Requirements Elicitation Techniques

Purpose

The goal of this section is to explain how our team will collect the needed information to understand what users want from the School Management System.

Our project includes modules for Class Scheduling and Communication between Teachers and Students, along with other core functions like attendance, grades, and announcements.

We chose a mix of five techniques to make sure we get complete and correct requirements from all users the admin, teachers, and students.

Selected Techniques and it's Justifications:

1. Semi-Structured Interviews

• Description:

We will conduct short interviews with the school principal and some teachers and admin staff.

• Justification:

This technique helps us collect detailed information about how the school works now and what problems they face.

Through interviews, we can ask about scheduling rules, data management, access control, and communication needs.

It also lets us ask follow-up questions for more details or examples.

The interview agendas include clear questions about user roles, current issues, and improvement ideas.

2. Questionnaires

• Description:

We will give questionnaires to teachers and students to collect opinions from many users quickly.

• Justification:

The questionnaire covers system access, interface preferences, attendance input, grade viewing, announcements, and communication needs.

This helps us understand how users want to interact with the system and which features are most important to them. It also supports our interview results by adding real user data and statistics.

3. Document Analysis

• Description:

We will review existing documents like class schedules, attendance sheets, grade records, and teacher lists.

• Justification:

These documents show how the school currently manages students, teachers, attendance, and grading.

By studying them, we can find what data the system must store, how it is organized, and what problems exist in the manual process. It also helps us set the rules and structure for the database and scheduling logic.

4. Observation

• Description:

We will watch how teachers and admin staff perform their daily tasks such as taking attendance, entering grades, and checking schedules.

• Justification:

Observation helps us see the real workflow instead of just hearing about it.

It shows where users face difficulties, which steps take the most time, and which actions can be automated in the system.

It also helps confirm whether the information from interviews is accurate in practice.

5. Prototyping

• Description:

We will create simple screen mockups or wireframes for main pages like the dashboard, attendance form, and communication panel.

• Justification:

Prototyping allows users to see what the system will look like and give feedback early.

This helps us improve the design before real development begins. It is especially useful for the class scheduling and teacher-student communication modules, where the interface is important for ease of use.