Schools24 Platform - Week 1 Progress Report

Period: January 1 - January 4, 2026
Project: School Management Platform
Status: Foundation Phase - On Track

Executive Summary

Week 1 focused on establishing the technical foundation of the Schools24 platform. The core backend infrastructure has been successfully set up with all essential components integrated and ready for feature development.

What We Built This Week

Backend Core Infrastructure

- **Single Backend Server**: Built in Go using modern Gin framework for high performance and low memory usage
- **API Gateway**: Configured KrakenD API Gateway to manage all incoming requests securely
- **Real-time Caching System**: Redis with data compression enabled for fast access to frequently used information
- **Security Layer**: JWT authentication system ready to protect user data

Database Setup

- **PostgreSQL**: Connected and configured for storing school data (users, fees, grades)
- **MongoDB**: Configured for document-based data (exam questions, activity logs)
- **Secure Connections**: All database communications encrypted

Core Modules Created

Five main feature modules initialized and structurally building:

1. **Authentication** - User login, registration, and token management
2. **Academic** - Quizzes, homework assignments, grade tracking
3. **Finance** - Fee management, payment processing
4. **Notifications** - Email, SMS, and push notification support
5. **Operations** - Bus routes and inventory management

Deployment & DevOps

- **Kubernetes Configuration**: Complete setup for cloud deployment
- **Docker Support**: Container setup prepared for easy deployment
- **Istio Service Mesh**: Security and traffic management layer configured

Technical Achievements

- Modular architecture designed for scalability
- Configuration system ready for multiple environments (development, staging, production)
- Rate limiting and CORS policies implemented
- Cloud storage (AWS) connectors prepared

Next Steps (Week 2)

- Implement Authentication module with login/registration features
- Working with Frontend Code
- Set up basic user dashboard
- Begin mobile app integration

Resources Allocated

Development Team: UpCraft Solutions (Advance payment received: ₹15,000)

Report Generated: January 4, 2026
Next Report: January 11, 2026