PROJECT PLANNING

Date	28 October 2025
Team ID	NM2025TMID07064
Project Name	Medical Inventory Management System
Maximum Marks	5 Marks

Introduction :

The Project Planning Phase establishes the foundation for developing the Medical Inventory Management System. It defines the scope, objectives, and execution strategy of the system while ensuring resource optimization and time efficiency. This phase helps stakeholders understand the deliverables, responsibilities, and expected outcomes clearly. Using Agile methodology, the project is divided into short iterative sprints to promote continuous testing, improvement, and feedback. This approach ensures adaptability, transparency, and collaboration throughout the development lifecycle.

ProductBacklog :

The Product Backlog includes essential features required to build the Medical Inventory Management System. It acts as a prioritized list guiding the development process. The major backlog items include supplier management,stock tracking, purchase entry, usage monitoring, billing, and report generation. Each feature is broken down into smaller, manageable tasks, ensuring stepwise development and easyintegration. Backlog refinement sessions ensure that highpriority modules such as medicine stock updates and billing automation are developed first, followed by secondary features like alerts and analyticsdashboards.

SprintSchedule :

The development is divided into short sprints of one to two weeks, where each sprint focuses on a specific module.

Sprint 1: Development of Supplier and Stock Management modules.

Sprint 2: Purchase and Usage Tracking modules.

Sprint 3: Billing, Alerts, and Expiry Management modules. Sprint 4:Dashboard, Testing, and Deployment.

Atthe end of each sprint, progress is reviewed, and any new requirements or issues are addressed through stakeholder feedback and internal testing.

Effort Estimation:

Effort estimationisdoneusing story points based on the complexity of each feature. Tasks like creating data modelsorfields are assigned lower points, while automation and validation tasks are assigned higherpoints.This estimation ensures efficient workload distribution and realistic timeline planning. It alsohelpsidentify potential risks and dependencies early in the process, contributing to smooth projectexecution.

Conclusion:

Through structured backlog management, sprint planning, and accurate effort estimation, the project planning phaseensures systematic development of the Medical Inventory Management System. This method guarantees faster delivery, improved quality, and flexibility to adapt to evolving healthcare inventory management needs.