

Final Sprint Review Document – Sprint 1

- **Sprint Pod Name:** MediConnect_Backend_Team

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What Was Achieved

- Designed a **normalized ER model** for Patients, Doctors, Appointments, and MedicalCases.
- Developed **Java classes** using object-oriented principles like interfaces and inheritance.
- Wrote and executed **SQL CRUD queries** for all core entities.
- Integrated **Java and JDBC** to handle real-time read/write operations to the database.
- Implemented **appointment queuing** using Java Collections and logged appointment timestamps using the Date/Time API.

Key Challenges

- Designing relationships and normalization in the ERD without creating redundancy.
- Managing JDBC connectivity and query execution for multiple entities.
- Handling edge cases in CRUD operations (e.g., invalid patient IDs or duplicate entries).
- Formatting and validating timestamp data correctly using Java Date/Time API.

Final Reflections and Learnings

- Learned how to structure a relational database for a healthcare CRM scenario.
- Gained hands-on experience in building modular, object-oriented Java programs.

- Understood JDBC-based integration and how to handle exceptions and data integrity in backend systems.
- This sprint laid a strong technical foundation for the UI and cloud-based extensions in upcoming sprints.