# **CHEMICAL INVENTORY MANAGEMENT SYSTEM**

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**Abstract** - The purpose of Chemical Inventory Management System is to automate the prevailing manual system by the assistance of computerized equipment and full-fledged computer software, fulfilling their requirements, so that their valuable data/information are often stored for an extended period with easy accessing and manipulation of an equivalent. It can also lead to a secure, free of errors, reliable and fast management system. It can assist the user to consider their other activities rather than to consider the record keeping.

# *KeyWords*: Inventory Management, Dashboard, Web development, User Friendly, PHP, Chemicals

# **1.INTRODUCTION**

The 'Chemical Inventory Management System' has been developed to override the issues prevailing in the practicing manual system. This system is designed particularly for a chemical company to carry out operations in a swish and effective manner.

The application is reduced as very much like potential to avoid errors coming into the data. It conjointly provides an error message. No formal knowledge is required for the user to use this system, therefore by this it proves that it is easy. Inventory Management System, as delineate higher than, can lead to error free, secure, reliable and fast management system. It assists the user to concentrate on their different activities rather to concentrate on the record keeping. Therefore it can facilitate in any organization, whether or not huge, has challenges to beat and managing the data of Inventory, Stock, Sells, Product class, Customers. System has completely different wants, therefore we tend to style inventory management systems that are adopted to the social control needs. This is designed to assist in strategic planning, data can guarantee that the organization is equipped with the right level of data and details for future goals.

# 2. LITERATURE SURVEY

# 2.1 Existing System

- 1. Existing system was manual.
- 2. Time intense as knowledge entry that embody calculations took tons of time.
- 3. Searching was terribly complicated as there may be 100's of entries per annum.

4. The planned system is predicted to be quicker than the present system.

# 2.2 Proposed System

The proposed system will be designed to support the following features:-

- 1. The planned system includes a user friendly Interface for porting of knowledge to server.[1]
- 2. The planned system provides the ability to drag the info from the server of the required order variety and acquire several reports.
- 3. The planned system provides no replication of knowledge.
- 4. Users will get the required output in keeping with their queries. This is an additional advantage.

# 2.3 Acceptance Criteria

The following acceptance criteria were established for the analysis of the new system:

- 1. User friendliness:- The system ought to meet what user wants and may be straightout easy to use.
- 2. Modularity:- The system should have comparatively freelance and single perform components.
- 3. Maintainability:- The system should be specified future maintenance and enhancements times and efforts area unit reduced.
- 4. Timeliness:- The system ought to operate well below traditional, peak and recovery conditions.[2]
- 5. The system developed is correct and thence reliable i.e. The error rate must be reduced and therefore the outputs should be consistent and proper.
- 6. Both the execution time and reaction time ought to be negligibly low.
- 7. The system should be economical i.e. the resources utilization must be optimum.[4]

8. The system ought to have scope to foresee modifications and enhancements i.e. it should be able to address the changes in future technology.[3]

#### **3. SYSTEM REQUIREMENTS**

#### 3.1 Hardware Requirements Specification

- Processor : Intel Pentium Family and above
- RAM : above 512 MB
- Hard Disk : 2 GB and above

#### **3.2 Software Requirements Specification**

Front End : Notepad (PHP)

Back End : Sql Server 2012

Platform : XAMPP

#### 4. MODULE DESCRIPTION

#### 4.1 User Login Module:

This module includes a login interface wherein the admin by his Login Id and password will login with success.The details for login are joined with the information in mysql server, i.e at database. If the details entered are wrong then it pops up with an error message.





# 4.2 Dashboard Module:

Dashboard includes summary regarding the organization that displays the sale of the chemical company at the side of the overall variety of product, brands, categories, subcategories and users. Left facet of the window pane consists of a sidebar that includes sub modules like class, subcategories, brand, product, inventory, cart, search, client details, transaction details, etc.



Fig -2: Dashboard

#### 4.3 Product Module:

This module includes Product Details and Add new product submenu, where we are able to add several details associated with the product. Costs for chemicals may be set during this section. We are able to conjointly update the stock of chemicals.

ALPINE CHEMICALS	A Wesserve Admin * THE Cart S Gardings /* Lagrant						
	# Home ) AddProduct						
# Dashboard	Add Product						
II Category	Add Floddet						
iii Sub Category							
D Brend	III Add Product						
0 Product	Product Name :	Enter Product Name					
e inventory	Category :	Select Category	~				
TE CARL 🚺	Sub Category Name: :	Befect Bub Category	v				
Q. Search Involce	Brand Name: :	Belect Brand	v				
🗑 Customer Detail	Model Number :	Enter Model Number					
II Report	Stock(units):	Enter Block					
	Price(perunits) :	Enter Price					
	Status :						
	Add						

Fig -3: Product Module

# 4.4 Inventory Module:

Inventory module shows various different kinds of chemicals we've got in our inventory in addition to another details like its class, subcategory, brand, model variety and stock details like the overall stock and also the remaining stock.

	10.00	De la la la							
I Cotegory	view	Products Inve	ntory						
	11 P	roducts Inventory							
	Show 10 + entries						Search:		
	SNO	Product Name	Category Name	SubCategory Name	Brand Norne	Model Number	Stock	Remaining Stock	Satu
	1.1	AMMONIUM SULPHATE	SPECIFIC HAZARD	ALKALI	Sinopec	003	50	49	Active
t Cart 🚺	2	NTRIC ACID	HEALTH HAZARD	SLIGHTLY HAZARDOUS	Sinopec	002	200	200	Active
	3	GRALIC ADD	SPECIFIC HAZARD	ON DIZER	Mtsubishi Chemical	004	200	150	Active
	4	SULPHURIC ACID	HEALTH HAZARD	HAZARDOUS	EconMobil Chemical	001	100	90	Active
								st Previous 1 N	

Fig -4: Inventory Module

#### 4.5 Cart Module:

This module consists of client details like name, mobile number and another contact data. It has choices to pick the mode of payment and shows the small print of the product and the total quantity.



ducts Cart

# Fig -5: Cart Module

#### **5. APPLICATIONS AND RESULTS**

#### 5.1 Functionalities by system:

Functionalities provided by Inventory Management System area unit as follows:

- 1. Provides the search out facilities supporting numerous factors. Like Stock, Products data, Sales, Customers, etc.
- 2. Inventory Management System additionally manages the merchandise class details on-line for Sales details, Customers details, Stock.
- 3. It tracks all the knowledge of Inventory, Product class, Sells etc.
- 4. Manage the Inventory data, shows the information and outline of the Stock, Products
- 5. To increase potency of managing the Stock, Inventory.
- 6. It deals with managing and recording transactions of Sales.
- 7. Manage the information of Stock editing, adding and change of Records is improved which ends in correct resource management of Stocks.
- 8. Manage the Sales data of organization.
- Integration of all the records of the Customers. 9.

#### **5.2 Economic Feasibility:**

The proposed "CHEMICAL INVENTORY MANAGEMENT" is economically achievable because:

- 1. The system needs only a few time factors.
- 2. The system can give a quick and economical features rather than a slow and error prone manual system, therefore reducing time and man power.
- 3. The system has GUI and less user-training is needed to get it learnt.

The system can give service to look at 4. numerous information for proper managerial decision making.

#### 5.3 Results:

The methodology represented above has resulted in successfully creating of the project. All the linking has been done correctly that has resulted in the proper functioning of the website. The website is functioning the same way as it was predicted. There are no errors until date and therefore the complete website has been tested with many different trials.

#### **6. FUTURE SCOPE AND CONCLUSION**

#### 6.1 Future Scope:

- 1. Manager module
- 2. Salary and bonus menu
- 3. Auto remainder concerning low stock
- 4. Website to be run on server
- Seperate Login Details for clients to examine 5. their cart and bills

# 6.2 Conclusion:

- 1. This system is anticipated to be user friendly and can supply easy accessibility to the data along with services like stock management, erecruitment, employee management, bill management and due pursuit.
- 2. In the absence of the Inventory Management System, it's terribly tedious for the human resource department to keep the track of all the employees and even tougher for daily chemical stock management bills.
- 3. The management system is developed to supply info of staff and plenty of alternative facilities at the clicking of a button.

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