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Elicitation Requirements for the Automated Attendance System

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**Submitted to:**

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## **Attendance Tracking System: Initial Requirements Document**

### **1. User Management Requirements**

**R01.** Authorized users should be able to register students and instructors in the system.

- **R01.01** For registration, authorized users will be able to upload a student's ID photo and personal information (full name, student ID, year level, program and faculty).
- **R01.02** The system should allow authorized users to delete students or instructors from the system.
- **R01.03** There should be a way for authorized users to unregister an instructor's phone if needed.
- **R01.04** Access to certain system features is limited to authorized users.
- **R01.05** Only authorized users are able to find lost registered instructor devices.

### **2. Attendance Tracking Requirements**

**R02.** Instructors should be able to use the system for tracking attendance.

- **R02.01** Instructors must be able to take attendance using ID barcode scanning via registered devices (phones or laptops).
- **R02.02** The system must allow instructors to drop students who have accumulated three consecutive absences.
- **R02.03** The system must generate attendance reports for authorized users.
- **R02.04** Students must be able to view their attendance records per course.

### **3. Security Requirements**

**R03. Strong security implementation to protect the data integrity and confidentiality.**

- **R03. 01** Enforce Role-Based Access Control (RBAC)
- **R03. 02** Use Data Encryption – Data encryption for data confidentiality must be enabled by the administrator.
- **R03. 03** Require Multi-Factor Authentication (MFA) for instructors logging in.
- **R03. 04** The system should run over HTTPS using SSL security protocols.

### **Infrastructure & Deployment Prerequisites5. Infrastructure & Deployment Requirements**

**R05.** The system should be cloud-based and guarantee scalability.

- **R05.01** The entity shall use MongoDB Atlas or MySQL at the cloud for data storage
- **R05.02** The system should be scalable and accessible.
- **R05.03** The system must not provide an API for integration with other university systems.

## **6. Deployment Timeline**

**R06.** On May 15, 2025 is the initial checking for the system.

**R07.** The system must be fully operational and deployed on May 22, 2025.

By adhering to these structured requirements, the system will streamline attendance processes, enhance security, and improve data accessibility for better decision-making.