OCEF Finance System
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About OCEF
• Overseas China Education Foundation (OCEF) registered in Texas in April, 2001. Its mission is to raise fund to support education, especially to help the disadvantaged children in the vast rural areas of China obtain basic education.
• Main features of OCEF
  1. Independent
  2. All-volunteer driven
  3. Guaranteed delivery
  4. Low operational cost

OCEF Finance System
• Responsible for the expense of OCEF
• Problems of traditional reimburse and disburse system
  1. Low efficient examine process
  2. Complex documents management

Functional Requirements
• Submit voucher online
  1. Reimburse and Disburse
• Examine online
  1. Check voucher and submit examine result
• Security
  1. President, supervisor, treasury, accountant

System Design
Reimbursement Process flow chart
System Design (Cont.)

Web System Map Diagram

Development

- Environment
  1. Local: Windows XP, Net beans IDE, MySQL, Apache
  2. Remote: SSH, OCEF server, LINUX, MySQL

- Technology
  1. WebPages: HTML, PHP, JavaScript, SQL
  2. Database: SQL

Responsibility

- Database
  1. Store user information, voucher, etc.
  2. Interaction with WebPages

- Examine Service
  1. For limited users
  2. View and examine online

Database Design

- User account
  - Username, password, email

- Examine Status
  - 4 times examine for each voucher, 3 type of status
    Pending, approved, disapproved

- Voucher

Database Design (cont.)

- Voucher
  - General Information
  - Payee Info
  - Expense Description
  - Expense Info
Database Design (cont.)

<table>
<thead>
<tr>
<th>ReimExpense</th>
<th>Eid</th>
<th>Vid</th>
<th>Date</th>
<th>Type</th>
<th>Des</th>
<th>Amount</th>
<th>NumOfRec</th>
</tr>
</thead>
<tbody>
<tr>
<td>ReimVoucher</td>
<td>Vid</td>
<td>Rdate</td>
<td>Rfname</td>
<td>Rlname</td>
<td>Rcontact</td>
<td>Pfname</td>
<td>Plname</td>
</tr>
</tbody>
</table>

Implementation

- Creation
  - Run SQL in Mysql
    ```
    CREATE TABLE `users` (
    `username` varchar(30) NOT NULL,
    `password` varchar(30) NOT NULL,
    `permission` varchar(30) NOT NULL,
    `email` varchar(30) NOT NULL,
    PRIMARY KEY (`username`) ) ENGINE=MyISAM DEFAULT CHARSET=latin1;
    ```

- Operation
  - Submit
  - Retrieve

Implement DB Operation

- Submit
  - Collect data from WebPages by using PHP function or session
    ```
    $userid = $_POST['username'];
    $submit = true;
    ```

- Operation
  - Collect data from WebPages by using PHP function or session
    ```
    $sql = "SELECT * FROM ReimVoucher WHERE Vid = {$_SESSION['submit_id']}";
    mysql_query($sql);
    ```

Detailed System Data Flow

Examine Service Design

- View vouchers and status
  - Retrieve voucher and status
  - Display together

- Submit examine results
  - Edit status with limitation
  - Submit status
Examine Service Implementation

- Table with hyperlink

- Table with dropList

Demonstration

- Examine Service

- Database

Future work

- Complete disbursement service

- Maintain user information

- Periodical report

Q & A?