**Project Design Phase-II**

**Solution Requirements (Functional & Non-functional)**

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| Date | 27 June 2025 |
| Team ID | LTVIP2025TMID30146 |
| Project Name | Garage management system |
| Maximum Marks | 4 Marks |

**Functional Requirements:**

Following are the functional requirements of the proposed solution:

| ID | Requirement | Description |
| --- | --- | --- |
| FR01 | Vehicle Issue Input Support | System should accept vehicle-related queries (e.g., “Car makes grinding noise when braking”). |
| FR02 | AI Troubleshooting | Accept input, process with IBM Granite model, and return probable issue causes. |
| FR03 | Maintenance Scheduling | Suggest next service date based on mileage or last service date. |
| FR04 | Parts Inventory Lookup | Check availability of spare parts and suggest alternatives. |
| FR05 | Service Booking | Allow customers to book or reschedule service appointments. |
| FR06 | Invoice & Job Card Generation | Auto-generate service invoices and job cards from AI recommendations. |
| FR07 | Customer Communication | Provide multi-language AI chatbot support for FAQs and updates. |
| FR08 | Salesforce Integration | Store AI outputs, service history, and booking details in Salesforce. |
| FR09 | Quick AI Response | Return results within 5–6 seconds for standard queries. |

**Non-functional Requirements**

Following are the non-functional requirements of the proposed solution:

| ID | Requirement | Description |
| --- | --- | --- |
| NFR01 | Platform Independence | Application should run on any modern browser (desktop & mobile). |
| NFR02 | Accessibility | Interface should be clean, tab-based, and support accessibility tools. |
| NFR03 | Performance | AI responses should be generated in under 6 seconds. |
| NFR04 | Security | No sensitive customer data should be stored in AI processing. |
| NFR05 | Scalability | Should scale easily when deployed on Hugging Face Spaces or Salesforce Experience Cloud. |