#### **Members:**

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# Attendance Tracking System: Initial Requirements Document

## 1. User Management Requirements

- **R01.** The system must allow authorized user to register students and instructors.
  - R01.01 Authorized user must be able to upload student ID photos along with personal details during registration.
    - full name
    - student ID
    - year level
    - program
    - faculty
  - R01.02 The system must allow authorized user to remove students or instructors from the system.
  - R01.03 Authorized user must have the authority to unregister an instructor's phone if necessary.
  - o **R01.04** Only authorized users can access **specific features**.
  - R01.05 Only authorized users can locate lost registered devices of the instructor.

### 2. Attendance Tracking Requirements

- **R02.** The system must provide attendance tracking functionality for instructors.
  - R02.01 Instructors must be able to take attendance using ID Barcode scanning via registered devices.
    - Phone
    - Laptop

- o **R02.02** The system must allow instructors to **drop students** who have accumulated three consecutive absences.
- o **R02.03** The system must generate **attendance report** for authorized users.
- R02.04 Students must be able to view their attendance records per course.

# 3. Security Requirements

- **R04.** The system must implement strong security measures to protect data integrity.
- R04.01 Role-Based Access Control (RBAC) must be enforced to restrict access to sensitive data.
- R04.02 Admin-controlled data encryption must be used to ensure data confidentiality.
- R04.03 Multi-Factor Authentication (MFA) must be required for instructor logins.
- o **R04.04** The system must operate over HTTPS using SSL security protocols.

#### 5. Infrastructure & Deployment Requirements

- **R05.** The system must be **cloud-based** and **ensure scalability**.
- R05.01 The system must use MongoDB Atlas or MySQL for cloud-based data storage.
- o **R05.02** The system must be accessible and scalable.
- R05.03 The system must not provide an API for integration with other university systems.

## 6. Deployment Timeline

- **R06.** Before **May 15, 2025** is the initial checking for the system.
- R07. The system must be fully operational and deployed on May 22, 2025.