**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**

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

**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* |  |  |

**PHYSICAL DATA MODEL:**

**TBL\_USER**

USERNAME (PK)

PASSWORD (NOT NULL) VARCHAR

ROLE (NOT NULL) (FK) VARCHAR

**TBL\_ROLE**

CODE (PK) VARCHAR

DESCRIPTION (NOT NULL) VARCHAR

**TBL\_FUNCTION**

CODE (PK) VARCHAR

DESCRIPTION (NOT NULL) VARCHAR

TBL\_FUNCTION\_BY\_ROLE

ROLE\_CODE (FK)

FUNCTION\_CODE (FK)

**TBL\_VENDOR NAME**

VENDOR ID\_NUMBER (PK) INT

TAX ID\_NUMBER (FK) INT

LEGAL NAME (NOT NULL) VARCHAR

ADDRESS (NOT NULL) VARCHAR

CITY\_CODE (NOT NULL) (FK)

COUNTRY\_CODE (NOT NULL) (FK)

VENDOR\_REQUESTOR (NOT NULL)

VENDOR\_CONTRACT\_APPROVAL\_STATUS (NOT NULL) (VARCHAR)

EMAIL\_VENDOR\_APPROVAL (NOT NULL) (VARCHAR)

FILE\_ATTACHMENT

**TBL\_PURCHASE\_ORDER**

PURCHASE ORDER\_NUMBER (PK) INT

CONTRACT\_NUMBER INT

PURCHASE\_REQUESTOR (NOT NULL) VARCHAR

QUANTITY INT NOT NULL

UNIT PRICE INT NOT NULL

PURCHASE\_ORDER\_APPROVER (NOT NULL) VARCHAR

PAYMENT TERMS (FK) INT

PAYMENT\_DUE\_DATE (NOT NULL)

**TBL\_PAYMENTS**

BANK\_ACCOUNT\_NUMBER (NOT NULL) (FK)

BANK ACCOUNT\_NAME (FK) INT (NOT NULL)

PAYMENT\_ADDRESS (NOT NULL)

COUNTRY (NOT NULL) (FK)

PAYMENT\_CURRENCY (NOT NULL) (FK)

**TBL\_CURRENCY**

CURRENCY\_ID (PK) STRING

DESCRIPTION (STRING)

VALUE (NOT NULL) (FLOAT)

**TBL\_TAXES**

TAX\_CODE (PK) (VARCHAR)

TAX\_VALUE (NOT NULL) (FLOAT)

CURRENCY (NOT NULL) (VARCHAR)