

UNIVERSITI TEKNOLOGI MARA

**WEB BASED EVENT ATTENDANCE SYSTEM
USING RFID TECHNOLOGY FOR ITEC FSKM**

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ABSTRACT

The project is about development of Event Attendance System Using RFID for Information Technology Club (ITEC) Faculty of Computer and Mathematical Sciences (FSKM) in UiTM Shah Alam and reason of developing this project replace the current method attendance tracking where this system requires the participant to fill in their attendance manually, for example writing down details like names and matric numbers on a piece of paper and sign it as a proof that you attend to the event. The current method occurs many problems in capturing attendance like one of the major issues of the manual system is time consuming and another problem that arise when using the manual system is the data inaccuracy. Thus, this project aims to develop the attendance system during event / function in faculty. This project using the web-based platform. Besides, the objectives of the project are to identify the user requirements for the Web Based Event Attendance System using Radio frequency identification (RFID) Technology that be implemented in (FSKM) event, to design, and to develop a system. The target user of this project would be student and staff who organize any events/function in the Faculty of Computer and Mathematical Sciences (FSKM) and use the attendee information for tracking purposes. The technique/method that will be used in this event attendance system is Radio frequency identification system (RFID). This project consists of three modules combination which is registration module, event registration module and module verify attendance with RFID integration. This project however will be developing up until testing phase only. Web Development Lifecycle (WDLC) is the approach methodology to complete this task. The limitation of the project is this system does not pull any data from UiTM database. The limitation and suggestion for future enhancement of this project had been identified based on the user feedback from the testing session conducted. In a nutshell, Web Based Event Attendance System using RFID can help and give a best experience to the participant and event organizer during the function in faculty with the emergence of advanced technology.

Keywords: Web Based System Development, WDLC model, Attendance System, RFID Technology, Radio Waves

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CHAPTER ONE

INTRODUCTION

An outline of this project is given in this section. This chapter includes background information, problem statements, project priorities, scope and project significance.

1.1 PROJECT BACKGROUND

Attendance system is used to track a single person 's attendance that is uses in the businesses, schools, colleges or workplaces. Attendance is characterized as the practice or condition of going to or being available at a spot or occasion on a regular basis. The typical way of taking attendance is disadvantageous, which is the attendance list data cannot be reused and it is harder to track and monitor student attendance (Rizal & Noah, 2010). Manual attendance reporting system is unreliable, and it takes more time to record and measure each student's attendance. Therefore, a system is intended to settle the problem of manual attendance (Aman, Shubham, & Kruttika, 2016).

There are several techniques being used in tracking attendance for example, fingerprints, irises expressions, retinal patterns, palm prints, speech, written by hand marks, and so forth for verification purposes. These physical information utilizing strategies are progressively observed as a viable option in contrast to traditional security techniques, for example, passwords or ID cards. Barcode readers, RFID gadget, Bluetooth and NFC (Near Field Communication) are just a couple of instances of these innovations (Aman, Shubham, & Kruttika, 2016).

There are various types of attendance program systems being utilized in different contexts, for example in schools and higher learning establishments. A Learning Management Systems (LMS) suggested the use of face recognition algorithms in real time that automatically identify and record students attending the class (Rizal & Noah, 2010). A system using the fingerprint verification technique has been proposed using a technique known as minute extraction which automates the attendance process (Rizal & Noah, 2010). A prototype system that uses face recognition and detection technologies combined with a neural network