**RMMM Document**  
**Project Title:** Car Rental Showroom System  
**Version:** 1.0  
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**Prepared By:** Muhammad Saad Arshad, Ayesha Nasir  
**Supervisor:** Miss Mahrukh

**1. Introduction**

This document identifies potential risks to the *Car Rental Showroom System* project, outlines mitigation strategies, and defines how risks will be monitored and managed throughout the software development lifecycle.

**Risk Management Table**

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| **Risk ID** | **Risk Description** | **Probability** | **Impact** | **Risk Score (P × I)** | **Category** | **Mitigation Strategy** |
| **R001** | **Database connection failure.** | **Medium (2)** | **High (3)** | **6** | **Technical** | **Implement connection retries and fallback; monitor DB uptime with alerts.** |
| **R002** | **Server downtime during deployment.** | **Medium (2)** | **High (3)** | **6** | **Deployment** | **Schedule deployments during off-peak hours; use Docker rollback if failure occurs.** |
| **R003** | **User data privacy breach.** | **Low (1)** | **High (3)** | **3** | **Security** | **Use HTTPS, sanitize inputs, and enforce secure password policies and encryption.** |
| **R004** | **Payment gateway failure.** | **Low (1)** | **High (3)** | **3** | **External Dependency** | **Set up alerts, integrate backup gateway if primary fails.** |
| **R005** | **High traffic overload during peak hours.** | **Medium (2)** | **Medium (2)** | **4** | **Performance** | **Enable auto-scaling; use caching mechanisms to balance load.** |
| **R006** | **Bugs in new feature releases.** | **Medium (2)** | **Medium (2)** | **4** | **Development** | **Perform unit & integration tests; deploy to staging before production.** |
| **R007** | **Team member unavailability near deadlines.** | **Medium (2)** | **Medium (2)** | **4** | **Organizational** | **Cross-train team members; maintain buffer time in project timeline.** |
| **R008** | **Outdated third-party libraries.** | **High (3)** | **Medium (2)** | **6** | **Maintenance** | **Regularly audit dependencies; schedule periodic updates and security checks.** |

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**5. Conclusion**

This RMMM document is essential for identifying and addressing risks during the development of the *Car Rental Showroom System*. All stakeholders must periodically review and update this document to adapt to emerging risks and maintain project stability and security.