Hotel Inventory Management System

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Abstract: Inventory management system which is helpful for the business operators, where shopkeeper keep the records of purchase and sales. This inventory is eliminate paper work, human faults , manual delay and speed up process .This inventory management system will have the ability to track sales and available inventory, tells a shopkeeper when it's time to reorder and how much to purchase. Inventory management system is windows application developed for windows operating systems which focused in the area of inventory control and generate. We aim to make a hassle free Inventory Management System for the staff to keep track of the supplies and raw material, eliminating the need of manual book record system. While making this project we have used the basic as well as advanced knowledge of accounting for better used experience. The software is made up of two parts: The frontend is developed using IIS, .Net Framework and the Backend from MS SQL Express 2019.

Keywords: Hotel Inventory Management, MS SQL Express 2019, IIS, .Net framework, Web Application

I. INTRODUCTION

Inventory management is the responsibility of the entire organization and it is very critical to hotel success. Minimized operational cost and improved customer satisfaction is achieved when an organization employees demand forecasting. Hotels have numerous operations in inventory which happen simultaneously. These operations include sales, food and liquor purchase, other related material. It is difficult to track all these activities manually on paper. The best inventory management helps practice helps a hotel plan its expenditure, ensure effective control on profit, predict hotel demands and supply rate accurately. Computer science supported database and web application integrity will help in creating a handy and functional way to register inventory of a hotel in many ways, one of them being the Hotel Inventory Management System, which takes all the data entered by the admin or inventory manager and stores it in the database at the backend. And also shows the remaining payments to be done, payment method used for the transaction, stock consumed, etc. This system is based on database and web application integrity such as MS SQL Express 2019 stores all the data given by the admin, and the GUI is made using PHP, CSS, and HTML. This project will be also helpful for other kinds of management systems.

II. LITERATURE SURVEY

Inventory is considered to be the central theme in managing materials. Hence, well developed inventory management system is required to manage it. Tom-Jose et al. (2013) defines inventory as physical stock of goods which are kept in hands for smooth and efficient running of future affairs of an organization at a minimum cost. [1]

Lysons and Gillingham (2003) also defines inventory as the value or quantity of raw materials, supplies, work in progress and finished goods that are kept or stored for use as need arises. Raw materials are all the poultry, seafood items that are frozen packed. Supplies are items such as all the grains, vegetables and other items that can be stored for quite a long time. Work in progress items are goods that the staff has already started using and haven't yet finished it. [2]

Inventory management is about ensuring that all input of production that is available firm are maintained at a level where production is not interrupted as well as ensuring that operational cost is kept at a minimal level without affecting operation efficiency (Eneje, Nweze & Udeh, 2012). All these coordinated efforts are meant to ensure achievement of efficiency in all operations of the firm. Such operations may include procurement, stocking and transportation (Akindipe, 2014) [3].

The goal of most organizations is profit maximization (Niresh &Velnampy, 2014).Profitability means the potential of an organization to enlarge its net worth in some profit making ways.

III. PROPOSED MODEL

This project is based on registering and making entries of the goods and raw materials bought from the vendors and also entering the payment details.

Hotel Inventory Management System is web application based system. Built using PHP, CSS and HTML and the data is stored in the database created in MS SQL EXPRESS 2019.

By the help of this project we have taken inventory management one step further. As we have eliminated the use of hand written bills and storing them for future purposes. And also the tried to reduce the complexity of tracking items left in the inventory.
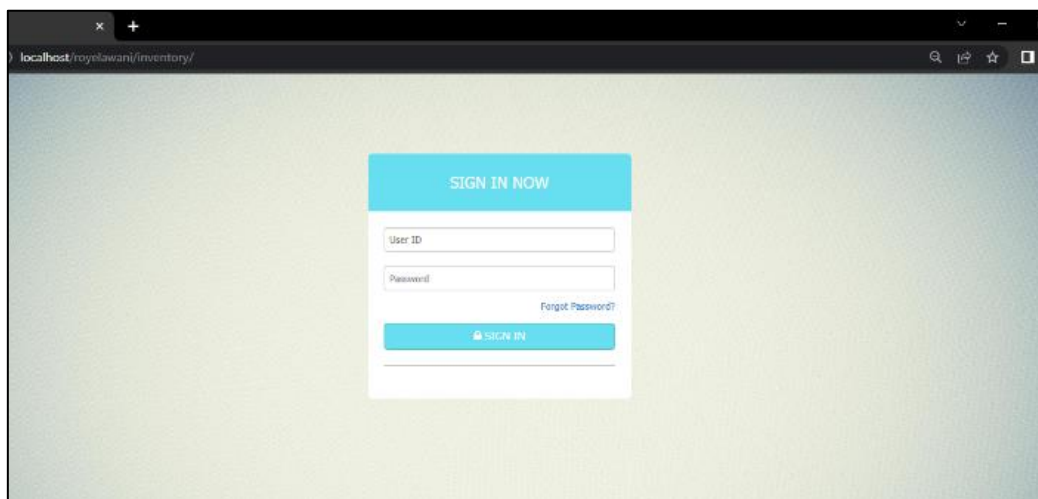
The admin can only access the inventory, admin is basically a dedicated person who only looks after the inventory. There can be multiple admins according to the requirements.

IV. WORKING METHODOLOGY

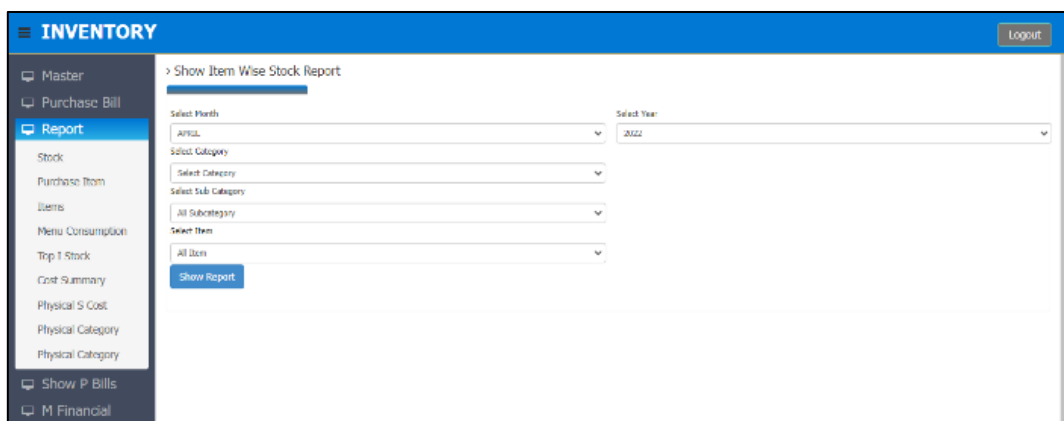The admin has all the control once he logs in. The system includes the following:

1. Admin Login

The admin is already being given a login Id and a password. These credentials are given by the hotel itself, and all the admins have a unique id and password. He has access to all the fields in the inventory.
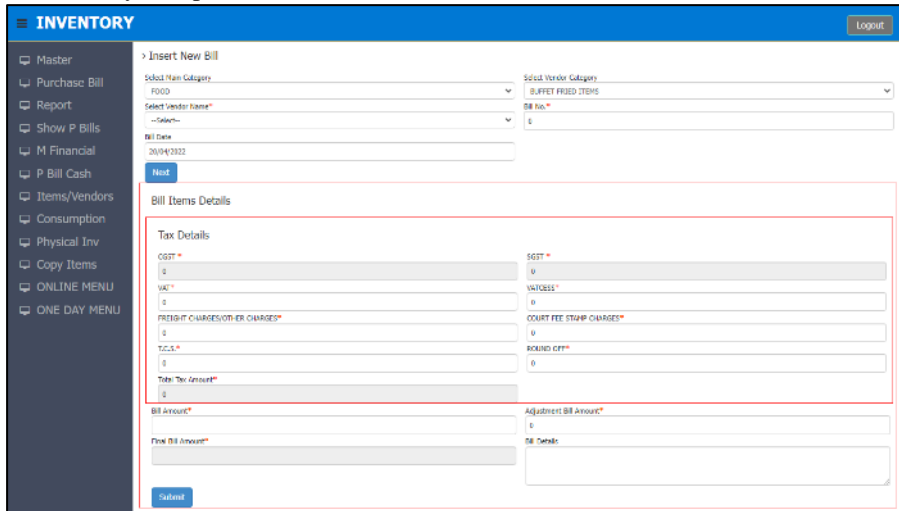

2. Purchase Bill Entry

Most of the vendors follow a receipt system and receipts are hard to manage, there's a risk of misplacing the receipts too. So admin enters the bill details in the application. The vendor's name, price, date, GST details, other details are entered.
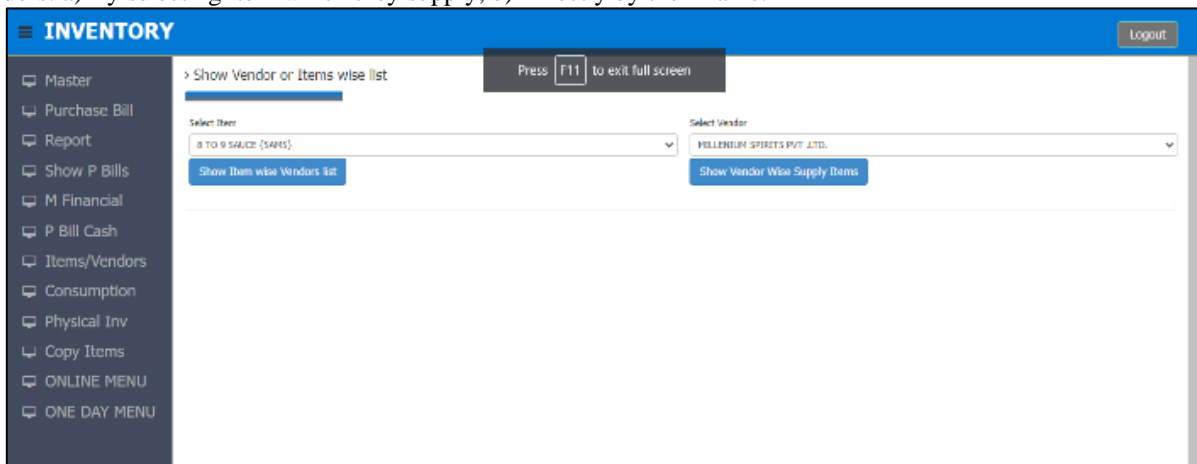
3. Stock Report

All the raw materials that is in stock is shown in this section. This gets updated as we enter the bills. We do not need to check the stock manually except some items.
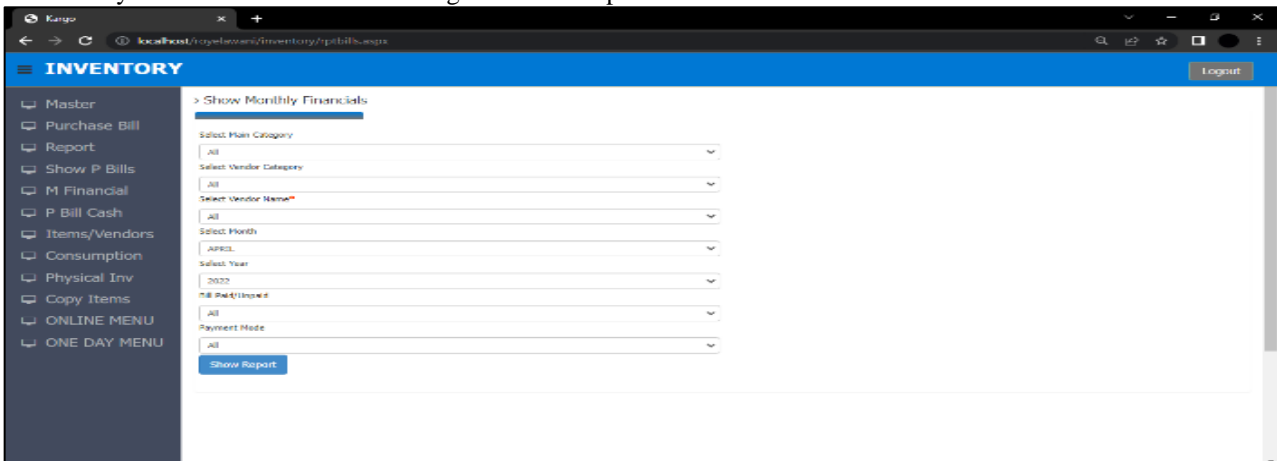

4. Vendor Details

The vendors and suppliers who provide the raw material are listed under this section. There are two ways to search vendors: a) By selecting item which they supply, b) Directly by their name.
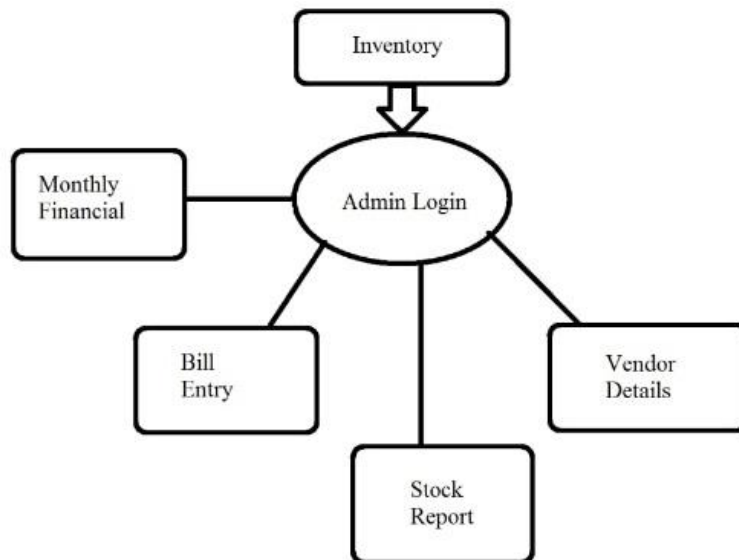

5. Monthly Financial

It shows the final amount spent in a specified period of time. Admin tallies all the bills and passes it to the CA for overall tally. All the bills that are entered gets summed up and stored in the data base.

V. WORK FLOW

VI. CONCLUSION

We have developed a platform where the hotel organization can manage their inventory with a less amount of manual work. Also the built system is precise and rigorous which will not cause any problems in keeping the records for a long time. We have eliminated oodles amount of transcribing and made it very easy to manage the inventory.

As we have achieved to put together an automated system and a user-friendly UI, the management process has become much more uncomplicated and clear. The admin can easily enter the bill details, and also retrieve them easily. The stock of raw material can be checked time-to-time and order items according to the need.

To correspond with the monthly finances, the admin has access to the monthly expenses of the inventory. Which he later tallies with the accountant for the hotel's overall expenses.

VII. RESULTS

The hotel's inventory management is simplified by the use of our project. The bill entry is now stress free, without the worry of losing the bill or the receipt. Also retrieving the bills is as easy, instead of going through enormous files.

Besides this we have also added a stock report, in which we do not have to manually go to the store room and check all the items. As we enter the bill the item gets registered and the quantity gets updated accordingly.

Aftermost, the monthly financial where all the bill amounts get summed up and create a figure which is considered as monthly expenses of the inventory.

VIII. FUTURE SCOPE

At this stage, our project is limited only to inventory, in future we're planning to add the employee salaries and wages. In which the salary will be sent directly sent to the worker's bank account. If possible, the online bookings section will also be added to our web application.

We may turn this project into complete Hotel Management system for restaurants, lodging hotels and even motels.

VIII. REFERENCES

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