

# LEASE MANAGEMENT TESTING SYSTEM

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| Date         | 29 June 2025  |
| Team ID      | NM2025TMID07016   |
| Project Name | Lease management  |
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## PERFORMANCE TESTING PHASE

### 1. Objective

The primary objective of the **testing phase** is to ensure that the **Lease Management System** functions as intended, meets all user requirements, and maintains high performance, security, and reliability before deployment.

### 2. Testing Strategy

The testing strategy involves a **multi-layered approach**, combining different types of testing to cover all system aspects — from functionality to performance and security.

#### a. Unit Testing

- Conducted by developers on individual modules (e.g., Lease Creation, Payment Tracking).
- Ensures each function or component works independently.

### 3. Metrics & Benchmarks

#### Metric Description Benchmark / Target

|                       |  |   |
|-----------------------|--|---|
| <b>Defect Density</b> | - Number of defects per module or -function tested | - $\leq 1$ defect per 1,000 lines of code |
|-----------------------|--|---|



## TESTING PROCESS

### 4. Tools Used

- **Jira / TestRail** – For test case management, tracking bugs, and documenting test results.
- **Selenium** – For automating web-based user interface testing.
- **Postman** – For API testing and validating backend integrations.
- **Apache JMeter** – For performance and load testing to evaluate system speed and stability.
- **OWASP ZAP / Burp Suite** – For security and penetration testing to detect vulnerabilities.

### 5. Result Summary

- **Functional Testing:** All core modules (lease, tenant, payment, and notification) passed with minor non-critical issues fixed immediately.
- **Integration Testing:** Data flow between modules was validated successfully; API endpoints returned correct responses.