

Day 3 Work Completion Report

Project: Mini Manufacturing ERP (PPO-Oriented)

Technology Stack: Java 17, Spring Boot, Spring Data JPA, MySQL

Objective of Day 3:

To build a strong backend foundation by setting up Spring Boot, connecting MySQL, creating entity mappings from the ER diagram, adding repository layers, and validating the complete backend structure.

Work Completed:

1. Spring Boot project setup with required dependencies.
2. MySQL database configuration and successful connection.
3. Layered package structure creation (controller, service, repository, entity, dto, exception).
4. Conversion of ER diagram into JPA entities (Role, User, Item, Supplier, PurchaseOrder, PurchaseOrderItem, GRR, GRRItem, SalesOrder, SalesOrderItem, Expense).
5. Repository interfaces created for all entities using JpaRepository.
6. Application run and schema validation using Hibernate.

Validation:

- Tables and foreign key constraints created successfully.
- Application started without runtime errors.
- Hibernate schema validation completed.

Outcome:

Day 3 work is completed successfully. Backend foundation is stable, ERP-compliant, and ready for Day 4 (User & Role CRUD implementation).