

The **Hospital Equipment Maintenance Monitoring System (HEMMS)** aims to digitalize the maintenance workflow in hospitals.

Currently, hospitals rely on paper-based tracking, which leads to missed maintenance schedules, poor accountability, and

long downtime of critical medical equipment. The proposed system will automate maintenance scheduling, technician assignment, repair tracking, alert generation, and reporting.

The main users of the system are:

- Technicians – perform maintenance tasks
- Maintenance Supervisors – assign jobs and track status
- Hospital Administrators – check reports and budgets
- IT/Database Officers – manage the Oracle database

The business process starts when equipment is registered by the administrator. If maintenance is required, a supervisor assigns

a technician who performs the task and updates the system. If a deadline is near, the system automatically generates an alert

and sends it to the supervisor. All completed maintenance data will be stored in the maintenance history table for BI analysis.

Analytics will be used to determine:

- The cost of repairs per department
- Failure trends of equipment
- Technician performance
- Predictive maintenance possibilities

This system improves accountability, ensures real-time tracking, and supports better hospital decision-making.