

A Campus Information Network System with Multi-Media Approach*

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Abstract

In this paper, we present the development of a campus information network system, which consists of several terminal devices and a management system. For each terminal device, a multi-media user interface is provided, and a local area network with TCP/IP protocol is employed to enable the communications from the management system. The management system consists of a main control system for monitoring the behaviors of the terminal devices, a object-oriented database management system to maintain multi-media data files, a script generating system to produce control scripts for terminal devices, and a preprocessing system to compose images or animations with Chinese fonts. The information system has been installed in the National Chiao Tung University of R.O.C. to provide all kinds of information concerning campus life, including the organization of the school, available software and hardware resources, instructions of how to apply the usage of a resource, instructions about all kinds of available services, traffic information, introductions for each institute and department, introductions for on-going projects and researches, campus activities, campus movies, all kinds of announcements, etc. To efficiently manage the multi-media data through network communications, some new techniques are applied to the design of the management system. From the statistic results by querying 562 users, we conclude that the whole project is successful.

Keywords: Campus Information Network, Multi-Media.