

Perfect Love School of Ministry (PLSOM) - Product Requirements Document

1. Executive Summary

PLSOM requires a comprehensive Learning Management System (LMS) to digitize their ministry training programs. The platform will support role-based access for administrators, lecturers, and students, with features for course management, live classes, assessments, and student tracking.

2. System Architecture Overview

2.1 Authentication & Authorization

- **JWT-based authentication** for secure session management
- **Role-Based Access Control (RBAC)** with three primary roles:
 - Admin (full system access)
 - Lecturer (course and student management)
 - Student (program-specific access)

2.2 Core User Roles

Admin Role

- Full platform administration
- User management (create/edit/delete lecturers and students)
- Cohort management
- System configuration
- Can also function as a lecturer

Lecturer Role

- Course management (assigned courses only)
- Class scheduling and management
- Test creation and grading
- Student progress tracking
- Access to student contact information

Student Role

- Program-specific access (Certificate or Diploma)
- Class attendance and participation

- Test submission
- Access to recordings and materials
- Profile management

3. Core Features

3.1 User Management

- **No public signup** - All users added by administrators
- User profile management (edit profile, change password)
- Password reset functionality via email
- Contact information storage (email, WhatsApp)

3.2 Cohort Management

- **Single active cohort** constraint per program type
- Cohort-based student grouping
- Program association (Certificate/Diploma in Practical Ministry)
- Student enrollment tracking

3.3 Course & Curriculum Management

- Hierarchical structure: Programs → Courses → Classes/Tests
- **Certificate Program Courses:**
 - Church Administration (10 modules)
 - Acts of Apostles (5 modules)
 - Doctrine 101 (6 modules)
 - The Pastoral (5 modules)
 - Evangelism (3 modules)
 - Eschatology (2 modules)
- **Diploma Program Courses:**
 - Church Planting and Mission (10 modules)
 - Ministerial Ethics and Development (5 modules)
 - The Five Fold Ministry (8 modules)
 - ADR (Conflict Resolutions) (4 modules)
 - The Dispensations of God (6 modules)
 - Christian Apologetics (4 modules)
 - Hermeneutics and Homiletics (6 modules)

3.4 Class Management

- **Live class scheduling** with Zoom integration
- Lecturer assignment to courses
- Class recordings storage and access
- **Attendance tracking** via Zoom integration:
 - Join/leave timestamps
 - Duration calculation
 - Recording access counts as attendance

3.5 Assessment System

- **Dynamic form builder** for test creation
- Support for:
 - Rich text questions
 - File upload submissions
 - Multiple choice questions
 - Essay questions
- **Test scoring** and grade management
- Submission tracking and timestamps

3.6 Communication Features

- **Email integration** for lecturer-student communication
- **WhatsApp integration** for direct messaging
- **Email notifications** for:
 - Class schedules
 - Test assignments
 - Grade notifications
 - System announcements

4. Technical Requirements

4.1 Zoom Integration

- **Zoom SDK/API integration** for:
 - Meeting creation and management
 - Attendance tracking

- Recording management
- Participant monitoring

4.2 File Management

- Support for test file uploads
- Recording storage and streaming
- Document management for course materials

4.3 Email System

- SMTP integration for notifications
- Template-based email system
- Password reset workflows

4.4 Database Schema (High Level)

Core Entities:

- **Users** (id, email, role, profile_data, created_at)
- **Cohorts** (id, name, program_type, is_active, start_date)
- **Courses** (id, name, program_type, module_count, description)
- **Classes** (id, course_id, lecturer_id, title, scheduled_at, zoom_meeting_id)
- **Tests** (id, course_id, title, form_schema, due_date, total_score)
- **Submissions** (id, test_id, student_id, answers, score, submitted_at)
- **Attendance** (id, class_id, student_id, join_time, leave_time, duration)
- **Enrollments** (student_id, cohort_id, enrolled_at)
- **CourseAssignments** (lecturer_id, course_id, assigned_at)

5. User Workflows

5.1 Admin Workflows

1. User Management:

- Create lecturer/student accounts
- Assign lecturers to courses
- Manage cohorts and enrollments

2. System Administration:

- Configure system settings
- Monitor platform usage

- Generate reports

5.2 Lecturer Workflows

1. Course Management:

- View assigned courses
- Schedule live classes
- Create and manage tests
- Track student progress

2. Class Delivery:

- Conduct live sessions via Zoom
- Monitor attendance
- Upload recordings
- Grade assessments

5.3 Student Workflows

1. Learning Activities:

- Attend live classes
- Access recordings
- Submit tests
- View grades and feedback

2. Communication:

- Contact lecturers via email/WhatsApp
- Receive notifications
- Update profile information

6. Non-Functional Requirements

6.1 Security

- JWT token expiration and refresh
- Role-based access validation
- Secure file upload handling
- Password complexity requirements

6.2 Performance

- Support for concurrent users during live classes

- Efficient video streaming for recordings
- Fast test submission processing

6.3 Scalability

- Horizontal scaling capability
- CDN integration for media files
- Database optimization for large datasets

7. Integration Requirements

7.1 Third-Party Services

- **Zoom API** for video conferencing
- **Email service** (SendGrid, AWS SES, etc.)
- **WhatsApp Business API** for messaging
- **Cloud storage** (AWS S3, Google Cloud) for files

7.2 Analytics

- User engagement tracking
- Class attendance analytics
- Assessment performance metrics
- System usage reports

8. Success Metrics

- **User Adoption:** Active students and lecturers using the platform
- **Engagement:** Class attendance rates and recording views
- **Academic Performance:** Test completion and scoring metrics
- **System Reliability:** Uptime and performance metrics

9. Future Enhancements

- Mobile application development
- Advanced analytics dashboard
- Integration with external learning resources
- AI-powered assessment tools
- Multi-language support

10. Risk Considerations

- **Zoom API limitations** and backup video solutions
 - **Data privacy** compliance for student information
 - **System downtime** during critical class times
 - **Scalability challenges** during peak usage periods
-

This PRD serves as the foundation for PLSOM's digital transformation, enabling efficient ministry training delivery while maintaining the school's commitment to practical, Spirit-led education.