:	License Tracker
Sprint Date:	24 October

Team Details

Role	Name
Scrum Master	Amaan Majid
Product Owner	M. Varun Reddy
Developers	Yasaswini Desai, Rohan Kumar, Rakshit L, Sanjana B

1. Purpose of Sprint 0

Sprint 0 focused on establishing the foundational architecture for the License Tracker project using FastAPI (backend), React.js (frontend), and MySQL (database). The goal was to ensure a stable and scalable base so that upcoming sprints can focus on building core functionalities without setup-related delays.

2. Objectives

- Finalize the database schema and relationships in MySQL.
- Set up a modular FastAPI backend structure.
- Initialize the React.js frontend using Vite.
- Implement role-based access control and JWT authentication.
- Establish configurations and reusable modules for backend and frontend integration.

3. Completed Tasks

■	ER Diagram Finalization	Designed and finalized the ER diagram for the License Tracker system.
■	Database Schema Creation (MySQL)	Created normalized tables with relationships, constraints, and indexing.
■	FastAPI Project Setup	Set up the backend structure with organized routes, models, and configurations.
■	React Frontend Bootstrapping	Initialized React.js using Vite and configured routing for main components.
■	Role-Based User Model	Defined multiple user roles and access levels for system security.
■	JWT-Based Login Flow	Implemented secure login and authorization using JSON Web Tokens.

4. Discussion Summary

- During this sprint, the team discussed and finalized:
- The overall backend architecture and modular folder structure for FastAPI.
 - The frontend setup using React and Vite for a faster development workflow.

- The database schema to ensure proper relationships and scalability.
- Implementation of authentication and authorization using JWT.
- A clear plan for frontend-backend integration in upcoming sprints.

5. Blockers / Challenges

■	MySQL Connection Issues	Faced connection and driver errors during the initial FastAPI setup. Resolved by updating the MySQL client library.
■	JWT Token Validation	Encountered issues with expired or invalid tokens during testing. Adjusted the token expiration time and validation logic.

6. Conclusion

Sprint 0 successfully established the technical foundation for the License Tracker project. Despite a few initial setup challenges, the team completed all key objectives, enabling smooth transition into Sprint 1 for feature implementation and API integration.