

Universiti Teknologi MARA

**Web-Based Application For Attendance
Record Of College Activities And The
Scrutinization Of College Application In
UiTM Perlis**

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STUDENT DECALARATION

I certify that this thesis and the project to which it refers is the product of my own work and that any idea or quotation from the work of other people, published or otherwise are fully acknowledged in accordance with the standard referring practices of the discipline.

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ABSTRACT

Students' attendance in all academic institutions is very important and cannot be overlooked because all institutions have certain criteria for their student's attendance in class, college activities, and examinations. Hence, the lecturers in most academic institutions are concerned with the students' inconsistent attendance. The manual method of taking attendance is not effective because there are several challenges to that kind of method. The data collected through the conventional method is difficult to manage; time consuming to be scrutinized; and it causes the wastage of human and material resources. Therefore, the aim of this project is to develop a web-based application for handling attendance record of college activities and the scrutinization of college application in UiTM Perlis. This web-based application will use the barcode scanner to scan the barcode on students' matric card in order to retrieve the data. The study involved three main phases which are requirement identification phase, design and development phase, and testing phases in part of the research methodology. The study also involves usability and functionality testing by using unit test, test script and distributed post-task questionnaires respectively to the college manager, college staff and students in UiTM Perlis branch, Campus Arau. In short, this project is conducted to find the feasible solution for the related issues by implementing the web-based and barcode technology for the research and development purpose. Also, the prototype enables the management to facilitate in handling the college application and can keep on track the attendance of student's activity.

Keywords: student attendance, attendance record, college activities, college management, barcode scanner, web-based application.

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