



JOURNAL OF EMERGING TECHNOLOGIES AND INNOVATIVE RESEARCH (JETIR)

An International Scholarly Open Access, Peer-reviewed, Refereed Journal

I-billing – Billing System for Medical store

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Abstract: This project is based on the improved version of the traditional billing software which being used by the old generations of medical store owners and pharmacies, but it has some advanced features which are discussed in this synopsis as a part of modules.

There are various stock management problems that medical, or pharmacy store owners are facing with time after time. Proper management of stock and daily transactions is a major challenge for modern companies, especially with the high competition that is now witnessed. The ages of monopoly are long gone, and consumers' rapid sophistication rate has meant dissatisfaction in the first experience will lead to ultimate loss.

The key to brand building has shifted over the years to rely solely on quality, reliability, and efficiency of service. Businesses are therefore faced with the challenge of retaining existing customers and sourcing new ones in their path to success. Poor store management will result in disastrous outcomes including customer loss, company misdirection and eventual liquidation.

Keywords: Billing, Pharmacy, Stock Management, Transactions.

I. INTRODUCTION

The billing – Billing System for Medical Store is a software that helps medical, pharmacy store owners and suppliers to manage both their store accounts and medicine stock data.

Billing and stock management is one of the key functions of almost any business. In the present time, the medical stores are looking for the services that are accurate and reliable for providing services to the customers and workers. Every store is making efforts to computerize their activities for providing better services to the customers. This is the system used for medicine stock inventory in the medical stores. This system enables the manager of the store to record and manage all activities of the medical shop.

This system also enables the workforce of the medical store to offer their services in a manner which is more efficient and systematic which also improve of the medical store. This also helps in analyzing the performance of the store. The medical store management module can organize the daily activities in the medical store such as information of tablets, billing, details of stock and others. The medical store management software enables to maintain the details of purchase stock by the store and the details of the selling stock by customer wise.

II. RESEARCH METHODOLOGY

Many consider the waterfall method to be the most traditional software development method. The waterfall method is a rigid linear model that consists of sequential phases (requirements, design, implementation, verification, maintenance) focusing on distinct goals. Each phase must be 100% complete before the next phase can start. There's usually no process for going back to modify the project or direction.

Benefits of using Waterfall Methodology

The linear nature of the waterfall development method makes it easy to understand and manage. Projects with clear objectives and stable requirements can best use the waterfall method. Less experienced project managers and project teams, as well as teams whose composition changes frequently, may benefit the most from using the waterfall development methodology.

Disadvantages of using Waterfall Methodology

The waterfall development method is often slow and costly due to its rigid structure and tight controls. These drawbacks can lead waterfall method users to explore other software development methodologies.

III. MODELING AND ANALYSIS

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Module 1: Medicine Management

One of the biggest hurdles clinic staff face when it comes to scheduling is the need to simultaneously ensure each physician's time is appropriately allocated for patient visits as well as conference calls and other miscellaneous meetings. Medical practice management systems give staff-members real-time insight into each provider's availability, allowing them to instantly identify potential scheduling conflicts. The software also helps clinic staff avoid (or reduce) double-bookings.

Medical store management software provides a big relief for medical shop owners in organizing the inventory, accounting, and sales processes. This module is used to keep track of the stock data. We can update the data and use it for generating various reports.

Module 2: Point of Sales (POS) Module

What is a Point of Sale (POS) module?

It is a powerful solution designed to streamline retail environments. With the POS module, you have access to real-time reporting, a detailed financial overview, and inventory management. Billing software uses the standard billing procedure to generate the bills for each sale.

Module 3: Medicine Stock Report

A medicine held as stock by the clinical area. These medicines are usually medicines that are frequently used in the clinical area, or medicines that might be required in an emergency.

This software helps to keep a report of these type of medicines and helps to determine the current stock.

Module 4: Sales & Purchase Report

A purchase report provides you an insight into the purchases made for various items in your inventory focusing mainly on quantity and total cost incurred to buy that quantity for a preferred date range for the medicines. Sales reports show the amount of medicine sold during a particular range of time.

IV. RESULTS AND DISCUSSION

Managing pharmaceutical inventory in a hospital, clinic or physician's office can be challenging. It can entail skills your medical staff do not necessarily possess. Tracking is essential to keeping vital and commonly used medications on hand while monitoring the usage of addictive and harmful medications subject to theft or misuse. Keeping accurate records help management understand what inventory is available, when to order and ensure physical inventory matches inventory records. Ultimately, reducing inventory shrinkage could save millions of dollars over the course of a year.

Lead times with few supplier options can result in detrimental shortages without the assistance of an inventory management designed for the job. This year's pandemic has been a useful reminder to the medical community; managing inventory when there is a high variability in demand is challenging. You need to ensure life-saving medications are always in ample supply, even in the event of a significant increase in patient infections, as we have seen throughout the Covid-19 pandemic.

Results of using I-billing Medical Store Management System in use cases:

Whether the pharmacy is a standalone facility, or one located in a hospital, the key to smooth operations is to have a sound inventory management system. While it is possible to manage inventory manually, it can get hectic, increasing the margin for error. Here is a list of the best benefits that can be achieved when a pharmacy business invests in a solid inventory management system.

1. Keep Shelves Stocked

A good inventory management system can sync up the pharmacy's POS system and automatically update when products are sold. Updating the current level of inventory present on shelves will help prevent them from ever becoming empty. This feature will also help keep prices updated and to avoid pilferage.

2. Better Understanding of Sales Trends

A business owner will get a better idea of which products are selling more strongly than others. Understanding current sales trends will help the pharmacy management know how to move forward with their orders and help them generate a more significant ROI.

3. Identify Inventory Shrinkage

Shrinkage is a problem that many businesses face and can be detrimental to the growth of any pharmacy. Manual inventory management may make it easier for shrinkage to occur. However, with an automated inventory system, shrinkage may be better prevented as it will be easier to narrow down on why inventory numbers have come up short. Checkout and order procedures may be reviewed, and even theft may be considered to try and find the most logical reason why the numbers do not line up as they should.

4. Optimize Product Range

An exemplary storage and inventory management system will reduce the possibility of waste because the products will always be accounted for. The flow of products through the pharmacy will become more efficient because the system will prevent specific products from expiring and becoming harder to sell.

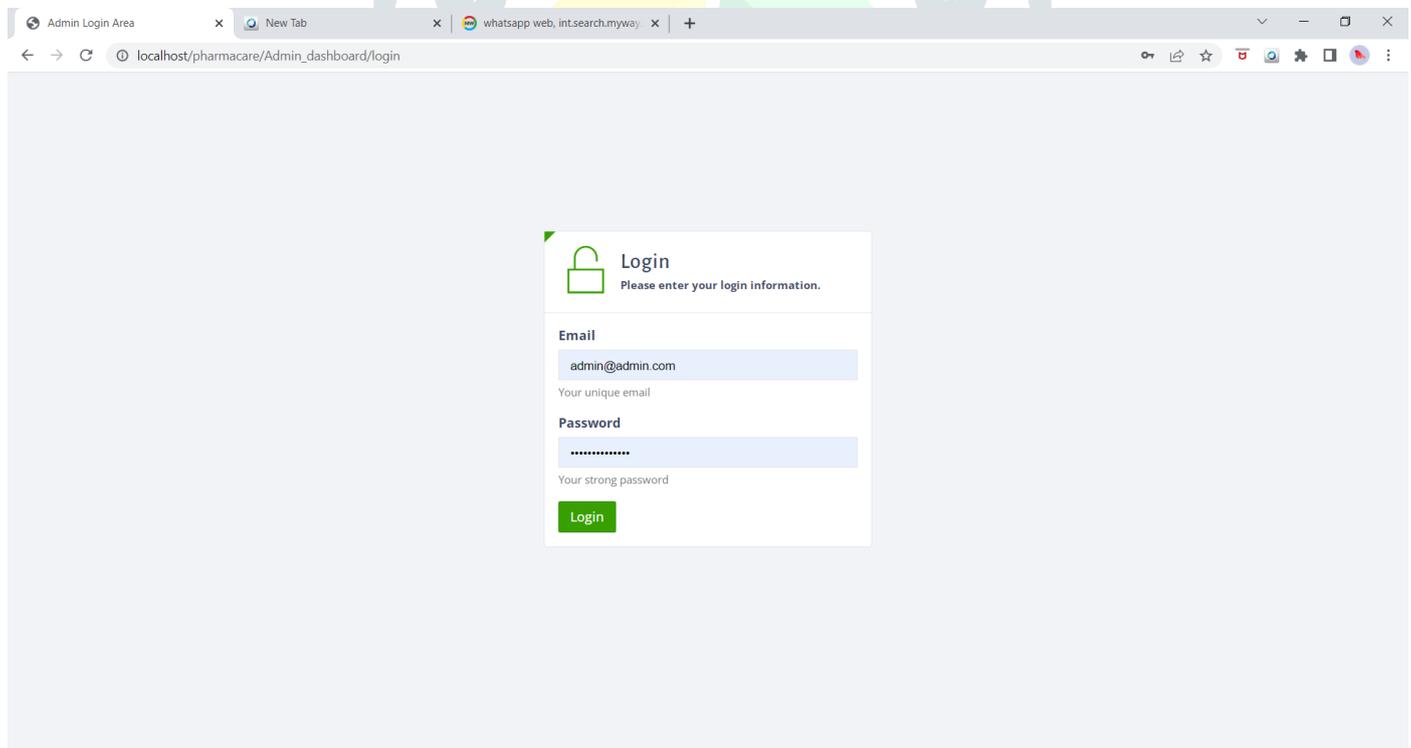


fig 1: Login Screen

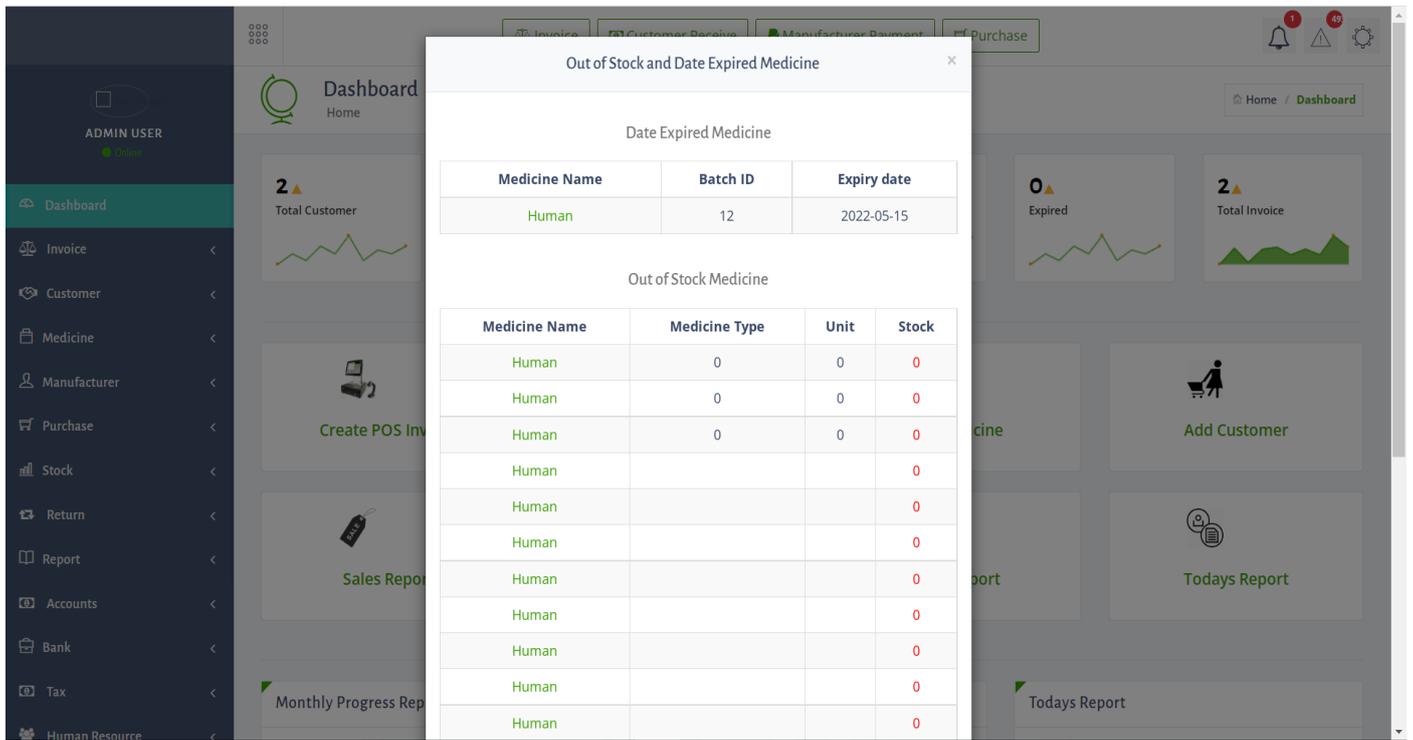


fig 2: Notification after login

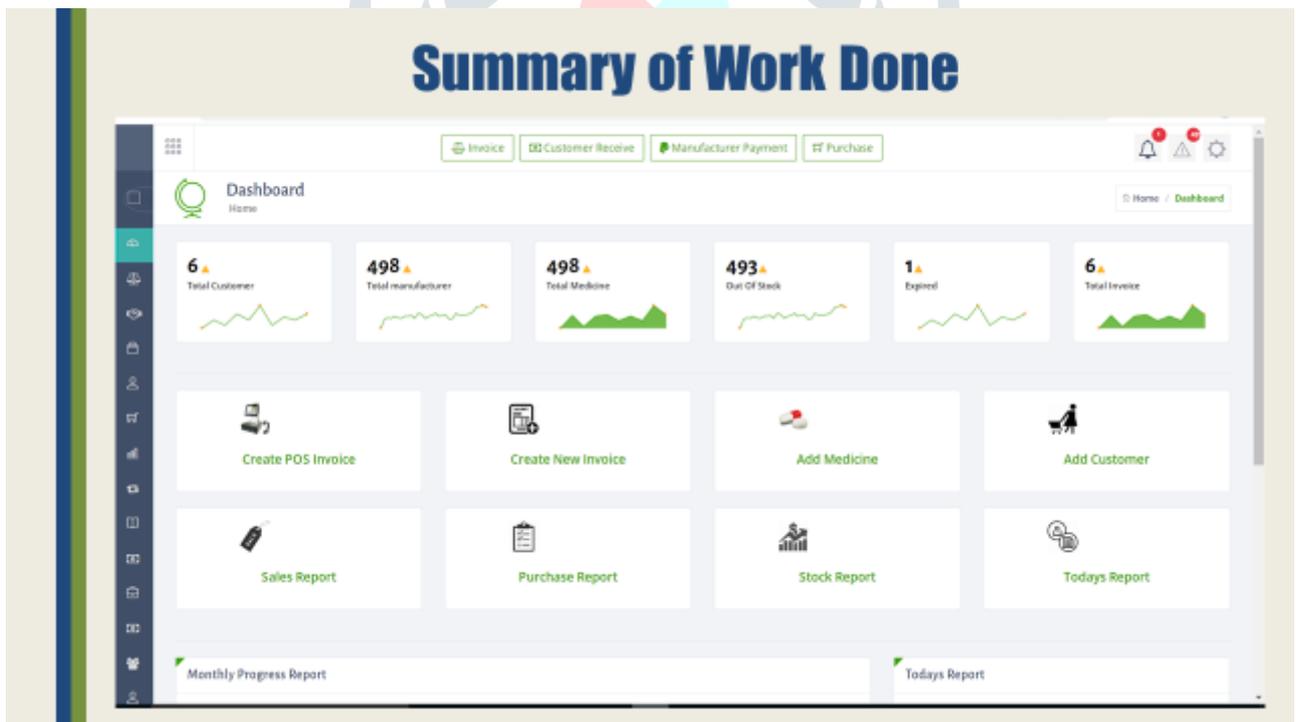


fig 3: medicine stock dashboard

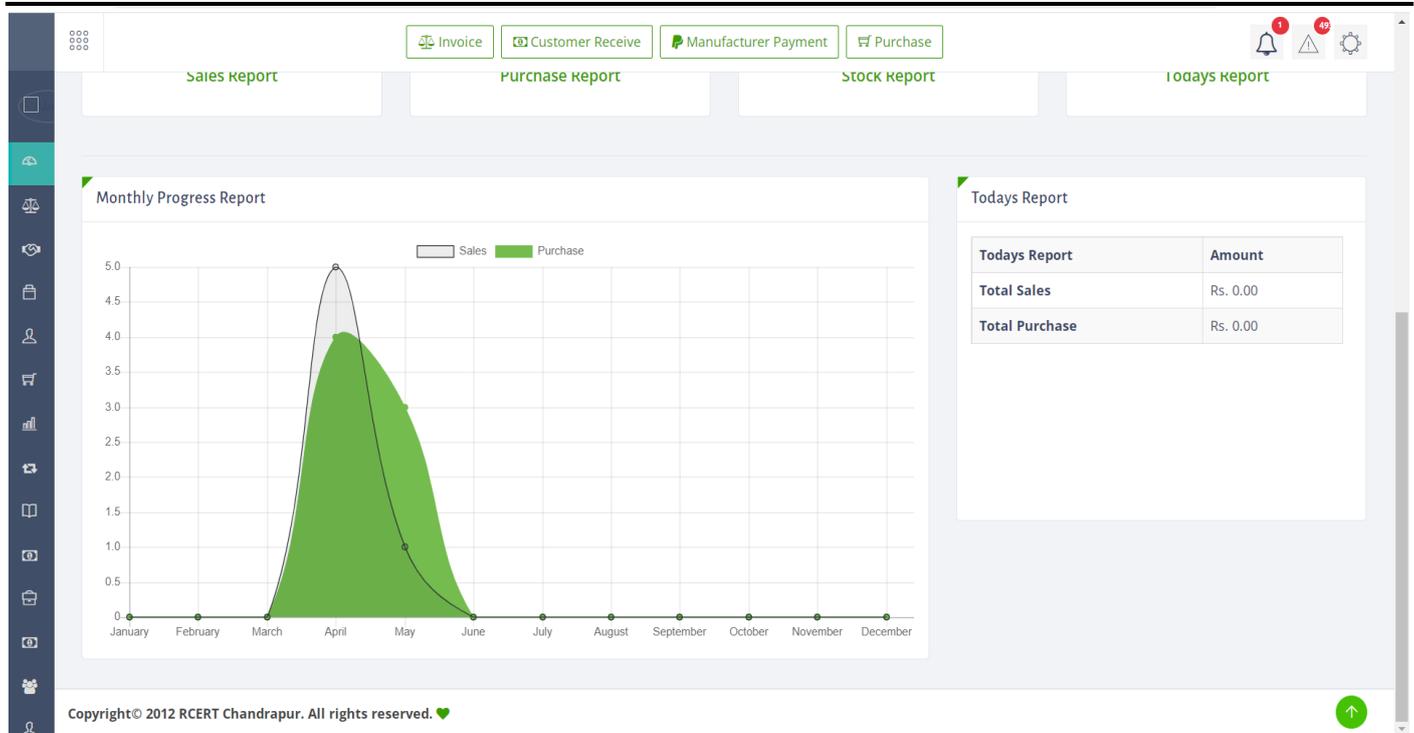


fig 4: sales & purchase report

V.CONCLUSION

An effective inventory management system will help a pharmacy reduce waste, avoid pilferage, and make the general experience more seamless for both pharmacists and customers. Having high-quality storage units and cabinets to keep your inventory of medicines and other pharmaceutical products is essential in any effective pharmacy inventory system.

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