# Design and Implementation of Online Roll Call and Leave Management Systems

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#### **ABSTRACT**

Attendance rates can affect not only learning effects of students, but also learning atmosphere of the university. Usually, a roll call in class is one of the methods to increase the attendance rate. Whenever a student cannot attend a class, he needs to take a leave. Therefore, the roll-call record has a tightly-close relationship with leave information. Currently, there is an online roll-call system operating at Da-Yeh University. However, the system 's user interfaces are not quite friendly, and is not integrated with other campus administration systems. Also, the leave procedures for students are still paper-based, which is quite time-consuming and difficult to be integrated with other systems for further analysis. In this thesis, we propose online roll-call and leave management systems for Da-Yeh University. For the roll-call system, three different modes are available for teachers to choose. The system provides pictures of students and the "Like" functionality similar to Facebook, making the roll call more interesting, and becoming an important way to get familiar with students. Besides, an absence warning email will also be sent through the system to both the student and his master teacher. The master teacher can thus have an early discussion with the student whenever necessary. The paper-based leave-taking procedure is also turned into a web-based leave management. Students no longer have to go to different offices asking for teachers 's signatures, and teachers do not have to arrange extra meetings. Meanwhile, the system also provides tracking functions so that both students and teachers can check leave status anytime through the web. Whenever the leave application is granted, the leave information will be updated to roll-call system automatically.

Keywords: roll-call system, absence warning, leave management system, web application

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