

PROJECT PLANNING

Date	23 Octobar 2025
Team ID	NM2025TMID08036
Project Name	Medical Inventory Management
Maximum Marks	2 Marks

Introduction:

The Project Planning Phase serves as the foundation for developing the Medical Inventory Management System. It defines the scope, goals, and structure of the development process while aligning tasks with available resources and timelines. The planning phase ensures that all stakeholders clearly understand project deliverables, responsibilities, and expected outcomes. Using the Agile methodology, the project is divided into iterative sprints that allow continuous improvement, testing, and feedback. This structured approach enhances collaboration, transparency, and adaptability throughout the development cycle.

Product Backlog:

The Product Backlog consists of all essential features required to build the Medical Inventory Management System. It is a prioritized list that guides development efforts and ensures alignment with project objectives. The primary backlog items include medical item creation, stock tracking, supplier management, billing, and audit reporting. Each feature is broken down into smaller, manageable user stories within the system, allowing

systematic implementation and testing. Regular backlog refinement ensures that high-priority items such as inventory control and supplier modules are

developed first, followed by secondary features like analytics and notification automation.

Sprint Schedule:

The project is divided into short, iterative sprints of one to two weeks. Each sprint focuses on a specific module of the system to ensure incremental progress and regular feedback.

Sprint 1: Development of Medical Item and Stock Management modules.

Sprint 2: Supplier and Purchase Order Management functionality.

Sprint 3: Billing, Expiry Alert, and Audit Report modules.

Sprint 4: Dashboard creation, testing, and deployment.

At the end of each sprint, progress is reviewed, and adjustments are made to accommodate any new requirements or improvements identified during testing and stakeholder evaluation.

Effort Estimation:

Effort estimation was carried out using the story point method, where each backlog item was assigned a complexity value based on the time and resources required. Simple tasks such as creating objects and fields were given lower estimates, while automation, integration, and testing were assigned higher points. This estimation helped in efficient time management and workload distribution among team members. It also provided a realistic understanding of project timelines and potential risks, ensuring that objectives were achieved within the planned schedule.

Conclusion:

Through structured backlog management, sprint planning, and precise estimation, the project planning phase ensures smooth and organized execution of the Medical Inventory Management System. This systematic

approach facilitates faster delivery, higher quality, and adaptability to changing requirements within the healthcare management environment.