Inventory Management System for Shree Kalbhairav Traders

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***Abstract*—Inventory management system is a desktop based system for tracking inventory levels, order the stock to minimize the bridge between demand and supply and fulfill the needs of customers. This system can be used to store the detail information about the inventory, stock maintenance and update the inventory. By keenly observing the details, Store and Financial report is procured. The purpose of our Inventory management system is to build an application program to reduce the manual work for managing the workers. Periodic backup of the database on cloud is purveyed using security. Sale analysis is imparted in the form of charts and graphs for catalyzing the decision making processes. It allows the administrator and the employees to access the assigned features.**

Keywords—Financial Report , Backup , Sale Analysis , Cloud , Security

I. INTRODUCTION

Inventory management system contains detailed information about the product or any item. In which it includes stock details Aging stock, purchase details, Sales details. In inventory management system Stock is considered everything which is necessary for making a products it includes raw materials, partially finished products and consumables[3].The Aging stock implies that after a certain time the stock remains unpurchased. In Inventory Management System depending upon the product , duration of aging stock will change. The optimal cycle of Inventory management system refers to the purchase of the material and its sale to the customer. Now -a-days ,the companies are almost service oriented rather than product oriented .In Inventory Management System tracking of the inventory in real time is crucial .In Inventory management administrator not only saves the tracking details but also generate report. The Cloud inventory management software allows business owners to integrate with their existing systems with ease. Utilizing web based inventory software system is quite easy. All Inventory Management System Administrator have to do is sign up for a monthly or yearly subscription and start using the inventory management software through the internet .

II . Existing System

In existing systems, the user(salesperson,sales manager, inventory manager) relies on a lot of paperwork in order to maintain the records of inventory. The records include each and every detail about the purchased products,sold products,products in demand, products information, transportation of products(Product's name, ID,etc) and the customer's information. Since there exist numerous records it is time consuming as well as difficult to manage and retrieve whenever needed which is also prone to human errors that occur which may lead to financial crisis in business[5].Stock is the most important investment made by the inventory keeping track of stock i.e. which of the stock is leftover and which the of stock will suffer shortage; all this information helps the owner in order to produce or order the products. This will also reduce over ordering of products also reducing costs. So to control over stock and identify slow moving inventory, stock ageing analysis reports need to be made. The stock ageing analysis reports are made considering expiry date of products that differs product by product and material by material. So its a very tedious work to make analysis reports in existing system. In order to control this advantages in existing system,it is necessary to replace it with the proposed system

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II. PROPOSED SYSTEM:

The urge to overcome the drawbacks of the customer's existing system enlightens with the solution of preparation of user friendly automated system. This system allows the employee to monitor and update the details of sale and purchase of goods. The keen observation of the centralized database is done after which the cost impact and the aging stock is obtained. By using the impact and stock details, Financial Report and Sales Report is prepared . This report helps the administrator or owner of the Inventory system to keep up the fast forward for the demand of goods[2]. The local centralized database gets updated on cloud platform on a regular basis or a monthly basis. Along with these, the administrator is allowed to upload the confidential information about the clients on cloud after encryption to provide security[1].

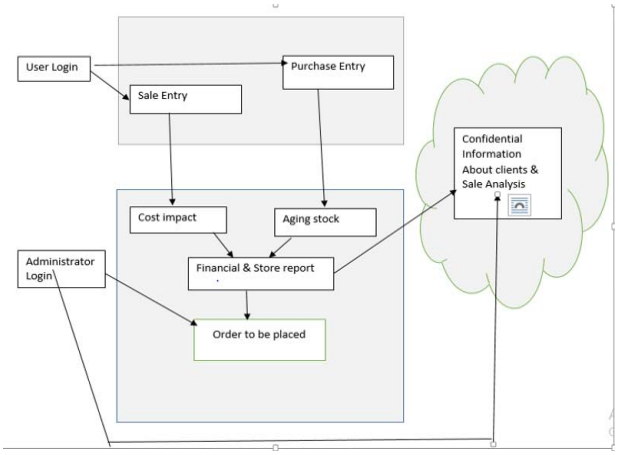

fig. 1.1 Inventory management system

IV. Implementation:

A. Purchase Module:

1.In this module employee or administrator can add all details about the products to be purchased .The details includes PO-Number, PO-date, Tax, Delivery-date and status.

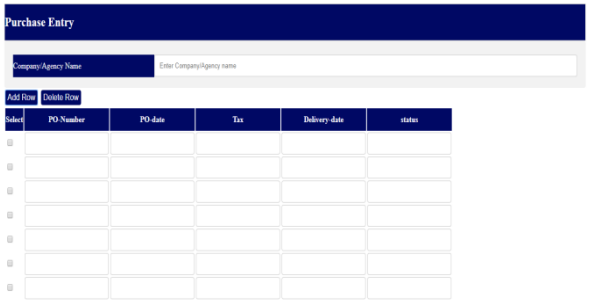

fig. 1.2 Purchase Module

2. He can add new purchase entries by clicking on "Add Row" Button.
3.He can also delete the particular entry by selecting appropriate row and then clicking on "Delete Row" button.

Source code for Purchase Module :

```
<!DOCTYPE html>
<HTML>
<div class="head">
<h2 align="center">Purchase Entry</h2>
</div>
<HEAD>
<TITLE>Purchase.html </TITLE>
<SCRIPT language="javascript">
function addtableRow(tableID) {
var table = document.getElementById(tableID);
var rowCount = table.rows.length;
var row = table.insertRow(rowCount);
var cell1 = row.insertCell(0);
var element1 = document.createElement("input");
element1.type = "checkbox";
element1.name="checkbox[]";
cell1.appendChild(element1);
var cell2 = row.insertCell(1);
//cell2.innerHTML = rowCount + 1;
var element2 = document.createElement("input");
element2.type = "text";
element2.name = "txtbox[]";
cell2.appendChild(element2);
var cell3 = row.insertCell(2);
var element3 = document.createElement("input");
element3.type = "text";
element3.name = "txtbox[]";
cell3.appendChild(element3);
var cell4 = row.insertCell(3);
var element4= document.createElement("input");
element4.type = "text";
element4.name = "txtbox[]";
cell4.appendChild(element4);

var cell5 = row.insertCell(4);
var element = document.createElement("input");
element5.type = "text";
element5.name = "txtbox[]";
cell5.appendChild(element5);
var cell6 = row.insertCell(5);
var element6 = document.createElement("input");
element6.type = "text";
element6.name = "txtbox[]";
cell6.appendChild(element6);
}
function deletetableRow(tableID) {
try {
var table = document.getElementById(tableID);
var rowCount = table.rows.length;
```

```
for(var i=0; i<rowCount; i++) {
var row = table.rows[i];
var chkbox = row.cells[0].childNodes[0];
if(null != chkbox && true == chkbox.checked) {
table.deleteRow(i);
rowCount--;
i--;
}
}
}catch(e) {
alert(e);
}
}
</script>
<style>
#dataTable th {
  padding-top: 12px;
  padding-bottom: 12px;
  text-align: center;
  background-color:#000066;
  color: white;
}
 .head{
  height: 100%;
  width:100%;
  background-color: #000066;
  color:white;
  border: 1px solid #c3c3c3;
  display: -webkit-flex;
  display: flex;
  -webkit-flex-wrap: wrap;
  flex-wrap: wrap;
  -webkit-align-content: center;
  }
* {
  box-sizing: border-box;
}
.button {
  background-color: #000066;
  border: none;
  color: white;
  padding: 5px;
  text-align: center;
  text-decoration: none;
  display: inline-block;
  font-size: 16px;
  margin: 4px 2px;
  cursor: pointer;
  border-radius: 4px;
}
.col-25 {
  background-color: #000066;
  color: white;
  float: left;
  width: 25%;
  margin-top: 6px;
}
.col-75 {
  float: left;
  width: 75%;
  margin-top: 6px;
}
.row:after {
  content: "";
  display: table;
  clear: both;
}
.container {
  border-radius: 5px;
  background-color: #f2f2f2;
  padding: 20px;
}
label {
  padding: 12px 12px 12px 0;
  display: inline-block;
}
input[type=text], select, textarea {
  width: 100%;
  padding: 12px;
  border: 1px solid #ccc;
  border-radius: 4px;
  resize: vertical;
}
@media screen and (max-width: 600px) {
  .col-25, .col-75, input[type=submit] {
    width: 100%;
    margin-top: 0;
  }
}
</style>

</HEAD>
<BODY>
<div class="container" >
<form>
    <div class="row">
    <div class="col-25">
      <label for="fname">Company/Agency Name</label>
    </div>
    <div class="col-75">
      <input type="text" id="comname"
name="Company/Agency Name"
placeholder="Enter Company/Agency name">
    </div>
  </div>
</form>
</div>
<INPUT type="button"  class="button"
value="Add Row" onclick="addRow('dataTable')" />
<INPUT type="button"  class="button"
value="Delete Row" onclick="deleteRow('dataTable')"/>
<TABLE id="dataTable"  >
<TR>
<th>Select</th>
```

```
<Th>PO-Number </Th>
<Th>PO-date</Th>
<Th>Tax </Th>
<Th>Delivery-date</Th>
<Th>status</Th>
</TR>
</TABLE>
</BODY>
</HTML>
```

B. Sales Module:

1.In this module employee or administrator can add details about the products to be sold. The details includes Product, Quantity, Rate and Amount.
2.He can Enter the Customer Details that includes Customer's name, address and phone number.

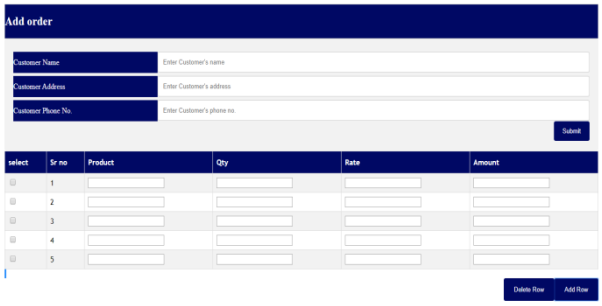

Fig 1.3 Sales Module

3.He can add new order entries by clicking on "New entry" Button.
4 He can also delete the particular order by selecting appropriate row and then clicking on "Delete Row" button.

Source code for Sales Module :

```
<!DOCTYPE html>
<html>
<head>
<style>
 .head{
  height: 100%;
  width:100%;
  background-color: #000066;
  color:white;
  border: 1px solid #c3c3c3;
 display: -webkit-flex;
  display: flex;
  -webkit-flex-wrap: wrap;
  flex-wrap: wrap;
  -webkit-align-content: center;
}
bu {
 height:50%;
 width : 50%;
 margin:bottom;
}
* {
  box-sizing: border-box;
}
input[type=text], select, textarea {
  width: 100%;
  padding: 12px;
  border: 1px solid #ccc;
  border-radius: 4px;
  resize: vertical;
}

label {
  padding: 12px 12px 12px 0;
  display: inline-block;
}

input[type=submit] {
  background-color: #000066;
  color: white;
  padding: 12px 20px;
  border: none;
  border-radius: 4px;
  cursor: pointer;
  float: right;
}

input[type=submit]:hover {
  background-color: #b3b3ff;
  color: black;
}
input[type=button] {
  background-color: #000066;
  color: white;
  padding: 15px 23px;
  border: none;
  border-radius: 4px;
  cursor: pointer;
  float: right;
}

input[type=button]:hover {
  background-color: #b3b3ff;
  color: black;
}
.container {
  border-radius: 5px;
  background-color: #f2f2f2;
  padding: 20px;
}
.col-25 {
  background-color: #000066;
  color: white;
  float: left;
  width: 25%;
```

```
  margin-top: 6px;
}

.col-75 {
  float: left;
  width: 75%;
  margin-top: 6px;
}

.row:after {
  content: "";
  display: table;
  clear: both;
}
#product {
  font-family: "Trebuchet MS", Arial, Helvetica, sans-serif;
  border-collapse: collapse;
  width: 100%;
  }
#product td, #product th {
  border: 1px solid #ddd;
  padding: 8px;
}
#product tr:nth-child(even){background-color: #f2f2f2;}

#product tr:hover {background-color: #ddd;}

#product th {
  padding-top: 12px;
  padding-bottom: 12px;
  text-align: left;
  background-color: #000066;
  color: white;
}
@media screen and (max-width: 600px) {
  .col-25, .col-75, input[type=submit] {
    width: 100%;
    margin-top: 0;
  }
}
</style><SCRIPT language="javascript">
function addtableRow(tableID) {
var table = document.getElementById(tableID);
var rowCount = table.rows.length;
var row = table.insertRow(rowCount);
var cell1 = row.insertCell(0);
var element1 = document.createElement("input");
element1.type = "checkbox";
element1.name="chkbox[]";
cell1.appendChild(element1);
var cell2 = row.insertCell(1);
cell2.innerHTML = rowCount ;
var cell3 = row.insertCell(2);
var element3= document.createElement("input");
cell3.appendChild(element3);
var cell4 = row.insertCell(3);
var element4 = document.createElement("input");
cell4.appendChild(element4);
var cell5 = row.insertCell(4);
var element5 = document.createElement("input");
cell5.appendChild(element5);
var cell6 = row.insertCell(5);
var element6 = document.createElement("input");
cell6.appendChild(element6);
}
function deletetableRow(tableID) {
try {
var table = document.getElementById(tableID);
var rowCount = table.rows.length;
for(var i=0; i<rowCount; i++) {
var row = table.rows[i];
var chkbox = row.cells[0].childNodes[0];
if(null != chkbox && true == chkbox.checked) {
if(rowCount <= 1) {
            alert("Cannot delete all the rows.");
break;
            }

            table.deleteRow(i);
rowCount--;
i--;
}
}
}catch(e) {
alert(e);
}
}
</SCRIPT>
</head>
<body>
<div class="head">
<h2 align="center">Add order</h2>
</div>
<div class="container">
  <form action="/action_page.php">
  <div class="row">
    <div class="col-25">
      <label for="fname">Customer Name</label>
    </div>
    <div class="col-75">
      <input type="text" id="cname" name="Customer Name"
placeholder="Enter Customer's name">
    </div>
  </div>
  <div class="row">
    <div class="col-25">
      <label for="lname">Customer Address</label>
    </div>
    <div class="col-75">
      <input type="text" id="caddress" name="Customer's
Address" placeholder="Enter Customer's address">
    </div>
  </div>
  <div class="row">
```

```
   <div class="col-25">
     <label for="lname">Customer Phone No.</label>
   </div>
   <div class="col-75">
     <input type="text" id="cphoneno" name="Customer's
Phoneno." placeholder="Enter Customer's phone no.">
   </div>
  </div>
  <div class="row">
    <input type="submit" value="Submit">
  </div>
  </form>
</div>
 <div>
 <TABLE id="product"  border="1">
<TR>
<th>select</th>
<th>Sr no</th>
<th>Product</th>
<th>Qty</th>
<th>Rate</th>
<th>Amount</th>
</TR>
</TABLE>
</div>
<br>
<INPUT type="button" value="Add Row"
onclick="addRow('product')" >
<INPUT type="button" value="Delete Row"
onclick="deleteRow('product')">
</body>
</html>
```

V. Conclusion

In this system, the employee is provided with the facility to enter the sales and purchase details about the intake and sell of the material. Our project also proposes an optimum way to find the cost impact and aging stock. We also want to make sure that data is kept secure from external attacks. We propose an algorithm from [1] which will handle the security implementation. Frequent updates of the database will be done on cloud storage where additional information can also stored by the administrator or owner of the inventory. This system helps the administrator and employee to handle the records of the inventory and update it with manual intervention everyday. In our proposed system we are focusing on reducing manual work due to this it consumes less time and introduces more user friendly environment.

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Unless there are six authors or more give all authors'