

**REPOSITORY OF INNOVATIVE PRODUCTS (RIP)
FOR INSPIRATION IN EDUCATION DESIGN
[CATEGORY: PRIMARY & SECONDARY SCHOOL*]**

**RFID: Smart Attendance System
for Computer Club Member**

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Highlights: Information Technology (IT) has played a significant role in developing several aspects in academic sectors and domains such as student monitoring and management systems. Therefore, it is a critical subject to tracking and manages student's attendance in school environment. Since it can be helped to urge students to attend on time, amend the efficiency of the learning, increase learning grade, and finally boosting and improving the education level. Calling student's name or taking student's signature are two traditional methods for tracking the attendance of the students in the classroom and they were more time-consuming.

The study focuses on proposing an RFID based attendance management system for computer club members by using RFID technology and web-based application. The proposed system aims to manage student's attendance recording and provides the capabilities of tracking student absentee as well.

Key words: Student attendance; Attendance management system; RFID

Product Description

Smart Attendance System is a system that will take an attendance by using information extracted from the RFID Database Handling System. The system will record student attendance to an attendance server. The information from RFID Database will use for the school administration to better manage students' statistics and also parents can track their children's attendance.

Smart system attendance has been developed using PHP programming languages. The database support for this software using MYSQL. In order to have complete system functionality, Smart Attendance System is needed to integrate with RFID device.

There are several tools which have been selected to be used during the development.

The Hardware:



Figure 1: RFID reader and ID card.

Software:

The XAMPP (Local web server) Software can be connected to MSQL (Database management) and VS code (code editor)

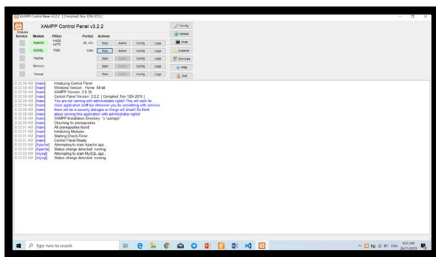


Figure 2: XAMPP (Local web server)

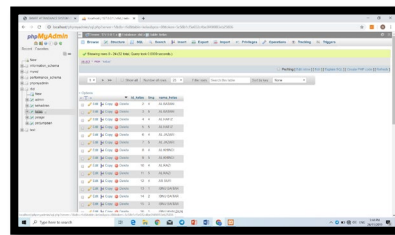


Figure 3: phpMyAdminSQL (Database management)

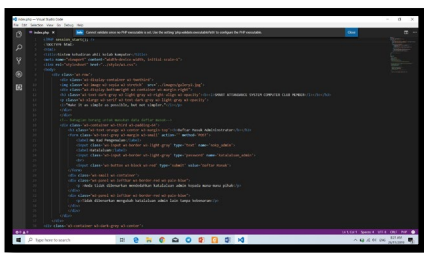


Figure 4: VS code (code editor)

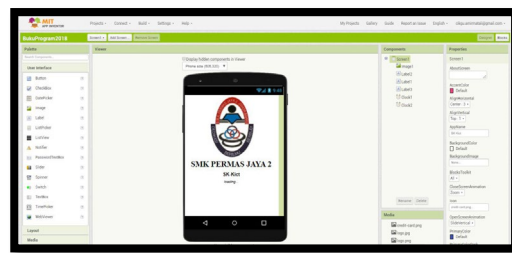
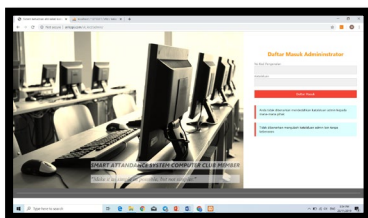
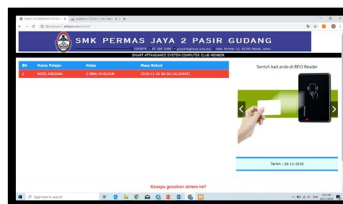


Figure 5: App inventor (mobile application)

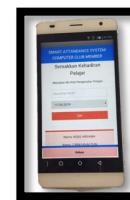
System Implementation:



Smart Attendance System (administrator interface)



Smart Attendance System (student interface).



Smart Attendance System (Parent's mobile interface)

Product Benefit

Based on the results, the proposed attendance and information system is time-effective and it reduces the documentation efforts. The RFID attendance system offers an organization, the efficiency and convenience associated with RFID technology at a low cost. This method is fast as well as simple.

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Reference No.: IP/CR/2019/1338

Title of innovation: SMART ATTENDANCE SYSTEM