

TITLE: SMART ATTENDANCE SYSTEM USING QR CODE

DOMAIN:WEB DEVELOPMENT,DATA MANAGEMENT

ABSTRACT:

- The First module is the module of the administrators, which consists of 3 types: admin, head of study program and administrator of the study program.
- Main Administrator : to backup the system and database, edit it, manage and insert professors, students, faculty, study programs, as well as create heads of study programs and administrators for the respective study programs.
- Head of study program has the opportunity for the semester to make a schedule for the professors, by setting the time when the class will be held, adding departments to the respective program.
- the Administrator of the study program is responsible to select the courses that the respective student should attend during that semester

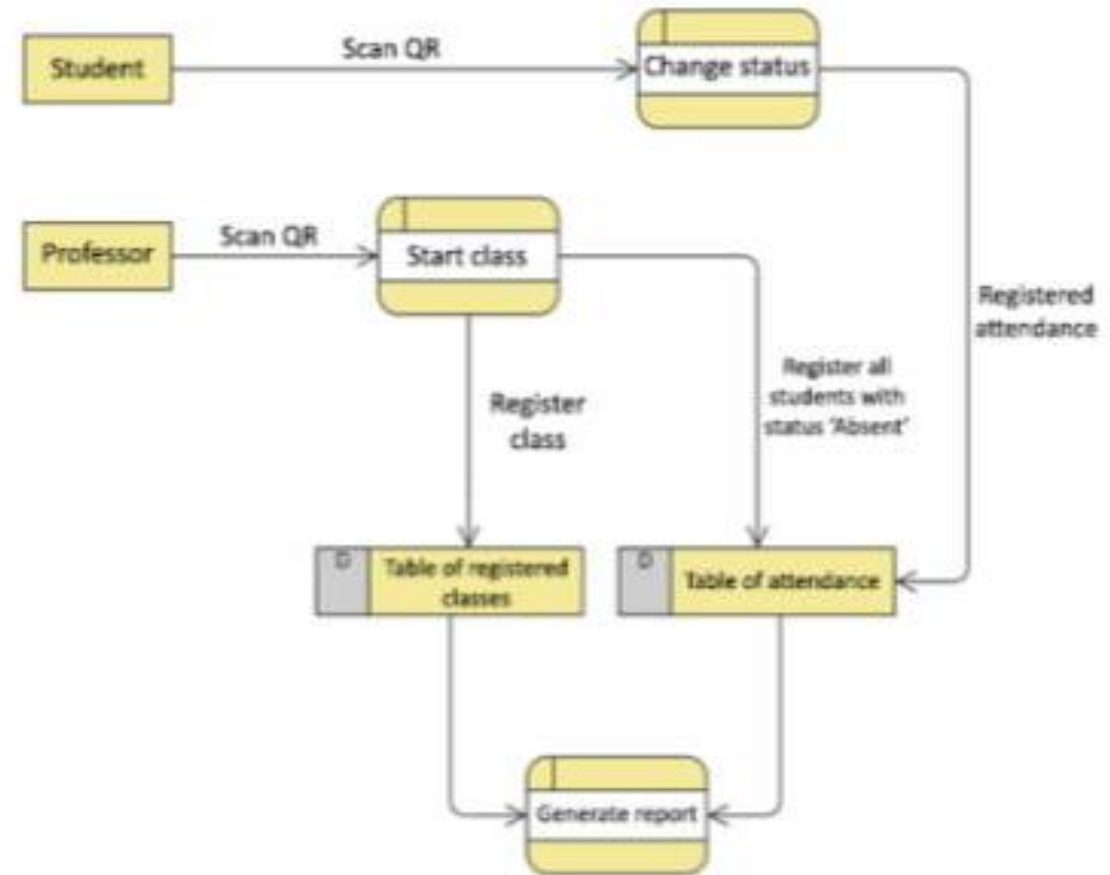


Fig 1. Proposed Model Architecture

OBJECTIVES:

- The proposed model provides data security and whole class or individual student attendance data can be accessed quickly and easily, moreover, the report is automatically generated by the professor.
- At the beginning of each course, to confirm their attendance, users (professors and students) are required to scan their unique QR code assigned to them during or at the beginning of each lecture, using QR reading devices within the classrooms. Based on this, the lecture and student attendance record and other necessary data will be recorded.

- The second module is the attendance record, which will be carried out through a device in each classroom that will be connected to a camera device and the internet.
- The code is initially read by the professor, which enables him to register the lecture held by the respective professor, within a specified time interval, based on the schedule inserted by the head of the study program.
- It automatically registers the class as completed and for that date inserts all students attending that course with 'Absent' status.
- There is the whole list of students attending the course and each student reads their unique QR code in order to change their status to 'Present'.

- The third module is about the professors and students module, where the professor and the student can log in to the system with their data obtained from the administrator.
- So, the system for each student performs the calculation process which includes the total number of absences and number of attendances, in percent, based on the course. Therefore, the professor is able to view and read the value without calculating it manually.
- It can also generate monthly reports for classes held by the professor, as well as student attendance reports.
- The student has the opportunity to check his/her participation in all the courses by seeing how many times he/she was absent and present.

BENEFITS FOR SOCIETY AND ENVIRONMENT

- Enhance the educational process using the latest technologies.
- The proposed system provides better security than the traditional methods, including eliminating chances of students signing up for others who may not be present
- This affordable QR code-based attendance system enables lecturers to speed up the process of recording attendance, especially in a large classroom and would save them valuable teaching time.
- Avoids wastage of paper and manual work.