Video Conference and Distance Learning Scheduling System on WEB

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Using the advanced WEB and the Oracle Database technology, I created an interactive videoconference and distance learning management system. This system has been used for 3 years, and has saved a lot time and trouble for both the users and administrators of the videoconference rooms.

Powerful Features

1. Provides searchable and automatically updated Video Conference Schedule on the WEB

A user can view the up-to-date schedule on the WEB, and can search the schedule by date and by the conference organizer’s name.

2. Enables users to make video conferencing reservations on the WEB

A user can send a request to reserve the video conference facility by filling out a form on the WEB. The inputted data will automatically be put into a database and a copy provided to the videoconference room administrator via e-mail. Remote site technical information is also inputted this way.

3. Generates Video Conference Room Usage Report

An additional feature generates useful reports to answer the questions such as who had videoconferences, how many times, and with what sites the conferences were held. This feature also provides information such as how many were classes, administrative meetings, or training workshops. It can provide reports on all the videoconferences or for a specified time period. For example, it can answer a question such as how many training workshops have been held from September 1 till December 31, 1998.

4. Complies the form of “Request for Off-NSHEC Network Calling Assistance”

To do an “off-net” videoconference, we need to send a special request form to a company called Tendberg. In the request form, we need to provide both the technical and contact information related to our sites and to the site with which we will hold the conference. The system can compile such forms automatically by pulling data from local user input and from the remote site administrator’s input.

An Inside Look

The system was created using WWW, CGI, and Oracle database technology. A user first looks at the videoconference schedule on the web to see if the time they want is available. Then, the user inputs the data about a conference (such as when, where, purpose, and contact person’s name, email and phone) by using a reservation form on the WEB. After the web form receives the data, it automatically forwards the data to a
CGI engine. This CGI engine then does three things with the data: 1) generates a web page that sends confirmation and gives further instructions to the user, 2) generates email to send data to the videoconference room administrator, 3) puts the data into an Oracle database. (See attached diagram below)

When the users click on the link to the videoconference schedule on the web, the system sends a request to a CGI engine. This engine pulls the data from the database accordingly, and generates the schedule for the user. In this way, the schedule presented to the users is always up-to-date and tailored toward users’ specific interest (See attached diagram).

To generate videoconference room usage reports, an administrator clicks corresponding buttons on the web, which sends a request to the CGI engine. This engine summarizes the data from the database and shows the results on the WEB. In a similar way, the system generates the form of “Request for Off-NSHEC Network

Diagram