# Facial Recognition-Based Attendance System data flow diagram.

**Data Flow Explanation.**

**1. Student → Camera (Face Capture)**

* The student enters the classroom.
* The camera captures the student's face.

**2. Camera → Facial Recognition (Verify & Match)**

* The facial recognition module checks if the captured face exists in the system.

**3. Facial Recognition → Attendance Processing (Mark Attendance)**

* If a match is found, the student is marked **Present**.
* If no match, the student remains **Absent (X)**.

**4. Attendance Processing → Database (Store Record)**

* The attendance record is saved in the database.

**5. Database → Lecturer (View Attendance)**

* The lecturer retrieves attendance records for monitoring.

**6. Lecturer → Attendance Report (Generate Reports)**

* The lecturer generates attendance reports.

**7. Attendance Report → School System (Sync Data)**

* The school system receives attendance data for official records.

**8. Admin → Database (Manage System)**

* The admin manages users and updates attendance records.

**9. Admin → Facial Recognition (Update AI Model)**

* The admin improves facial recognition accuracy by updating student images.

