

Detailed Interview Between Requirement Engineer and Business Owner for School Management System

Participants:

- **Requirement Engineer (RE)** – Jhon
- **Business Owner (BO)** – Hussain

Location: School Administration Office

Date: [Insert Date]

Duration: 90-120 minutes

1. Introduction & Meeting Objectives

RE: Good morning, [Business Owner's Name]. Thank you for taking the time to meet with me today. My goal is to thoroughly understand your school's operations, pain points, and expectations for the new **School Management System (SMS)**. This will help us design a solution that perfectly fits your needs.

BO: Good morning. We're excited about this project because our current manual processes are inefficient and error-prone.

RE: Great. I'll start with some high-level questions and then dive into specifics. Please feel free to elaborate on any points—the more details, the better.

Agenda for Today:

1. **Current System Overview & Pain Points**
2. **Key Functional Requirements**
 - Student Management
 - Attendance Tracking
 - Fee Management
 - Exam & Grading
 - Teacher & Staff Management
 - Communication Portal
 - Reporting & Analytics

3. **Non-Functional Requirements** (Security, Performance, Usability)
 4. **Integration Needs & Future Scalability**
 5. **Budget & Timeline Expectations**
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2. Deep Dive into Current Processes & Pain Points

A. General School Operations

RE: Could you walk me through the major administrative workflows in your school?

BO:

- **Student Admissions:** Parents submit physical forms, we verify documents, and manually enter data into spreadsheets.
- **Attendance:** Teachers take roll call on paper, which is later entered into Excel.
- **Fee Collection:** Parents pay via cash, bank transfer, or checks. We manually track payments, leading to delays and errors.
- **Exams & Grading:** Teachers submit marks in paper registers, which are compiled into report cards manually.
- **Timetable & Scheduling:** Done on paper, making last-minute changes difficult.
- **Communication:** Mostly via phone calls, WhatsApp groups, and printed notices.

RE: What are the biggest inefficiencies in these processes?

BO:

- **Data Duplication:** Same student details are entered multiple times.
 - **Errors in Manual Entry:** Wrong grades, incorrect fee records.
 - **Delays in Reporting:** Generating exam results or attendance summaries takes days.
 - **Lack of Transparency:** Parents don't have real-time access to their child's progress.
 - **Security Risks:** Paper records can be lost or accessed by unauthorized people.
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3. Detailed Functional Requirements Discussion

A. Student Management

RE: What student information should the system store?

BO:

- **Basic Details:** Name, age, gender, blood group, address, contact info.
- **Academic Records:** Class, section, previous school history.
- **Medical Records:** Allergies, disabilities, vaccination history.
- **Parent/Guardian Details:** Names, contact numbers, email, occupation.

RE: Should there be different user roles (Admin, Teacher, Parent, Student)?

BO:

- **Admin:** Full access (add/edit students, generate reports).
- **Teachers:** Can mark attendance, enter grades, view class schedules.
- **Parents:** View child's attendance, grades, fee status, and communicate with teachers.
- **Students (optional):** Access assignments, timetables, and grades.

B. Attendance Tracking

RE: How should attendance be recorded?

BO:

- **Daily Attendance:** Teachers mark present/absent via a digital interface.
- **Automated Alerts:** Notify parents if a student is absent.
- **Reports:** Monthly attendance summaries for admin and parents.

RE: Should biometric or RFID-based attendance be considered?

BO: Not immediately, but we'd like the system to support it in the future.

C. Fee Management

RE: Describe your current fee structure.

BO:

- **Fee Types:** Tuition, transport, extracurricular, late fees.
- **Payment Modes:** Cash, bank transfer, online payment (currently not automated).
- **Discounts/Scholarships:** Some students get partial waivers.

RE: What features do you need?

BO:

- **Automated Invoices & Receipts**
- **Online Payment Gateway Integration** (Credit Card, UPI, Net Banking)
- **Late Fee Calculation & Reminders**
- **Real-Time Fee Status Dashboard**

D. Exam & Grading System

RE: How are exams conducted and grades calculated?

BO:

- **Exam Types:** Unit tests, mid-terms, finals.
- **Grading System:** Percentage-based (some classes use GPA).
- **Report Cards:** Manually prepared—takes a lot of time.

RE: What improvements do you want?

BO:

- **Digital Grade Entry by Teachers**
- **Auto-Calculation of Results & Rank**
- **Customizable Report Card Templates**
- **Progress Graphs for Parents**

E. Teacher & Staff Management

RE: What staff-related functions should the system handle?

BO:

- **Teacher Profiles:** Qualifications, subjects taught, class assignments.
- **Attendance & Leave Management**
- **Salary Processing with Deductions (Tax, PF, etc.)**
- **Performance Reviews**

F. Communication Portal

RE: How should communication work?

BO:

- **Announcements:** School-wide or class-specific notices.
- **Parent-Teacher Messaging:** Secure chat or email integration.
- **SMS/Email Alerts:** For fees, attendance, emergencies.

G. Reporting & Analytics

RE: What reports are essential?

BO:

- **Student Performance Trends**
 - **Fee Defaulters List**
 - **Teacher Workload Analysis**
 - **School-wide Attendance Summary**
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4. Non-Functional Requirements

A. Security & Access Control

RE: How sensitive is the data?

BO: Very. Student records, fee payments, and exam results must be secure.

RE: Proposed Security Measures:

- **Role-Based Access Control (RBAC)**
- **Data Encryption**
- **Audit Logs for All Changes**

B. Performance & Scalability

RE: How many concurrent users do you expect?

BO: ~500 (teachers, admin, parents). Should handle peak loads during exam results.

RE:

- **Cloud Hosting for Scalability**

- **Fast Response Time (<2 sec for key operations)**

C. Usability & Training

BO: Many teachers are not tech-savvy—UI must be simple.

RE:

- **Intuitive Dashboard**
 - **Training Sessions for Staff**
 - **User Manuals & Video Tutorials**
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5. Integration & Future Needs

RE: Should the system integrate with other tools?

BO:

- **Accounting Software** (Tally/QuickBooks for fee reconciliation)
 - **Payment Gateways** (Razorpay, PayPal)
 - **Future: Mobile App, AI for Predictive Analytics**
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6. Budget & Timeline

RE: What's your budget range?

BO: \$25,000–\$40,000.

RE: Expected Timeline?

BO: 6–8 months for first rollout.

7. Closing & Next Steps

RE: Thank you for your time. I'll document these requirements in an **SRS (Software Requirements Specification)** and share it for review. Would you like weekly progress updates?

BO: Yes, and let's schedule a follow-up in two weeks.

RE: Perfect. I'll send a meeting invite. Have a great day!

