**MERCH PROJECT**

A**/P Vendor Customer Information Management System**

1. Design DB Tables for Vendor/Customer Profile

2. Create SQL scripts for add, edit, delete, retrieve/read

3. Create Java Database Access Object classes and unit tests

4. Design UI

**Requirements:**

* **Written in JAVA**
* **A web application that uses J2EE as a web service (includes: HTML, CSS3, JavaScript, AJAX)**
* **CRUD**
* **Purpose & functionality must be clear**
* **With authentication and authorization**
* **Integrate & utilize HTTP Client, JSON or XML**
* **New and not shared/developed with others or copied anywhere/online**

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**PURPOSE:**

The purpose of this A/P Vendor Customer Information System is to provide a detailed, centralized and comprehensive vendor(payables) & customer(receivables) information which can be accessed by the business owner or the Finance and Accounting personnel of an organization/company as follows:

* Purchaser/Buyer
* Accounting Personnel
* Receiving Personnel
* Customer Service Personnel
* IT Personnel

This will support the user of this database for tracking, billing and payments, schedule management, and customer support. Database storage must be maintained for at least # of years for history tracking.

**Activity Diagram:**

Employee Log-In (system) >>> Enter Vendor Request Form (system) >>> Send to Vendor/Customer (button to send info to vendor/customer) >>> Completed Form send to Employee >>> Employee to create vendor (system)>>> save set-up >>> approval workflow (approval link sent to supervisor) >>>> supervisor approves (vendor created in the system will automatically assign a unique vendor ID).

**User and Role Maintenance:**

Provision for adding, deleting and updating the user accounts and system access.

**User Authentication:** Access protocol will be implemented to provide user authentication.

**Employee Log-In (Role Restrictions)**

**Role Restrictions:** Users are only allowed to perform functions by logging in using assigned role – restricted only to the configured functions.

* Purchaser/Buyer (Create, Read, Edit Delete)
* Accounting Personnel (Create, Read, Edit, Delete)
* Receiving Personnel (Read, Edit)
* Customer Service Personnel (Read)
* IT Personnel (Create, Read, Edit Delete)

**Vendor Request Form:**

**Vendor/Customer component (Invoice sections).**

**Required Fields/Data Model:**

* **General Info. Tab**

Vendor ID: (Primary Key)

Vendor Name: (Foreign Key)

Vendor Address:

Legal Name:

Tax ID:

Payment Terms:

Purchase Order Number: (Foreign Key)

Vendor Requestor:

Payment Method:

Payment Due Date:

Payable to:

Currency: (Foreign Key)

Contract/Agreement: Approved(Y/N)

Vendor Approval Status: Approved(Y/N)

Email Vendor Approval: Y/N

File Upload:

Attach from: Computer

File Name:

Folder:

URL: Select File: Browse:

Attach File:

* **Audit Trail/History Tab:**

Fields Entered:

Date Created:

Date Sent to Supervisor for Approval:

Date Approved:

Contract Approved:

Vendor Approved:

* **Comment Tab:**

**TOOLS & TECHNOLOGY USED:**

| **Software** | **Version** | **Category** |
| --- | --- | --- |
| *JAVA* |  |  |
| *HTML*  *CSS3*  *JAVASCRIPT*  *AJAX*  *XML* |  |  |

**DATA MAPPING:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **tbl\_currency** |  |  |  |  |  |
| **Field** | **Type** | **Null** | **Key** | **Default** | **Extra** |
| currency\_id | int<11> | NO | PRI | NULL | auto increment |
| description | varchar<255> | NO |  | NULL |  |
|  |  |  |  |  |  |
| **tbl\_function** |  |  |  |  |  |
| **Field** | **Type** | **Null** | **Key** | **Default** | **Extra** |
| function\_code | varchar<50> | NO | PRI | NULL |  |
| description | varchar<50> | NO |  | NULL |  |
| functionx | varchar<255> | NO |  | NULL |  |
| role\_code | varchar<15> | NO |  | NULL |  |
|  |  |  |  |  |  |
| **tbl\_payments** |  |  |  |  |  |
| **Field** | **Type** | **Null** | **Key** | **Default** | **Extra** |
| paymend\_id | int<11> | NO | PRI | NULL | auto increment |
| bank\_account\_name | varchar<255> | NO | MUL | NULL |  |
| bank\_account\_number | int<255> | NO |  | NULL |  |
| payment\_address | varchar<255> | NO |  | NULL |  |
| payment\_currency | varchar<255> | NO | MUL | NULL |  |
|  |  |  |  |  |  |
| **tbl\_purchase\_order** |  |  |  |  |  |
| **Field** | **Type** | **Null** | **Key** | **Default** | **Extra** |
| purchase\_order\_number | int<11> | NO | PRI | NULL | auto increment |
| contract\_number | int<255> | NO |  | NULL |  |
| PO\_vendor\_name | varchar<255> | NO | MUL | NULL |  |
| legal\_name | varchar<75> | NO |  | NULL |  |
| bill\_to | varchar<255> | NO | MUL | NULL |  |
| purchase\_order\_currency | varchar<15> | NO | MUL | NULL |  |
| vendor\_requestor | varchar<50> | NO |  | NULL |  |
| vendor\_contract\_approval\_status | varchar<255> | NO |  | NULL |  |
| email\_vendor\_approval | varchar<255> | NO |  | NULL |  |
| file\_attachment | varchar<255> | NO |  | NULL |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **tbl\_taxes** |  |  |  |  |  |
| **Field** | **Type** | **Null** | **Key** | **Default** | **Extra** |
| tax\_code | varchar<255> | NO | PRI | NULL |  |
| tax\_value | int<255> | NO |  | NULL |  |
| currency | varchar<255> | NO | MUL | NULL |  |
|  |  |  |  |  |  |
| **tbl\_user** |  |  |  |  |  |
| **Field** | **Type** | **Null** | **Key** | **Default** | **Extra** |
| user\_id | int<11> | NO | PRI | NULL | auto increment |
| username | varchar<50> | NO |  | NULL |  |
| password | varchar<15> | NO |  | NULL |  |
| role | varchar<15> | NO |  | NULL |  |
|  |  |  |  |  |  |
| **tbl\_user\_role** |  |  |  |  |  |
| **Field** | **Type** | **Null** | **Key** | **Default** | **Extra** |
| role\_code | varchar<15> | NO | PRI | NULL |  |
| description | varchar<255> | NO |  | NULL |  |
|  |  |  |  |  |  |
| **tbl\_vendor\_name** |  |  |  |  |  |
| **Field** | **Type** | **Null** | **Key** | **Default** | **Extra** |
| vendor\_id |  | NO | PRI | NULL | auto increment |
| tax\_id |  | NO |  | NULL |  |
| name |  | NO | MUL | NULL |  |
| legal\_name |  | NO |  | NULL |  |
| address |  | NO | MUL | NULL |  |
| city\_code |  | NO | MUL | NULL |  |
| country\_code |  | NO |  | NULL |  |
| vendor\_requestor |  | NO |  | NULL |  |
| currency |  | NO |  | NULL |  |
| vendor\_contract\_approval\_status |  | NO |  | NULL |  |
| email\_vendor\_approval |  | NO |  | NULL |  |
| file\_attachment |  | NO |  | NULL |  |