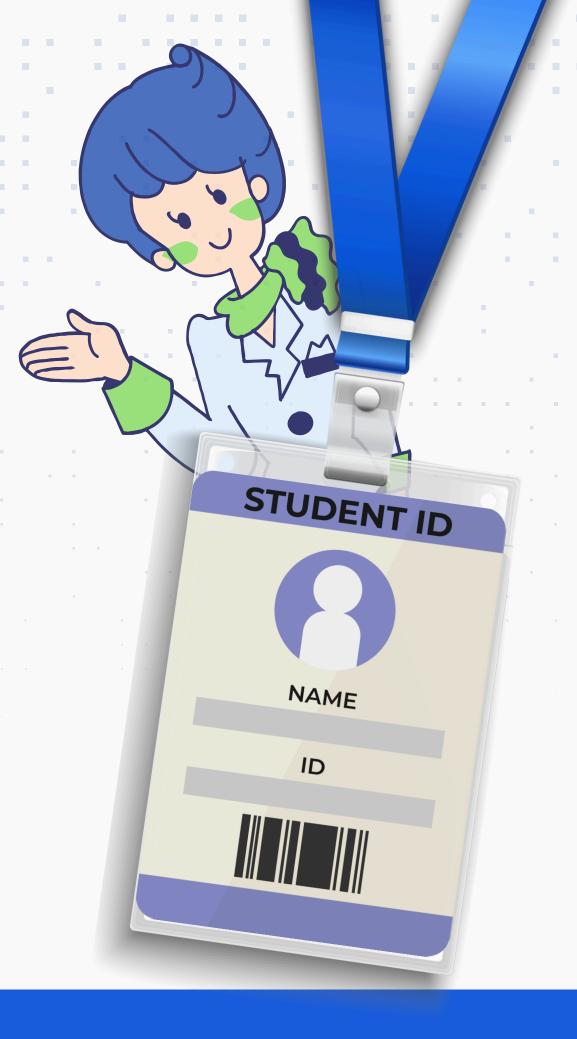


# PROJECT X:

# Automated Attendance Tracking System Requirements

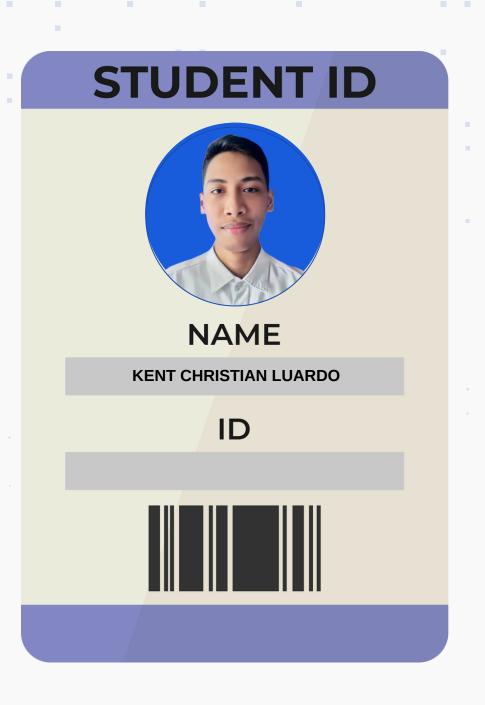
PRESENTER: ALLEN JEAN B. LAGANGGA JESSA M. DIANO KENT CHRISTIAN LUARDO



## J.A.K. OF ALL TRADES









## System Overview:

The Automated Attendance Tracking System ensures efficient, accurate, and secure attendance monitoring through barcode scanning, cloud-based storage, and secure access controls.





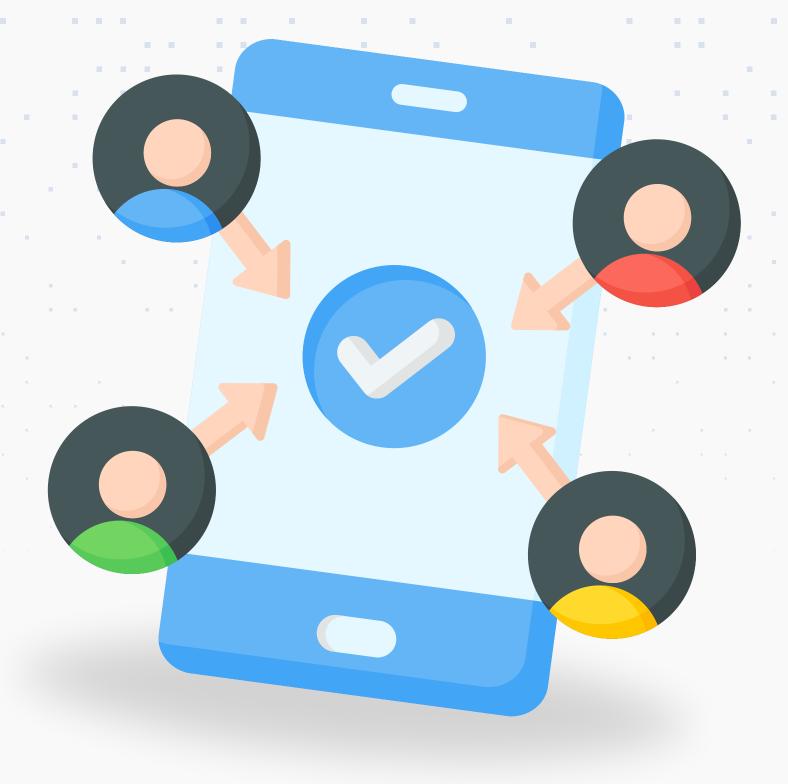
### System Users:

The system shall support three primary roles:

• R00.01: Administrator

• R00.02: Instructor

• R00.03: Student





- **R01.01** Authorized users shall register instructors and upload their ID photos, full name, instructor ID number, program, and faculty details.
- R01.02 Authorized users shall register students and upload their ID photos, full name, student ID number, year level, program, and faculty details.
- R01.03 Authorized users shall be able to amend, delete and view all data in the system, ensuring proper management and oversight of records.



- **R01.04** Authorized users shall allow an authorized user to have one or more registered devices for attendance recording.
  - R01.04.01 Each registered device shall be assigned to only one instructor.
  - R01.04.02 Registered devices can be:
    - **R01.04.02.01** Mobile phones
    - R01.04.02. 02 Computers
- R01.05 Authorized users shall register courses and assign course details.
- **R01.06** Authorized users shall assign instructors to courses, specifying the sections they will manage and their corresponding schedules.



- **R01.07** Authorized users shall enroll students in courses, specifying the assigned instructor, schedule, and section.
- **R01.08** Authorized users shall unregister an instructor's registered device when necessary to maintain security.
- **R01.09** Authorized users shall track and locate a registered instructor's lost device to prevent unauthorized access.



- R01.10 Authorized users shall generate reports.
  - R01.10.01 Reports shall include:
    - R01.10.01.01 Lists of registered instructors per faculty
    - R01.10.01.02 List of registered students per faculty
    - R01.10.01.03 List of registered courses per faculty



#### 2. Attendance Tracking Requirements

- R02.01 Authorized users shall record attendance using barcode scanning via registered devices.
- **R02.02** Authorized users shall mark students as "dropped" if they accumulate three consecutive absences.
- R02.03 The system shall generate attendance reports and allow authorized users to download attendance records in CSV format on a monthly basis for further analysis and record-keeping.



#### 2. Attendance Tracking Requirements

- R02.04 The system shall allow students to:
  - R02.04.01 Access their personal attendance records via a designated student portal.
  - R02.04.02 Track their attendance history and monitor their presence across different courses.



#### 3. Security Requirements

- **R03.01** The system shall implement Role-Based Access Control (RBAC) to ensure appropriate data access permissions.
- **R03.02** The system shall employ data encryption to maintain confidentiality and protect sensitive information.
- R03.03 The system shall require Multi-Factor Authentication (MFA) for instructor logins to enhance security.
- R03.04 The system shall utilize HTTPS with SSL encryption to secure all communications.



#### 4. Infrastructure & Deployment Requirements

- R04.01 The system shall utilize a secure and scalable cloud-based database for data storage.
- R04.02 The system shall be both accessible and scalable to accommodate increased usage.
- R04.03 The system shall function as a standalone platform and will not include API integration with other university systems at this stage.



#### 5. Project Timeline

- R05.01 An initial system review shall be conducted on May 15, 2025.
- R05.02 The system shall be fully deployed and operational by May 22, 2025.

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