Lesotho Parliamentary Feedback and Transparency Platform

# 1. Introduction

This document describes the design, system requirements, and software requirements for the Lesotho Parliamentary Feedback and Transparency Platform. The platform allows citizens to securely send feedback, petitions, and suggestions to Parliament Members, track their status, and participate in a public suggestion board. Parliament Members can respond, analyse public input, and generate reports.

# 2. Objectives

• Provide a secure, intuitive online portal for citizens.  
• Enable real-time status tracking and notifications.  
• Offer a public suggestion board with voting.  
• Provide analytics to Parliament Members for evidence-based decisions.  
• Model the system with UML diagrams for clarity and maintainability.

# 3. System Requirements

## 3.1 Hardware Requirements

|  |  |  |
| --- | --- | --- |
| Component | Minimum Requirement | Recommended |
| Server CPU | Quad-core 2.0 GHz | Octa-core 3.0 GHz |
| Server RAM | 4 GB | 8 GB+ |
| Server Storage | 50 GB SSD | 100 GB SSD+ |
| Client Device | 1 GHz CPU, 2 GB RAM | 2 GHz CPU, 4 GB RAM |
| Network | 5 Mbps up/down | 20 Mbps up/down |

## 3.2 Software Requirements

• Operating System: Ubuntu Server 22.04 / Windows Server  
• Web Server: Apache or Nginx  
• Application Layer: PHP  
• Database: MySQL 8.x or PostgreSQL 13+  
• Frontend: HTML5, CSS3, Boostrap  
• Browser Support: Chrome, Firefox, Edge, Safari  
• Notifications: SMTP Email server / SMS Gateway

# 4. Software Requirements

## 4.1 Functional Requirements

FR1: The system shall allow citizens to register, login, and update profiles.  
FR2: The system shall allow citizens to submit feedback and petitions.  
FR3: The system shall allow citizens to post suggestions and vote on suggestions.  
FR4: The system shall allow Parliament Members to view and respond to submissions.  
FR5: The system shall notify citizens of status updates.  
FR6: The system shall allow Admin to manage users, moderate content, and generate analytics reports.

## 4.2 Non-Functional Requirements

NFR1: The system shall support 500 concurrent users (scalable to 5,000).  
NFR2: Page load time shall not exceed 3 seconds under normal load.  
NFR3: All communications shall be encrypted (HTTPS).  
NFR4: The system shall be responsive and usable on mobile devices.  
NFR5: The system shall have at least 99.5% uptime.

# 5. UML Diagrams

This section contains Use Case, Class, Activity, Sequence, and Deployment Diagrams illustrating system functionality. (Diagrams to be inserted here).

# 6. Conclusion

This combined document presents the System Requirements, Software Requirements, and UML Design for the Lesotho Parliamentary Feedback and Transparency Platform. It gives a clear blueprint for developers and stakeholders, ensuring the platform is secure, scalable, and meets its objectives of improving transparency and citizen engagement.