



**KGiSL Institute of Technology  
(An Autonomous Institution)**

Affiliated to Anna University, Approved by AICTE, Recognized by UGC, Accredited by NAAC & NBA (B.E-CSE,B.E-ECE, B.Tech-IT), 365, KGiSL Campus, Thudiyalur Road, Saravanampatti, Coimbatore – 641035.

## **DATABASE MANAGEMENT SYSTEMS CAPSTONE PROJECT REPORT**

**DONE BY :**  
**TEAM 4**  
**SOUNDARYA J**  
**(23CSB40)**

**KGISL INSTITUTE OF TECHNOLOGY**  
**DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING**  
**PHP & MySQL Billing System**

---

## **INTRODUCTION**

The Billing System is a comprehensive web-based application built using PHP and MySQL, designed for efficient management of sales, billing, and inventory operations. The system provides a user-friendly interface for creating and managing bills, tracking inventory, generating reports, and handling customer information. This solution is particularly useful for retail businesses, small shops, and any organization that needs to manage billing and inventory operations efficiently.

In today's competitive business environment, having an efficient and reliable billing system is essential for maintaining accurate financial records and providing excellent customer service. This PHP and MySQL-based solution addresses these needs by offering a secure, scalable platform that centralizes all aspects of the billing process. By automating routine tasks such as tax calculations, inventory updates, and report generation, the system significantly reduces human error and allows staff to focus on more valuable customer-oriented activities.

The system is designed with flexibility in mind, catering to businesses of various sizes and domains. Whether handling retail transactions with immediate payment or managing B2B operations with recurring billing cycles, the application provides customizable workflows to accommodate different business models. Its integration capabilities with barcode systems and support for multiple user roles make it adaptable to diverse operational requirements while maintaining robust data security and integrity throughout the billing lifecycle.

## **ABSTRACT**

This billing system streamlines the sales and inventory management process by offering a centralized platform for tracking products, generating bills, managing quotations, and analyzing business performance. The system incorporates GST (Goods and Services Tax) calculations, customer information management, barcode generation, and detailed reporting features, all within a secure environment accessible only to authorized personnel.

## **OBJECTIVES**

- Provide an easy-to-use interface for creating, viewing, and managing bills
- Track and manage inventory with real-time updates
- Generate detailed sales reports for different time periods (daily, monthly, yearly)
- Enable efficient customer information management
- Facilitate GST calculations and compliance
- Support barcode generation and printing functionality
- Allow for pending payment tracking
- Secure access to the system with user authentication
- Support quotation creation before final billing

## **INNOVATION**

- QR code integration for quick bill access and sharing
- Barcode generation for efficient product identification and inventory management
- Serial number tracking for products that require unique identification
- Flexible GST handling (inclusive or exclusive of price) with multiple percentage options
- Multiple vendor management for comprehensive inventory tracking
- Hold item functionality for temporarily reserving products
- Pending payment tracking for managing credit sales

## **TECHNIQUES / TOOLS**

### **Backend:**

- PHP 7+ for server-side processing
- MySQL database for data storage and management
- Session-based authentication for security

### **Frontend:**

- HTML5, CSS3, and JavaScript for user interface
- Bootstrap framework for responsive design
- jQuery for enhanced user interaction
- SCSS for advanced styling

### **Libraries:**

- Composer for dependency management
- Bootstrap Select for enhanced form controls
- Font Awesome for iconography

## **MODULES**

### **Authentication Module**

- User login and registration
- Session management
- Access control

### **Dashboard Module**

- Overview of key metrics
- Quick access to common tasks
- System status information

### **Billing Module**

- Create new bills
- View and print existing bills
- Manage billing details (customer info, items, quantities, pricing)
- GST calculation
- Bill printing

## **Inventory Management Module**

- Add new items
- Update item details
- Track item quantities
- Manage item categories
- Hold items functionality

## **Customer Management Module**

- Store customer information
- Retrieve customer history
- Manage customer contact details

## **Quotation Module**

- Create quotations for customers
- Convert quotations to bills
- Manage existing quotations

## **Vendor Management Module**

- Add and manage vendors
- Track items by vendor

## **Reporting Module**

- Generate sales reports (daily, monthly, yearly)
- Export reports to CSV
- Analyze profitability
- Track sales trends

## **Barcode Module**

- Generate barcodes for items
- Print barcodes for inventory management

## **SERVICE AVAILABILITY**

The billing system is designed as a web-based application that can be deployed in various environments:

### **Local Deployment**

- Can be installed on a local server using XAMPP, WAMP, or similar stacks
- Accessible within a local network for small businesses with a single location

### **Cloud Deployment**

- Can be hosted on cloud servers for access from multiple locations
- Supports secure remote access with proper authentication

### **Access Options**

- Web-based interface accessible from any modern browser
- Responsive design for use on different devices (desktops, tablets)

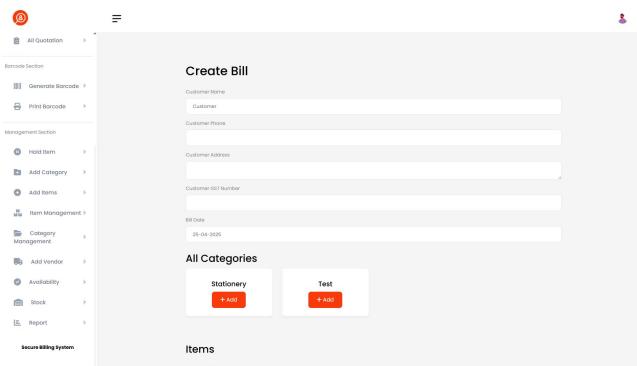
### **Backup & Recovery**

- Database backup functionality for data protection
- Data export options for reporting and archiving

### **Scalability**

- The system architecture supports scaling as business grows
- Modular design allows for adding new features as needed

## **SOURCE CODE SNAPSHOT:**



**Add Item**

Item Name	NEW ITEM
Category	Test
Price	899
Selling Price	899
Vendor Name	TEST
Serial Number	1234
Date	28-04-2025
Quantity	10

**Add Item**

**Test**

Item	Price	Selling Price	Vendor Name	Available	Quantity
NEW ITEM	899.00	899.00	TEST	10	1

**All Categories**

Stationery	4400
Test	4400

**BILL**

Date: 2025-04-28  
Bill Number: 101  
Customer Name: TEST  
Customer Phone Number: 123  
Customer Address: 123456789

Item	Quantity	Selling Price	Total
NEW ITEM	12	899.00	10788
<b>Total Quantities:</b>			12
<b>Total Amount:</b>			10788

**Statement**

We declare that this invoice shows the actual price of the goods described and that all particulars are true.  
 Deeds on handing  
 Deeds on receiving

**Print Bill**

**Sales and Profit Report**

Today's Total Sales: ₹11,794.54  
Today's Profit: ₹10,233.50  
Yesterday's Total Sales: 0.00  
Yesterday's Profit: 0.00  
Sales Difference from Yesterday: ₹11,794.54  
Profit Difference from Yesterday: ₹10,233.50  
**Daily Sales**

Date	Total Sales
2025-04-28	₹11,794.54

**Monthly Sales**

Month	Total Sales
2025-04	₹11,794.54

**Download Reports**

[Download Daily Sales Report](#) [Download Monthly Sales Report](#) [Download Yearly Sales Report](#)

**Available Stocks**

Total Stock Value: ₹11,538.00

#	Item Name	Category	Selling Price	Quantity	Stock Value
101	Sticky Notes	Stationery	899.00	9	₹8,091.00
102	Pen	Stationery	89.90	10	₹899.00
103	Pencil	Stationery	9.90	10	₹99.00
104	Glosser	Stationery	89.90	10	₹899.00
105	sharpener	Stationery	9.90	10	₹99.00
106	Notebooks (14)	Stationery	899.00	10	₹8,990.00
107	Ruler	Stationery	89.90	10	₹899.00
108	Color Pencils	Stationery	899.00	10	₹8,990.00
109	Watch Pen	Stationery	899.00	10	₹8,990.00
110	Marker	Stationery	899.00	10	₹8,990.00
111	New OEM	Test	899.00	10	₹8,990.00

**VIDEO EXECUTION LINK:**

[https://drive.google.com/file/d/1RpWfk0TLr4G1WJg7T0G6l08bu8zDXugS/view?  
usp=sharing](https://drive.google.com/file/d/1RpWfk0TLr4G1WJg7T0G6l08bu8zDXugS/view?usp=sharing)

**CONCLUSION**

The PHP and MySQL-based Billing System provides a comprehensive solution for businesses to manage their sales, inventory, and reporting needs efficiently. By combining user-friendly interfaces with powerful backend functionality, the system streamlines business operations and provides valuable insights into performance metrics. The integration of features like GST handling, barcode generation, quotation management, and detailed reporting makes this system a versatile tool for modern businesses of various sizes.

The modular architecture of the system allows for future enhancements and customizations based on specific business requirements. With its focus on security, efficiency, and ease of use, this billing system serves as an essential tool for businesses looking to digitize and optimize their sales and inventory management processes.

---

**PROJECT TEAM DETAILS**

PAVITHRAN V (711723104073)

SOUNDARYA J (711723104103)

VAISHNAVI S (711723104118)

MOHAMMED HIBATHULLAH I (711723104065)

**FACULTY COORDINATOR**

Mrs. JAYASHREE S

ASSISTANT PROFESSOR,CSE