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Billing System

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ABSTRACT : .

This project is developed to manage the bill submission process in big organization. Using this system user can submit their bill online and check the status of their bill. In this system employee can submit their bill to their manager online. After submitting the bill concerned manager gets the notification. Manager review the bill and approve the bill or disapprove. Employee can check the status of the bill any time after login the system.

Employee can submit bill of various amount. An email will be sent to the concerned people to let them know about the status of the bill. The main propose of this bill management system project is developing a system that automate the bill submission and bill approval task. In big organization bill submission is very tiresome work and maintaining the record of bill is very difficult and time consuming. In present system, user have to work manually to maintain bill records and it is very difficult to know the status of the submitted bill.

In present manual system, submitting the bills to their corresponding managers is a time consuming process and we have to maintain records manually. Some times in manual process, there is a possibility to get errors. To overcome all these problem we have developed this bill management system.

Keyword – Php, Billing System

INTRODUCTION

The project “Billing system” is an application to automate the process of ordering and billing of a “Departmental store” .This based on Software . The Power Billing System Project Report basically deals with the billing system. Since it’s Software application the problems of single tier could be solved using this Software Application Name: Billing system

Paper bills are now the primary channel of communication between companies and their customers. However, their potential for personalization is limited, and they are not interactive. If a customer wants to react to something in his paper bill for example, to make a customer service inquiry or to order a new service – he must make a telephone call. Internet Billing promises far more than a new and inexpensive way to deliver billing information. Industry experts predict to that Internet Billing will fundamentally change the way companies interact with their customers. Eventually, the Internet Bill will be an interactive entry to a host of additional services including customer self-care, automated sales one-to-one marketing. The Internet Bill will become the gateway through which customers and companies have electronic one to one dialogs.

PHP is a popular server-side scripting language that is commonly used for web development. It is particularly useful for creating dynamic web pages and web applications. PHP is often used in conjunction with a database management system, such as MySQL. MySQL is a popular open-source relational database management system. It is commonly used for web applications and is particularly well-suited for web development because it is fast, reliable, and easy to use. A billing system is an important component of many businesses, as it helps them keep track of their financial transactions, invoicing, and payments. In PHP and MySQL, you can create a billing system by following these steps: Design your database: Create a database with tables to store information such as customer details, products or services offered, and transaction information.

Develop the backend: Use PHP to create the server-side code that interacts with the database, handles requests from the client-side, and generates invoices.

Create the frontend: Develop the user interface using HTML, CSS, and JavaScript to enable users to input and view data, such as customer information, products, and invoices.

Implement security measures: Make sure to implement proper security measures to protect sensitive data, such as encryption of user passwords and input validation.

Test and deploy: Test the system thoroughly to ensure it works as intended, and deploy it to a production environment for users to access.

Here are some specific steps you can follow to implement a billing system in PHP and MySQL:

1. Create a database: Use a tool like phpMyAdmin or MySQL Workbench to create a new database and add tables to store the necessary data.
2. Define the database schema: Determine the structure of the tables in your database, including the fields, data types, and relationships between them.
3. Write PHP code: Use PHP to write the code that will interact with the database, such as inserting new customer information or generating invoices.
4. Create the user interface: Develop the frontend using HTML, CSS, and JavaScript to enable users to input and view data.
5. Test the system: Thoroughly test the system to ensure it works as intended and that all data is being properly stored in the database.
6. Deploy the system: Deploy the system to a production environment where it can be accessed by users.

A bill is a record of statement, and transaction of the money. Bill is used to keep record of business when a person buys some goods or any valuable things. To track of all the products sold to the customer and how much products was there in their reserve. They need to write down all the records in a record book manually [3]. The bill is not just for keeping the record of transaction, the bill is used for so many other purposes. They use the data from the bills to control the extra expenditure and spend on what is needed and also use it to improve their businesses. track of all the products sold to the customer and how much products was there in their reserve. They need to write down all the records in a record book manually [3]. The bill is not just for keeping the record of transaction, the bill is used for so many other purposes. They use the data from the bills to control the extra expenditure and spend on what is needed and also use it to improve their businesses.

As the technology came into the picture the written bill management started turning into digital. Initially, they introduced a simple billing management system. Software was used on computers to generate and print the bill. The administrator only is allowed to record and bill all the purchased goods, employee details and modify the prices with the aid of a database functions. The goods are arranged in categories in the database [1]. Software was designed to handle the time and bill tracking as well as keeping customers informed of their purchase of services and goods. Billing software can track the hours worked by employees, the number of the goods, as well as expenses related with projects or customers. Most billing software applications are capable of creating billing reports. These reports can display information such as hours worked, expenses incurred, how much to bill customers, and which customers owe how much money for which goods, total investment, and total income of the month. Few examples of the billing management systems :

1. Sage Timeslips
2. Intuit QuickBooks Time
3. Billing Tracker and kBilling

LITERATURE REVIEW

PHP is a widely-used server-side scripting language that can be used to develop web applications, including billing systems. PHP billing systems offer a range of features, including invoicing, payment processing, account management, and reporting. They can be used by businesses of all sizes and industries to manage their billing processes efficiently. In a study conducted by Moniruzzaman and Hossain (2013), they developed a web-based billing system using PHP and MySQL. The system was designed to automate the billing process of a small business. The system was found to be efficient in managing the billing process, reducing the time and effort required for manual billing. Similarly, in a study by Al-Hilfy and Al-Jobouri (2016), they developed a web-based billing system using PHP and MySQL. The system was designed to be used by a small retail business to manage their billing and invoicing processes. The system was found to be effective in reducing the time and effort required for billing and improving the accuracy of invoicing. Furthermore, in a study conducted by Raja and Mohamed (2016), they developed a billing system using PHP and MySQL for a small medical clinic. The system was designed to manage patient billing, appointment scheduling, and medical records. The system was found to be effective in improving the efficiency of the clinic's billing process and reducing the time and effort required for manual billing. In conclusion, PHP billing systems offer a range of benefits for businesses looking to automate and streamline their billing processes. The studies reviewed demonstrate that PHP billing systems can be effective in reducing the time and effort required for manual billing and improving the accuracy and efficiency of invoicing and payment processing. However, it is important to ensure that the system is properly designed, configured, and maintained to ensure its effectiveness and reliability.

IMPLEMENTATION

This project is based on the sales transaction and billing of items in a supermarket. The first activity is based on adding the items to the system along with the rate which are present in the supermarket and the name of the items which the supermarket will agree to sell [2]. The models provide four basic types of functionality, that is, create, read, update, and delete the resources. This is often referred to as CRUD by computer scientists. A model should have the ability to perform all these four functions in order to be complete. If an action cannot be described by one of these four operations, then it should be contained in a model of its own. The CRUD paradigm is commonly used to construct web applications, as it provides a memorable framework for reminding developers of how to construct complete, usable models. We use Python to build the functionality of the application and graphics user interface (GUI). We use the SQLite database to store the application data and transaction data. Using this database, we add, update, delete, and keep track of the transactions. We make use of different libraries of Python, like Tkinter, qrcode, pyzbar, Sqlite to build the application.

FEATURES OF BILLING SYSTEM

1. **PRODUCTS/ITEMS:** Items are the products that you sell to various clients and can be purchased from various vendors in a business. There are two type of item. One is to track inventory and other one for customer items which do not include to inventory. General settings (name, code, descriptions, category, item tax, image) Sales pricing (Set Sales pricing for Inventory Item.) Purchase pricing (Set Purchase pricing for Inventory Item)

[Transaction \(Shows each transaction history of an item with date and quantity\)](#)

Status (When user create an item, it will shows stock status for all location for this company with quantity of item available.) 2. **SALES:** You can use the complete sales process or just the steps you require depending on your operation. The menu options below are annotated with suggestions as to which Department would use them Invoices Payment .

3. **PURCHASES:** A purchase order is an official document that you issue to your vendors, indicating relevant information about what you want to buy, the quantity, the price agreed for that particular product or service.

- [Select a Supplier](#)
- [Select a store location](#)
- [Reference number will generate automatically.](#)
- [select items, supply quantity and click Add Item](#)
- [Submit your order.](#)

4. **CUSTOMERS:** Admin has permission of add, edit and delete customers. This is to manage all customers who are purchasing items/products from this selected company. There are two different way to create new customer. Admin can create customer by both manually and by uploading CSV files. For manually adding new customer there is a customer create form which needs customer's name, email, address and phone number.

5. **SUPPLIERS:** This is almost similar to customers. Admin can create suppliers for his/her company by inputting supplier's name, email, address and phone number. There are two different way to create new supplier. Admin can create supplier by both manually and by uploading CSV files. For manually adding new supplier there is a supplier create form which needs supplier's name, email, address and phone number .

6. **REPORTS:** Various reports are generated as they are given below.

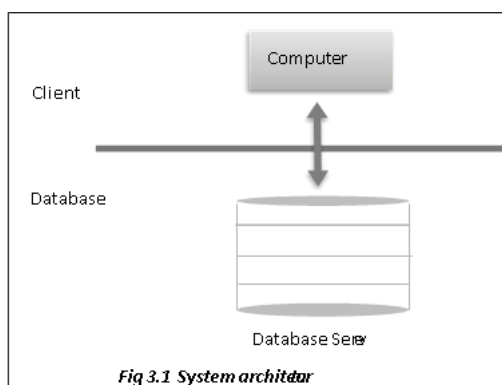
- [Inventory stock on Hand](#)
- [Sales Report](#)
- [Purchase Report](#)
- [Expense Report](#)
- Team Member Report

OBJECTIVES

The 'smart billing software' helps in maintaining records and products. It also provides the economic/financial report to the owner monthly, weekly and yearly. The purpose is to fulfil the requirements of small and medium scale industries by maintaining stock and providing efficient billing system. User can also use USB barcode readers to record the stock and generate invoices.

SYSTEM ARCHITECTURE

The system defines a two tier architecture i.e., client-server architecture in which server hosts, deliver and manages most of the resources and services to be consumed by the client. [4] It has one or more client computers connected to a central server over a network. Client and server communicate over a computer network on separate hardware, but both reside in the same system. [5] A client requests a server's content or service function and therefore initiates the communication session with servers. The below fig shows the representation of system architecture. Here the user make a data entry and send the details to the server in order to generate the bill. This request is received by the server which checks for items entered, their quantity and finally do the calculations including GST and respond for the client.



Processing systems have become computerized for great ease and accuracy [6]. A billing system is a combination of hardware and software that receives purchase details and service usage information, groups this for specific accounts or customers produces invoices, creates reports for employee or an administrator.

The word 'billing' can refer to both the total amount of goods and the act of counting them. Medical billing system [7] involves a healthcare provider submitting following up on, claims with health insurance in order to receive payment for services. It discuss the purpose of medical record documentation and various forms and the patient's accounts, order entry, charge capture, billing and accounts [www.coursewareobjects.com]. 'Billing plus' [8] is the admin plus module to manage student billing – from invoicing and online bill payments to tuition plans, financial reporting and record keeping. Designed for use by private and public schools.

'Telecommunication billing software' is the group of processes of communications service providers that are responsible to collect consumption data, calculate charging and billing information, produce bills to customers, process their payments and manage collection[9]. 'Electronic billing' is when a company, organization, or group sends its bills over the internet, and customers pay the bills electronically [10].

METHODOLOGY

A software development methodology is the basic framework using which software developers can plan, structure and control the overall process of developing a software or information system. Software project methodologies are especially important, since it makes system user-friendly. This project includes crystal reports, Crystal Reports is a business intelligence application used to create custom reports from a variety of data sources. The package includes the major features needed for a business to create a database reporting environment, such as data access, report design/formatting, report viewing and application integration. The figure 5.1 explains the basic process involved in the methodology which includes purchase, inventory, tax rates, sales, quick billing, advance reports.



In accounting, purchases is the amount of goods a shop bought throughout a periodic time. It also refers to information as to the kind, quality, quantity, and cost of goods bought that should be maintained. They are added to inventory. Here purchasing can be seen in 2 forms one is by the owner who buy goods and store them another one is by the customer who wants to take particular items from the shop. Inventory is the collection of unsold products waiting to be sold. It is listed as a current asset on an enterprise's balance sheet. Inventory is a key component of calculating cost of goods sold (COGS) and is a key driver of profit, total assets, and tax liability. Many financial ratios, such as inventory turnover, incorporate inventory values to measure certain aspects of the health of a business. Once a customer purchases the items corresponding value is deducted from the inventory and amount of tax along with the GST is calculated. Further sales are done, bills are generated and proper report is maintained.

BILLING SOFTWARE

We are making the billing software smart enough to get the customer order details .In this software we implement smart workiogy.This billing system connect each other through intrnt.In this billing Systeam have many features that’s are Empluye can access any wear .

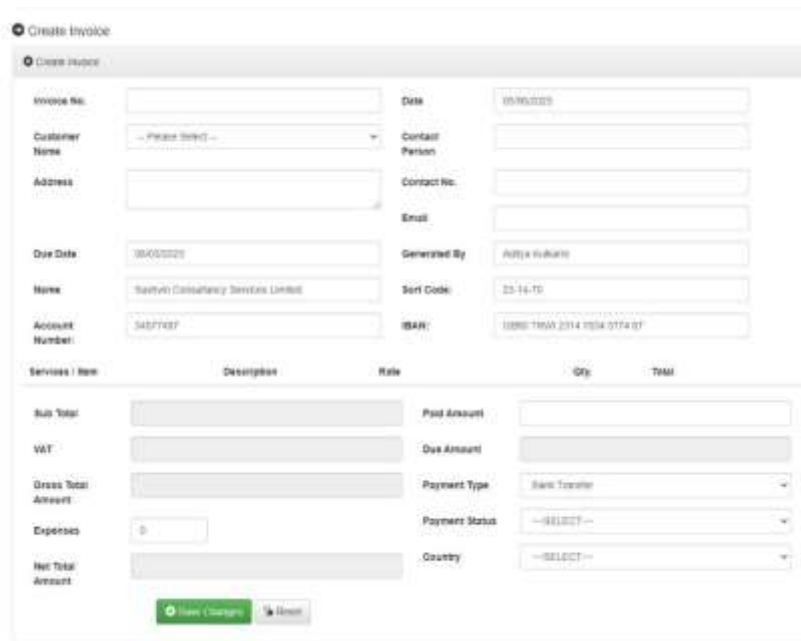


Please Sign in

Username

Password

Fig of sign in page



Create Invoice

Create Invoice

Invoice No. Date

Customer Name Contact Person

Address Contact No.

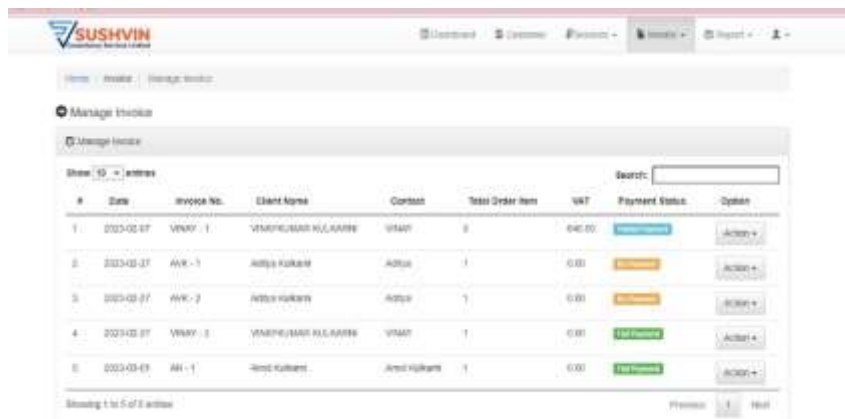
Due Date Generated By

Name Serf Code

Account Number IBAN

Services / Item	Description	Rate	Qty	TAM
Sub Total	<input type="text"/>	Post Amount	<input type="text"/>	
VAT	<input type="text"/>	Due Amount	<input type="text"/>	
Gross Total Amount	<input type="text"/>	Payment Type	<input type="text" value="Bank Transfer"/>	
Expenses <input type="text" value="0"/>		Payment Status	<input type="text" value="--SELECT--"/>	
Net Total Amount	<input type="text"/>	Country	<input type="text" value="--SELECT--"/>	

Fig of Create invoice



SUSHVIN

Dashboard | Customers | Invoices | Reports

Home | Invoices | Manage Invoice

Manage Invoice

Show entries

#	Date	Invoice No.	Client Name	Contact	Total Order Item	VAT	Payment Status	Option
1	2023-02-07	VENY-1	VINAYKAR KULKARNI	VINAY	0	0.00	Unpaid	Action +
2	2023-02-07	AWK-1	AJITH KULKARNI	AJITH	1	0.00	Unpaid	Action +
3	2023-02-07	AWK-2	AJITH KULKARNI	AJITH	1	0.00	Unpaid	Action +
4	2023-02-07	VENY-2	VINAYKAR KULKARNI	VINAY	1	0.00	Unpaid	Action +
5	2023-03-01	AWK-1	AJITH KULKARNI	AJITH KULKARNI	1	0.00	Unpaid	Action +

Showing 1 to 5 of 5 entries

Previous 1 Next

Fig of Genraete invoice

CONCLUSION

Today man getting change according to the technology and he always finds a new way to explore the things. Of course there may be many billing softwares but no small and medium scale shops are using them. “ Billing System “ project will help the common people to know about how the things are done automatically and even how they can use their mobiles for these types of work too.

Billing system provides a complete view of user’s stock inventory, periodic reports, and also it gives full of security and protection. It mainly focus on making the system user-friendly.

A smart billing system can provide numerous benefits to businesses, including increased efficiency, accuracy, and cost savings. By automating the billing process, businesses can reduce errors, minimize manual labor, and ensure timely and accurate billing. Smart billing systems can also help businesses track customer payment histories, identify trends, and forecast future revenue streams.

REFERENCES

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- [4] <http://www.phptpoint.com/gst-billing-software/>
- [5] https://en.m.wikipedia.org/wiki/Client%E2%80%93server_model
- [6] [3server_model](#)
- [7] <https://www.techopedia.com/definition/438/clientserverarchitecture>
- [8] <http://www.studymode.com/subjects/review-literaturebilling-system-page1.html>