ATTENDANCE USING FACE RECOGNITION PROJECT

CONTENT

PROJECT DEFINITION

Our project aims to develop an Automated Attendance System using state-of-the-art technologies.

The system leverages liveness face detection and recognition techniques, incorporating the Haar Cascade Classifier for face detection and the FaceNet Convolutional Neural Network (CNN) algorithm for face recognition.

To enhance user accessibility, the system will be integrated into a Flutter-based application, providing a seamless and user-friendly experience.

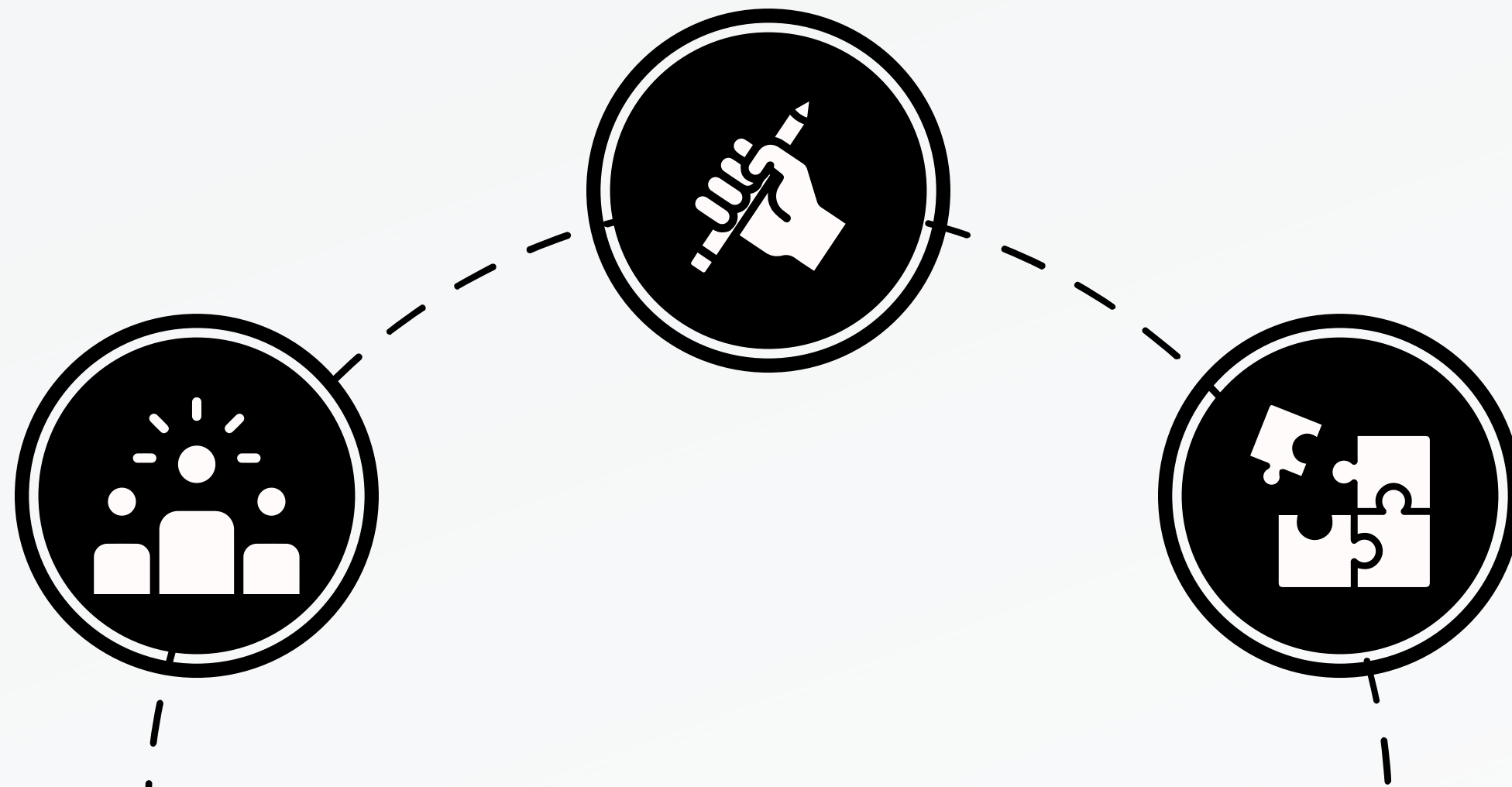# PROJECT OBJECTIVES

Objective 1

- To automate the attendance tracking process.

- To enhance accuracy and efficiency in attendance management.

Objective 2

- To streamline the overall attendance process, enabling quick and timely generation of attendance reports.

Objective 3

- To minimize administrative workload by automating repetitive tasks associated with attendance monitoring.

PROJECT SCOPE

- The project primarily focuses on automating the attendance taking process for companies or organizations are used for attendance taking using face recognition technology.

- The system will be designed to capture attendance once a day, streamlining the process to improve efficiency and accuracy.

- **Target Audience:** The target audience for the system is educational institutions and offices that want to enhance their attendance management process.

PROJECT MODULE

Registration and Login:

- To use various features of the app or the app the user has to register him/herself.

- Once the user registers then the user will be asked to login in order to use the functionality of the app.

- Only the logged in user can use all the features of the app.

Face Detection and Recognition Module:

- Once the user gets logged in, the mobile camera will detect the face of the user and recognize it from the model.

- This module will provide the feature of face detection and attendance marking.

PROJECT MODULE

Attendance Traking Module:

- This module contains a monthly calendar where the user can track his/her attendance or can have a glimpse of the monthly attendance.

User-Friendly Interface:

- Designing an intuitive and user-friendly interface for system administrators and end-users.
- Incorporating features for easy system configuration and management.

Notification System:

- It provides notifications related to holidays, low attendance etc.

Attendance Report:

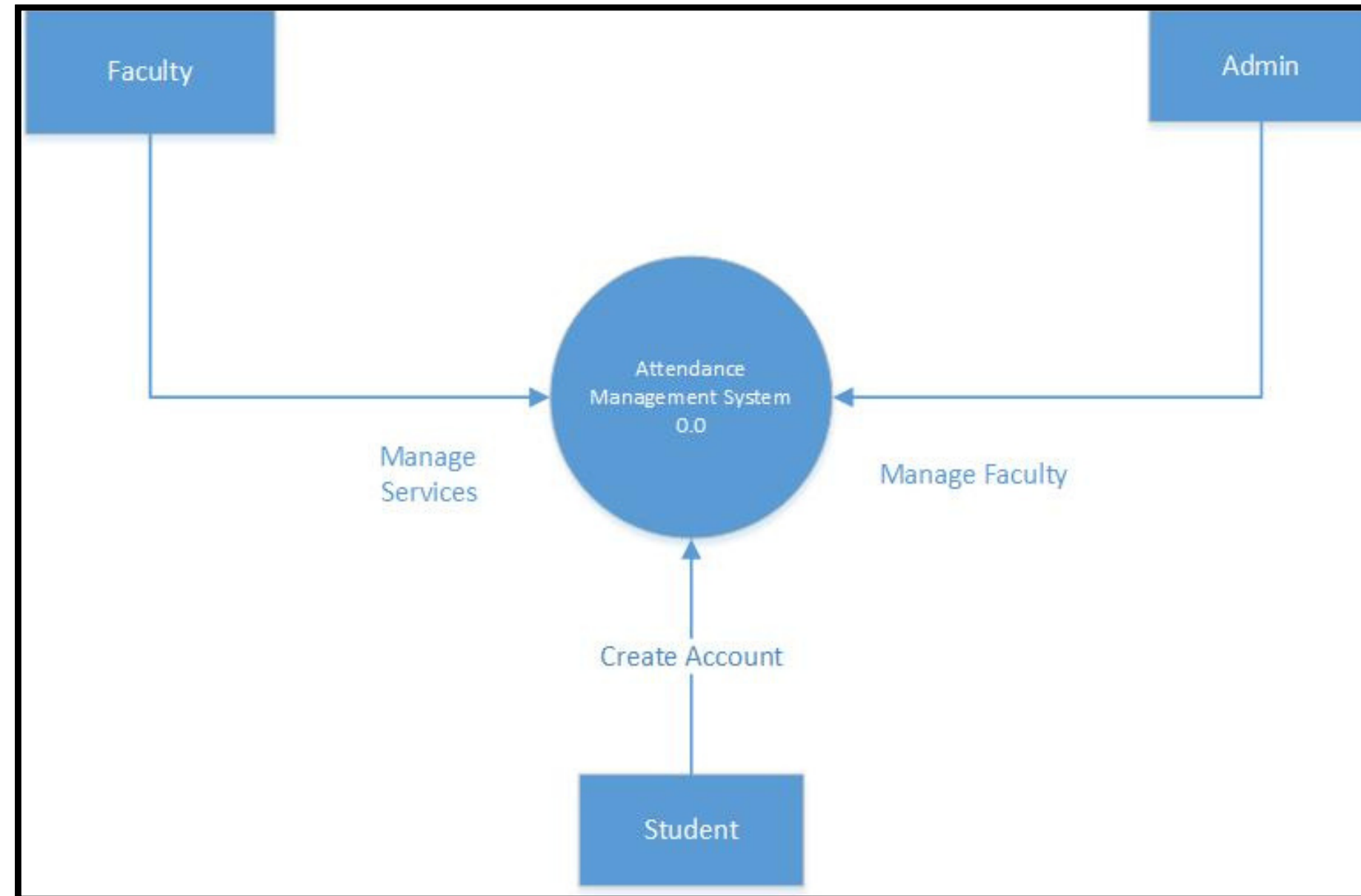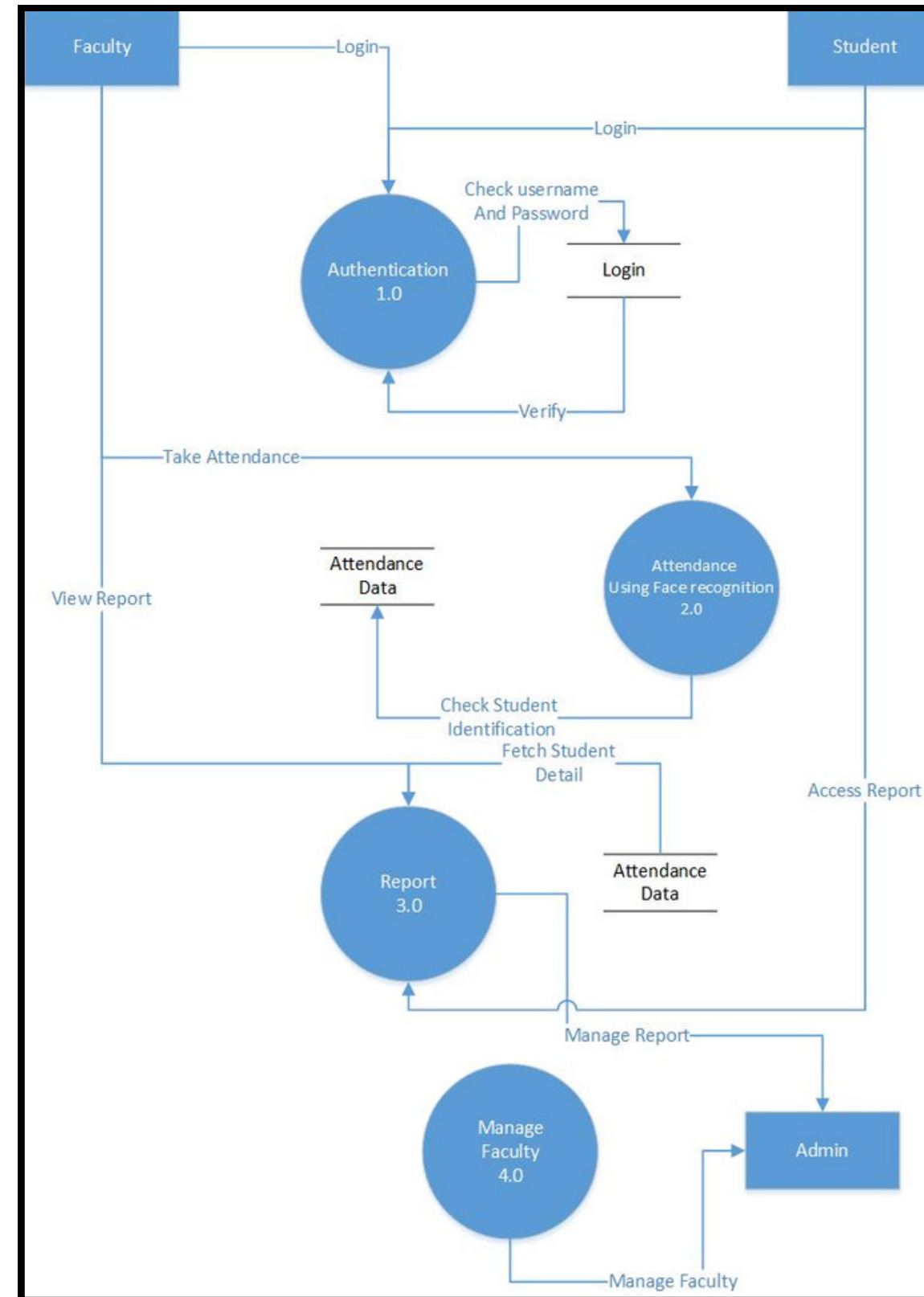- Generating automated attendance reports with customizable parameters.
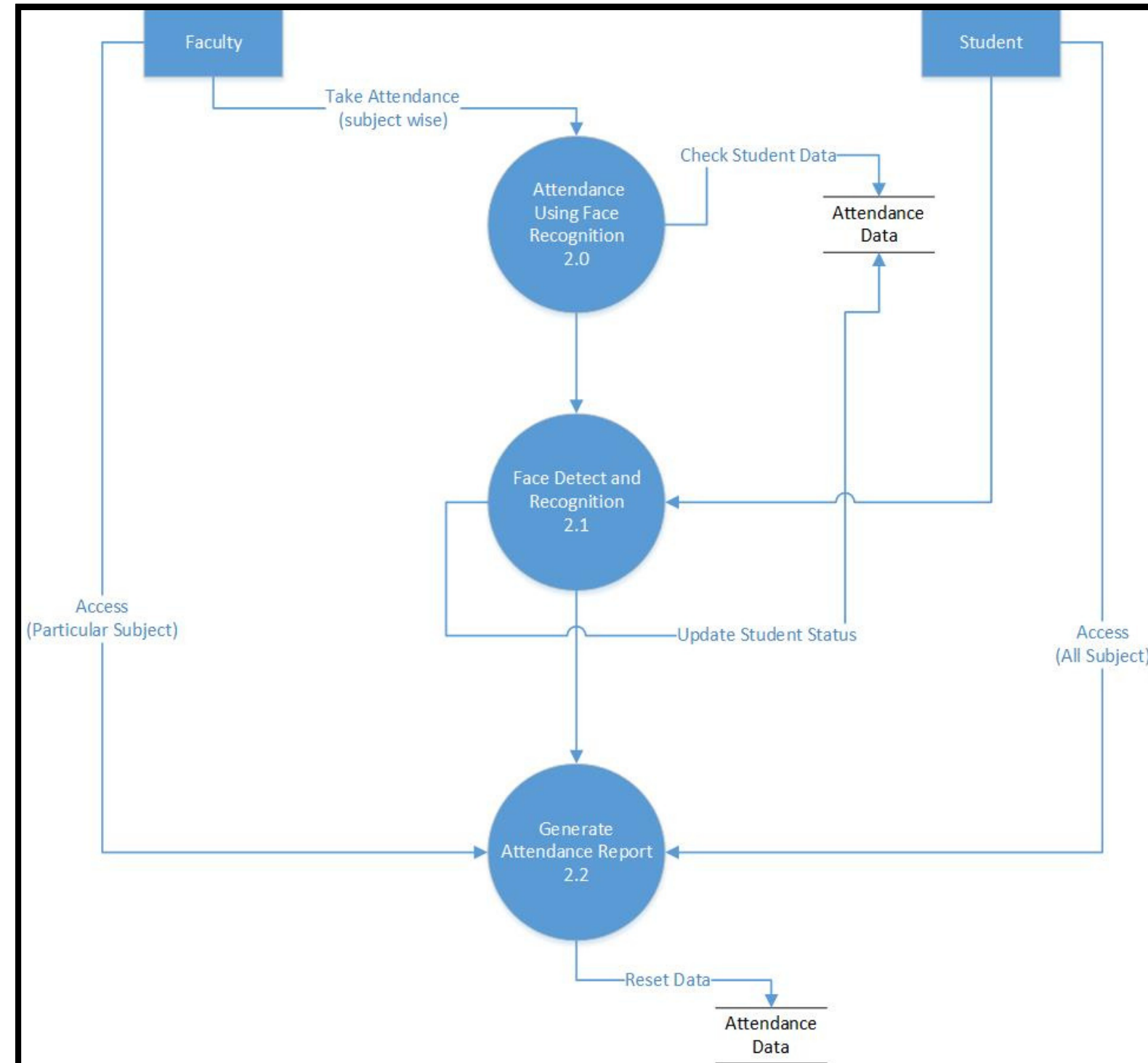
PROJECT DIAGRAMS

Use Case Diagram:

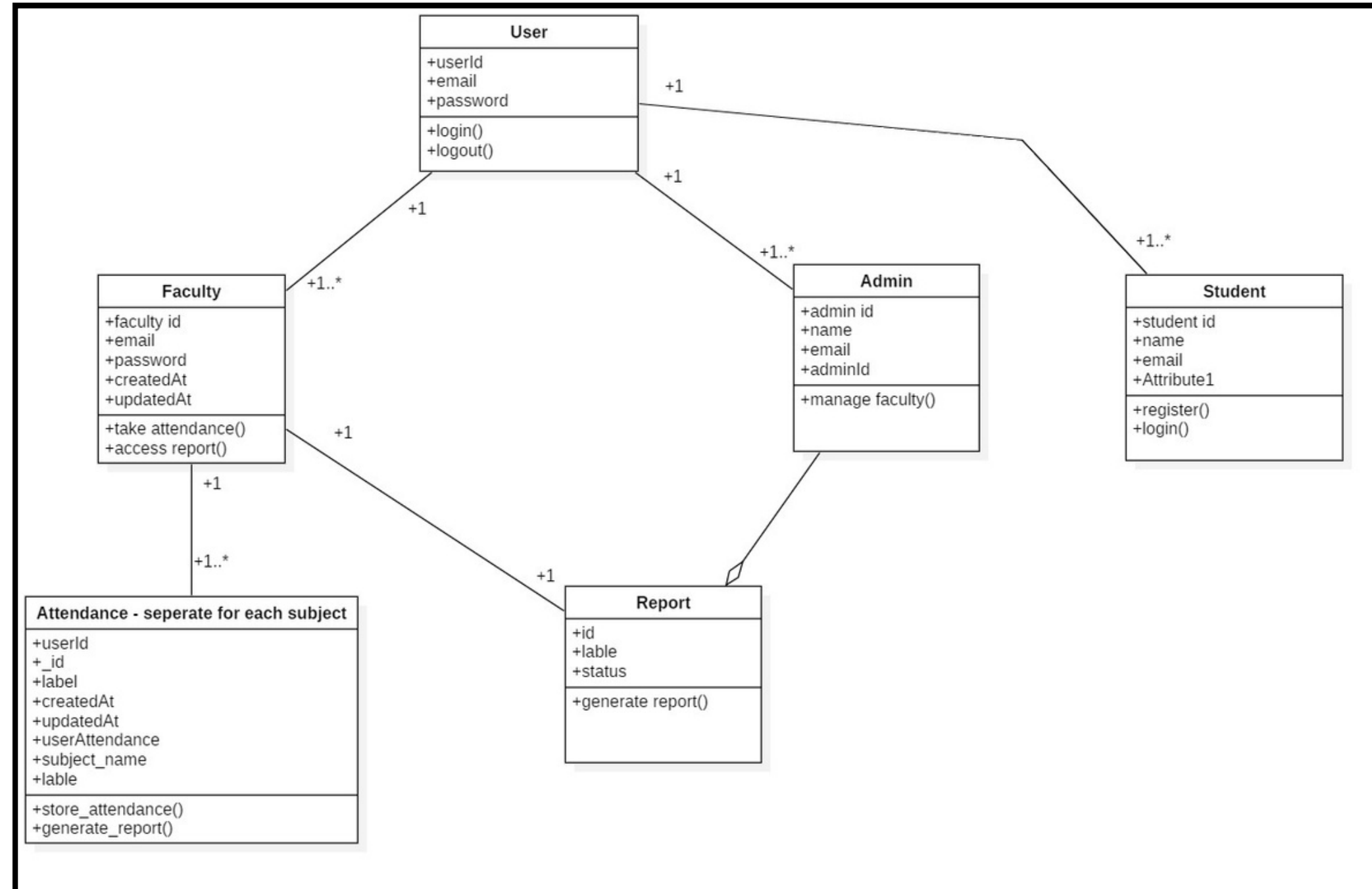# Data Flow Level-0 Diagram:

Data Flow Level-1 Diagram:

Data Flow Level-2 Diagram:

Class Diagram:

IMPLEMENTED GUI