Garage Management System – Project Planning

Garage Management System – Project Planning & Scheduling

Date: 29-06-2025
Team ID: LTVIP2025TMID28841
Project Name: Garage Management System
Maximum Marks: 5 Marks

5.1 Project Plan (Gantt Chart)

Introduction:
The success of any software implementation project depends significantly on effective planning and time-bound execution. For the Garage Management System, a structured timeline ensures that key phases like requirement gathering, development, testing, and deployment are executed in a well-coordinated manner. To visualize and track progress, a Gantt Chart outlines major milestones across the project lifecycle.

Project Duration:
Start Date: January 2025
End Date: September 2025
Total Duration: 9 months

The project is divided into 10 key phases, each with dependencies on preceding tasks. Activities have been scheduled with enough buffer to accommodate review cycles, testing iterations, and change requests.

Key Phases & Activities:

1. Requirement Analysis (Jan – Feb): Understanding garage workflows, identifying pain points, preparing use cases.
2. System Design (Feb – Apr): Data modeling, ER diagrams, DFDs, UI planning, architecture definition.
3. Development (Mar – May): Building modules for vehicle management, appointment booking, parts inventory.
4. Testing (Apr – Jun): Functional testing, bug fixing, and UAT (User Acceptance Testing).
5. Deployment (May – Jul): Final deployment to the live environment, configuration, integration setup.
6. User Training (Jun – Aug): Hands-on sessions for garage staff and admin personnel.
7. Documentation (Jul – Aug): User manuals, process documentation, system architecture handoff.
8. Review & Feedback (Aug – Sept): Collection of feedback, minor changes, performance tuning.
9. Project Closure (Sept): Final approval, project report submission, success review.

Gantt Chart Overview:
- Development begins in March but overlaps with design finalization.
- Testing starts midway through development to follow an agile and iterative cycle.
- Deployment and training are parallel to avoid delays.

Dependencies & Risk Management:
- Dependency 1: Testing depends on partial development completion.
- Dependency 2: Training is dependent on successful UAT results.
- Dependency 3: Documentation starts only after core features are stable.

To mitigate risks:
- Weekly sprint reviews and internal demos.
- Buffer time before critical milestones like deployment and closure.
- Slack time during documentation and feedback phases.

Tools Used for Scheduling:
- Project Tracking Tool: Trello for task-level management.
- Gantt Chart Tool: Microsoft Excel & Lucidchart for timeline visualization.
- Sprint Management: Jira (optional) for agile planning and collaboration.

Conclusion:
The structured planning reflected in the Gantt chart ensures systematic development and delivery of the Garage Management System. Adhering to this timeline allows the team to maintain focus, adapt to changes, and deliver a reliable, user-friendly solution for garage operations.