Inventory Management System

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Abstract- *In today's world there is a major problem of Managing the inventory for large and small scale companies and making document sheet of them makes the situation even worse as it is difficult to search or manage the stocks efficiently. To overcome this, we come up with an inventory management based software. The software manages the stock in/out of the company, it can provide monthly report also. As far as memory requirement is concerned it requires RAM of 513MB to respond efficiently to commands. It has two modules Employees and admin.Work relating adding/removing stock, validating any employee for login access are done by admin. Employees work are characterized as-making invoice, making reports etc. It uses Html/Css, bootstrap, JavaScript for developing frontend where Jsp and servlet as a backend language.*

Keywords- *inventory, validating, Html/Css, bootstrap, JavaScript, jsp, servlet.*

I. INTRODUCTION

Inventory management is the ongoing process of moving parts and products into an out of the company's/store's location. It stores the records of the supplier, hardware, software, sales and customer's record are maintained and manipulated.

Company manages their inventory on daily basis as they placed a new orders for the products and the ship order out to the customer. It is important for the business leaders to gain the profit involved in the inventory management Process. Without a doubt inventory management system is a important part of doing business. It means by which company remain stock with all of the essential goods which they need of sell to the customer and complete the daily operations.

II. SOFTWARE AND HARDWARE SPECIFICATIONS

Hardware Specification

Processor	:	Pentium III/AMD Athlone XP
RAM	:	512 MB
Hard disk	:	20 GB
FDD	:	1.44MB
Monitor	:	14 inch
Mouse	:	3 Button scroll
CD Drive	:	52 X
Keyboard	:	108 keys

Software Specification

Operating System	:	Windows 2000/xp /7
Languages	:	java (Ajax, JDBC, JSP, Servlet)
Front End	:	HTML, JavaScript, CSS, Bootstrap
IDE Tool	:	eclipse
Web Servers	:	Tomcat 8.0
Backend	:	SQL
Browser Program	:	Internet explorer/Mozilla/chrome

III. INVENTORY SOFTWARE INTERFACE

There are two core modules in the Inventory software-admin module, employee module**.**

1) Admin module-

This is the module handled by a small bunch of people who were responsible for adding or removing resources (i.e. employees or stocks).
It has three submodules

A) Login access module:

This module deal with restricting the unauthorized access to the core admin module.

Only the dedicated registered users can access this module based on username and password given to them.

Fig 1.1   Admin-login Interface

B) Add user/Stock:

a) In add user sub-module we permit a admin has given the rights to permit or restrict a particular registered employee to use the core employee module of the software.

b) In add stock sub-module we have given the authority to admin for adding the quantity for a particular present stock.
If any fault occurs during this phase then he is the responsible person as it was under his authority.

C) View users/Stock:

This module has a lots of usage. It foretell the admin that a particular stock is going to reduce. It also gives the total count of the employees along with their data.

Fig 1.1   Admin-home Interface

2) Employees Module-

This is the module which is designed for employees only. Here we have restrict the rights of manipulating any registered data. Through this module a user can only retrieve data and
not able to manipulate it.The main function under this module is generating invoice, Generating reports for analyzing purpose.

A) Login access module

Here also every employee is assigned with some user name and password without which he can't enter the employee module. This is an important sub-module as it is related to the security and credibility of our software.

B) Invoice generation

a) Invoice generation: In this submodule we have an interface having columns for Item, quantity, price etc.
Here we made the invoice based on the input from the customer.

b) Print Invoice: Here the data entered by the user first goes into MySQL database and then this data gives the command to print for printing the invoice
.
c) View Invoice: In this sub-module we can view any invoice generated in the past just by putting the bill no given on the top of the invoice print generated in the past.
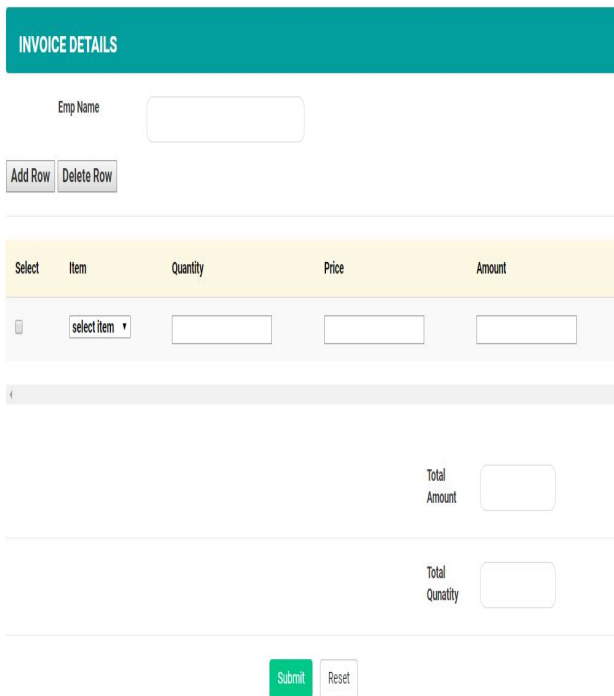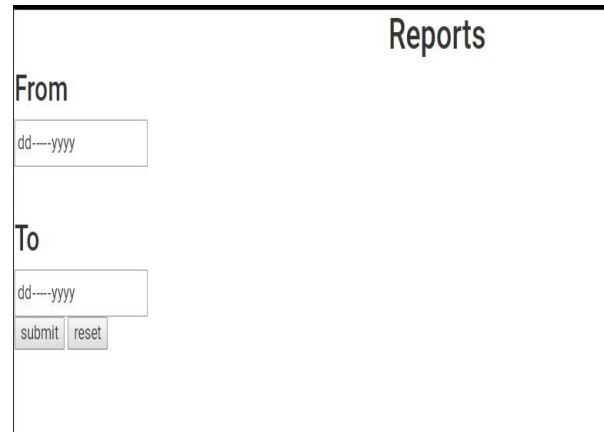
Fig 2.1   Employee-Invoice generation Interface
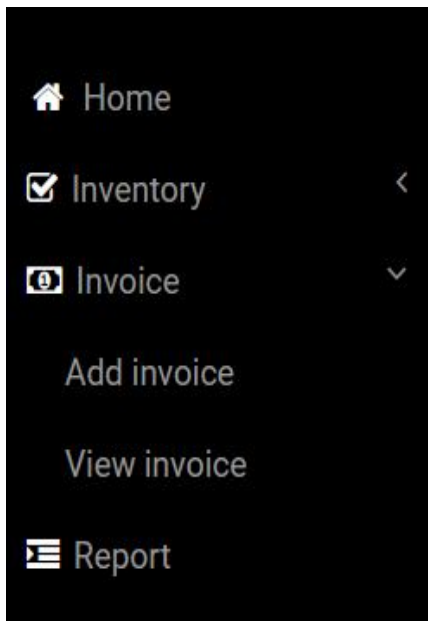
Fig 2.2 Employee-home page interface

C) Report Generation

This sub-module is designed for easing the work of analyst. This provides them the detail flow of stock for selected period of time. It shows the interest of customers for a particular product etc**.**

Fig 2.3 Employee-Report interface

IV.CONCLUSION

This project implementation would reduce a long run headache for small/medium sized firms which are tradionally into hectic paperwork to manage inventory related works. Some of the benefits of this automated software is:

1) Help in increasing profit/decision-making
-Managing and controlling stocks reduces the chance of over-stocked or under-stocked ware-houses which can lead to losses due to degraded or expired stocks.
-As it has analysis report also, so it tells which is the most preferred item, brand etc. just by mere analysis of the generated report which which enrich the firm-customers relationships**.**

2) Help in reducing manual mistakes or repeated work
-It helps in reducing the manual mistake in price, quantity during invoice generation as all those things are made predefined by the admin at the management phase**.**

3) Improves cash flow:
-Purchasing the correct inventory in right amount while eliminate slow-moving, absolute inventory lead to better cash flow.
-Credit management and collection tools integrated within an inventory management system helps convert receivable to cash quicker.

4) It increases the enriched customer experience:
Stocking the items based on the reports generating through this software results in coping with trend, seasonality, changing market conditions which will be appreciated by the customers.

V. ACKNOWLEDGEMENT

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