

PROJECT TITLE

MTR Network Display System (MTR-NDS)
Sponsor: Mass Transit Railway (MTR)

IT02



(From left to right) YIU Ngan Yuk Yuki, CHENG wing Shan Cherries, TSOI Yau Chat Desmond (supervisor),
WONG Po Tin Protein, CHONG Pik Ha Becky

DEVELOPMENT ENVIRONMENT

Operating Platform: Microsoft Windows XP
Hardware Requirement: Intel PC installed with Apache web server
Server: MySQL 5.0
Programming Language: PHP, SQL, JavaScript, HTML, CSS
Development tools: Macromedia Dreamweaver 8, AppServ 2.5.10 (Apache 2.2.8, PHP 5.2.6,
MySQL 5.0.51b, phpMyAdmin-2.10.3), Adobe Photoshop CS,
Windows Movie Maker

PROJECT DESCRIPTION

SUPERVISOR
Dr Desmond TSOI

Project Description:

Background:

With the need of effective information delivery to customers within a short time frame, large format displays in high resolution have been widely used in many commercial sectors nowadays. One of the many possible solutions is to build up a large scale display unit via mosaicing an array of Liquid Crystal Displays (LCDs). MTR corporate, which serves as one of the biggest companies in Hong Kong, is currently investigating the feasibility of building up such a system for the use of their information broadcast in the stations. In this project, we work closely with MTR staff to carry out the study.

The main targets of this project are:

1. To provide a user friendly interface for the station operators to manage the information that will be shown on the screen. They can change the video, the messages, the alignment and any other design quickly. Station operators can spend less time on any change. Also, the system provides the function to update and show the emergency message.
2. Every passenger will pass in the entry gate and leave out the exit gate. They can get information they need easily and quickly in their short entry time. It is more convenient because they can decide whether to take other transportation before their entry if there is any accident and delay.
3. Comparing with the current display, the LCD system is longer, more colourful and higher resolution. It can display different types of media data, such as video, flash, image, that can catch customers' attention more easily.

Major functions:

Front-end System:

1. Synchronize with central database
2. Provide general information in MTR Station
3. Broadcast emergency messages
4. Broadcast videos for advertising purpose
5. Show Entry/Exit sign to guide the passengers to access the train platforms

Back-end Management System:

1. Login procedure
2. User management
3. Data management
4. Real-time data acquisition
5. File management
6. Device management