**Inventory MANAGEMENT**

by

**Arpit chaturvedi and TEAM**

Submitted to the Department of Computer Science & Applications

In partial fulfillment of the requirements

For the Degree of

**Bachelor**

**In**

**Computer** **Applications**

****

RAJASTHAN TECHNICAL UNIVERSITY

20015-2019

*Under the Esteemed Guidance of*

**Mr. Brijesh Sir**

**(Assistant professor)**

Dept. of Computer Science & Applications, MAIIT, Kota



**CERTIFICATE**

Certified that project work entitled **“Inventory Management System”** is a bonafide work carried out by **Arpit Chaturvedi, Gaurangna Lakhani and Vandana Rawal** at MAIIT, Kota. In partial fulfillment for the award of “**Bachelor**” in Computer Application from Rajasthan Technical University, Kota during the academic year 2015-2019.

**(External) (Internal/Guide)**

**Name of External Name of Internal/Guide**

**Date:**

(Signature Date)

Dept. of Computer Science & Applications

**Department of Computer Science and Application**

**Acknowledgement**

Every mature individual in professional life is keenly aware of his sense of indebtedness to many people who have simulated and influenced his intellectual development. Ordinarily, this feeling is expressed in customary gesture of acknowledgement. Therefore it seems as a right to acknowledge our gratitude with sense of veneration to the almighty god and various people who helped us during the course of project work. Their valuable guidance and wise direction have enabled us to complete our project in systematic and smooth manner.

**Thanking You**

From:-

**INDEX**

**1. Introduction  
   1.1 Need/Motivation  
2. Literature survey  
3. Requirements.**

**3.1 Functional Requirements  
3.2 Non- Functional Requirements  
 3.2.1  Safety Requirements.  
 3.2.2  Security Requirements  
 3.2.3  Software Quality Attributes  
3.3  Hardware Requirements  
3.4  Software Requirements  
3.5  WaterFall  Model  
3.6 Feasibility Study  
 3.6.1 Economic Feasibility  
 3.6.2 Technical Feasibility  
 3.6.3 Operational Feasibility**

**4. System  Architecture  
 4.1 Client-Server Architecture  
 5. Design and Implementation  
 5.1  Product  Features  
 5.2  DFD  
 5.3  E-R Diagram**

**6. Snapshots  
 7. Conclusion  
8 Bibliography**

**Introduction:-**

Inventory management is the supervision of non-capitalized assets (inventory) and stock items. A component of [supply chain management](https://searcherp.techtarget.com/definition/supply-chain-management-SCM), inventory management supervises the flow of goods from manufacturers to warehouses and from these facilities to point of sale. A key function of inventory management is to keep a detailed record of each new or returned product as it enters or leaves a warehouse or point of sale.

Inventory management software systems generally began as simple spreadsheets that tracked the quantities of goods in a warehouse, but have become more complex. Inventory management software can now go several layers deep and integrate with accounting and [ERP systems](https://searcherp.techtarget.com/definition/ERP-enterprise-resource-planning). The systems keep track of goods in inventory, sometimes across several warehouse locations. The software also calculates the costs -- often in multiple currencies -- so that accounting systems always have an accurate assessment of the value of the goods.

* 1. **Need/Motivation**: GST software serve as a backbone of the GST operations in organizations. GST is a well-organized version of the indirect taxes on goods and services by the central as well as state governments in India. The GST solution is easy-to-use accounting, inventory and invoicing systems that aim to cater the specific needs of various business organizations for tracking GST. Through the use of effective GST accounting software, the businesses can easily manage their accounts, inventory, purchase, sales, taxation and various processes in an efficient manner.

**2. Literature survey**

Today every business need GST billing and Inventory Management system. This system solves GST compliant and inventory problem. GST billing software is probably the fastest and easiest way of making business GST compliant. This application serves as a supplier/customer registration system, a database, invoicing software and a GST returns calculator all rolled in one.

This software provides a solution to these problems. It provides an interactive user interface and helps users in an organization to get information immediately at that instant of time. The different users of the system are the administrator, the heads of various department, technical staff and lab instructor. These users are assigned with different privileges based on the level of administration.

**Objectives**

* Helps the business holder to keep track inventory and GST .
* Assists in the smooth interaction between supplier and customer.
* Proper maintenance of available Resources.
* Speed up the Activities to overcome the problems associated with the GST billing.
* Automate load supplier, product and customer detail
* Helps the operator to make easy entry of purchase and sales and auto calculate GST.

**REQUIREMENTS**

**3.1 Functional Requirements**

* It should provide automated customer, product and supplier detail.
* It should provide auto calculation of GST and total bill amount.
* It should have facility to create customer, supplier and product registration.
* It should provide GST invoice printing.
* It should have calculate GST return amount.
* It should track the inventory or stock detail.
* It should provide authorized login.

**3.2 Non- Functional Requirements**

**3.2.1 Safety Requirements**

If there is extensive damage to a wide portion of the database due to catastrophic failure, such as a disk crash, the recovery method restores a past copy of the database that was backed up to archival storage (typically tape) and reconstructs a more current state by reapplying or redoing the operations of committed transactions from the backed up log, up to the time of failure.

**3.2.2 Security Requirements**

Security systems need database storage just like many other applications. However, the special requirements of the security market mean that vendors must choose their database partner carefully.

**3.2.3 Software Quality  Attributes**

* **AVAILABILITY:** database connectivity available all the time.
* **CORRECTNESS:**The system should generate an appropriate report about different activities of the lab and should keep track of all records.
* **MAINTAINABILITY:**The system should maintain correct schedules of labs and the documentation of all the lab equipment.
* **USABILITY:**The system should satisfy a maximum number of users needs.

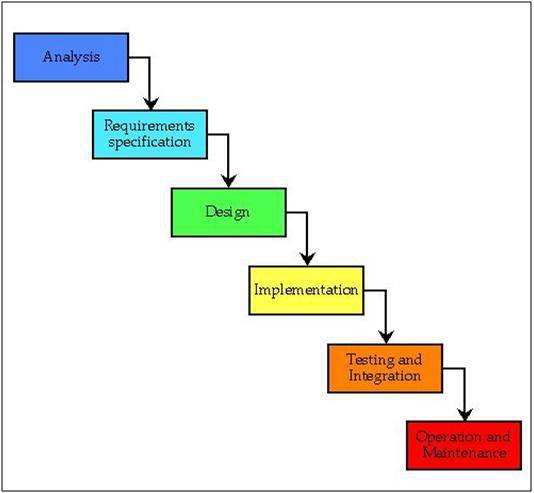
**3.3  Hardware Requirements**

* Pentium IV or higher, (PIV-300GHz recommended)
* 256 MB RAM
* 1 Gb hard free drive space

**3.4 Software Requirements**

* Java (J2SE) (front end)
* MySQL Server (back-end)
* Operating System: Windows XP / Windows7/ Windows 8
* netbeans for development

**3.5  Waterfall Model**



**Fig. 3.1 Waterfall Model**

The waterfall model is a sequential design process, often used in software development processes, in which progress is seen as flowing steadily downwards (like a waterfall) through the phases of  Analysis, Requirement Specification, Design, Implementation, Testing and Integration and Operation and Maintenance.

If in the beginning of the project failures are detected, it takes less effort (and therefore time and money) for this error. In the waterfall model phases to be properly sealed first before proceeding to the next stage. It is believed that the phases are correct before proceeding to the next phase. In the waterfall model lay the emphasis on documentation. It is a straightforward method. The way of working ensures that there are specific phases. This tells you what stage it is. One can use this method of milestones. Milestones can be used to monitor the progress of the project to estimate.

In our Project, all the requirements are clear and well known and the project is large. All the activities in our project are carried out in above-mentioned phases of the waterfall model.

**3.6 Feasibility Study**

The prime focus of the feasibility is evaluating the practicality of the proposed system keeping in mind a number of factors. The following factors are taken into account before deciding in favor of the new system.

**3.6.1 Economic Feasibility**

Report generation in the proposed system in precise that is reports are generated as per user requirements, which reduces the use of papers and manual labor.

**3.6.2 Technical feasibility**

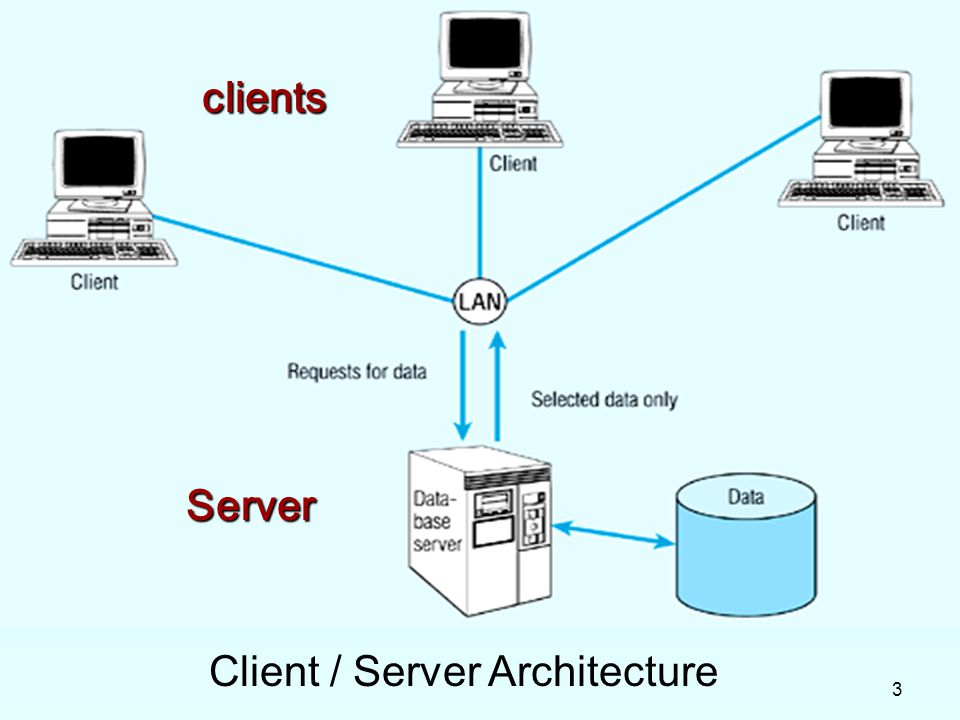
Keeping in view the above fact, nowadays all organizations are automating the repetitive and monotonous works done by humans. The key process areas of the current system are nicely amenable to automation and hence the technical feasibility is proved beyond doubt.

**3.6.3 Operational Feasibility**

The present system has automated most of the manual tasks. Therefore the proposed system will increase the operational efficiency of the administrator and operator.

**4. System Architecture**

**4.1 Clint-Server Architecture**



**5.Design and Implementation**

**5.1  Product  Features**

* 1. Reorder Point.
  2. Asset tracking.
  3. Service management.
  4. Product identification.
  5. Inventory optimization.
  6. Cost savings.
  7. Increased efficiency.
  8. Warehouse organization.
  9. GST Billing

**5.2 Data flow diagram**

**Stock Management**

**Product Management**

**GST Bill Generation**

**Customer Management**

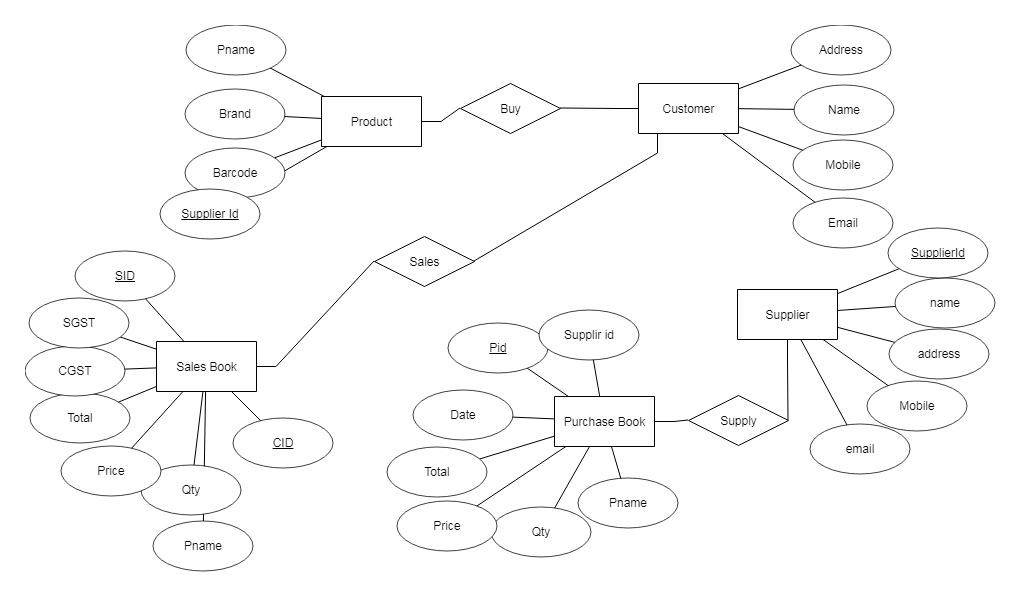
**Supplier Management**

**Zero Level DFD for Inventory Management System**

**5.3 ER Diagram**

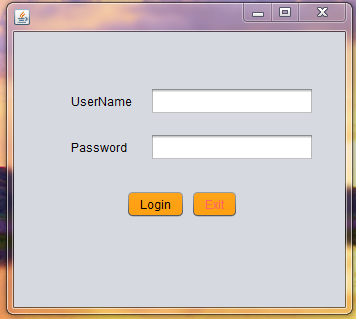
* E-R Diagram constitutes a technique for representing the logical structure of a database in a pictorial manner. This analysis is then used to organize data as a relation, normalizing relation and finally obtaining a relation database.
* **ENTITIES:**  Which specify distinct real-world items in an application.
* **PROPERTIES/ATTRIBUTES:**  Which specify properties of an entity and relationships.
* **RELATIONSHIPS:** Which connect entities and represent meaningful dependencies between them.

Here the Entities are Customer, Supplier, Product, Purchase Book, and Sales Book.

****

**6 Snapshots**

**Login page**

****

private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event\_jButton1ActionPerformed

// TODO add your handling code here:

String username=T1.getText();

String pass=String.valueOf(T2.getPassword());

if(username.equals("admin")&&pass.equals("admin"))

{

HomeUi obj=new HomeUi();

obj.setVisible(true);

this.setVisible(false);

}

else

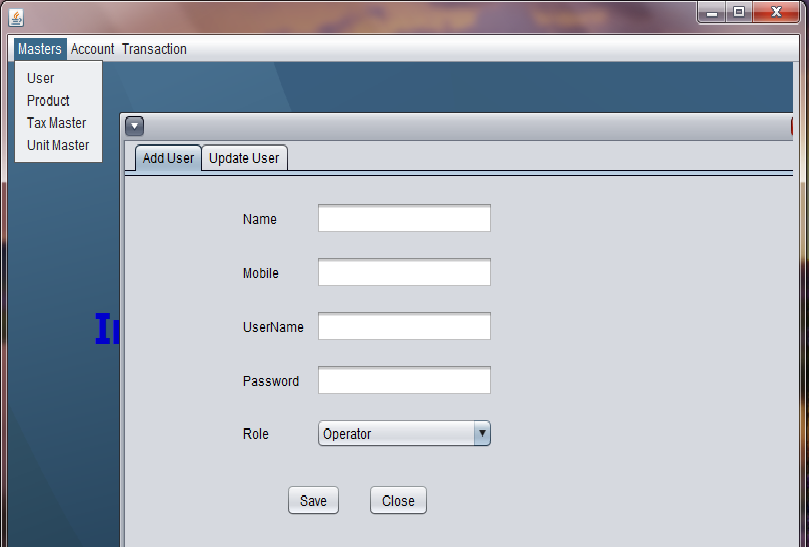
{

javax.swing.JOptionPane.showMessageDialog(this, "invalid username & password");

}

}

**User Master**

****

private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event\_jButton1ActionPerformed

// TODO add your handling code here:

try

{

Class.forName("com.mysql.jdbc.Driver").newInstance();

Connection cn=DriverManager.getConnection("jdbc:mysql://localhost/gstapp","root","");

String sql="insert into user values(?,?,?,?)";

String sql1="insert into login values(?,?,?,?)";

PreparedStatement pst=cn.prepareStatement(sql);

pst.setInt(1, 0);

pst.setString(2, T1.getText());

pst.setString(3, T2.getText());

pst.setString(4, T3.getText());

int x=pst.executeUpdate();

PreparedStatement pst1=cn.prepareStatement(sql1);

pst1.setInt(1,0);

pst1.setString(2, T3.getText());

pst1.setString(3,String.valueOf(T4.getPassword()));

pst1.setString(4, String.valueOf(C1.getSelectedItem()));

int y=pst1.executeUpdate();

if(x>0&&y>0)

{

JOptionPane.showMessageDialog(this, "Saved!");

T1.setText("");

T2.setText("");

T3.setText("");

T4.setText("");

}

else

{

JOptionPane.showMessageDialog(this, "Error!");

}

cn.close();

}

catch(SQLException e)

{

e.printStackTrace();

}

catch(Exception ee)

{

ee.printStackTrace();

}

}//GEN-LAST:event\_jButton1ActionPerformed

private void jButton2ActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event\_jButton2ActionPerformed

// TODO add your handling code here:

}//GEN-LAST:event\_jButton2ActionPerformed

private void jButton5ActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event\_jButton5ActionPerformed

try

{

Class.forName("com.mysql.jdbc.Driver").newInstance();

Connection cn=DriverManager.getConnection("jdbc:mysql://localhost/gstapp","root","");

String sql="select user.name,user.mobile,user.username,login.password,login.role from user,login where user.id=? and login.id=? ";

PreparedStatement pst=cn.prepareStatement(sql);

pst.setInt(1, Integer.parseInt(ID.getText()));

pst.setInt(2, Integer.parseInt(ID.getText()));

ResultSet rs=pst.executeQuery();

if(rs.next())

{

name.setText(rs.getString(1));

mob.setText(rs.getString(2));

user.setText(rs.getString(3));

pass.setText(rs.getString(4));

jComboBox2.setSelectedItem(rs.getString(5));

ID.setEditable(false);

}

cn.close();

}

catch(SQLException e)

{

e.printStackTrace();

}

catch(Exception ee)

{

ee.printStackTrace();

}

// TODO add your handling code here:

}//GEN-LAST:event\_jButton5ActionPerformed

private void jButton4ActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event\_jButton4ActionPerformed

name.setText("");

mob.setText("");

user.setText("");

pass.setText("");

ID.setText("");

ID.setEditable(true);

// TODO add your handling code here:

}//GEN-LAST:event\_jButton4ActionPerformed

private void jButton3ActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event\_jButton3ActionPerformed

try

{

ID.setEditable(true);

Class.forName("com.mysql.jdbc.Driver").newInstance();

Connection cn=DriverManager.getConnection("jdbc:mysql://localhost/gstapp","root","");

String sql="update user set name=?,mobile=?,username=? where id=?";

String sql1="update login set username=?,password=?,role=? where id=?";

PreparedStatement pst=cn.prepareStatement(sql);

pst.setString(1, name.getText());

pst.setString(2, mob.getText());

pst.setString(3, user.getText());

pst.setInt(4, Integer.parseInt(ID.getText()));

int x=pst.executeUpdate();

PreparedStatement pst1=cn.prepareStatement(sql1);

pst1.setString(1,user.getText());

pst1.setString(2,pass.getText());

pst1.setString(3, String.valueOf(jComboBox2.getSelectedItem()));

pst1.setInt(4, Integer.parseInt(ID.getText()));

int y=pst1.executeUpdate();

if(x>0||y>0)

{

JOptionPane.showMessageDialog(this, "Update!");

name.setText("");

mob.setText("");

pass.setText("");

user.setText("");

}

else

{

JOptionPane.showMessageDialog(this, "Error!");

}

cn.close();

}

catch(SQLException ee)

{

ee.printStackTrace();

}

catch(Exception e)

{

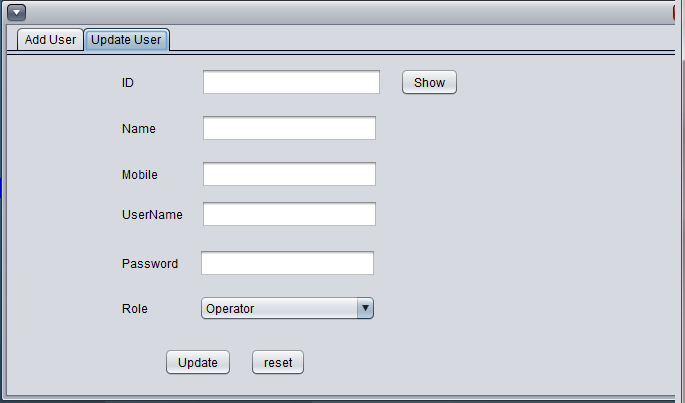
e.printStackTrace();

}

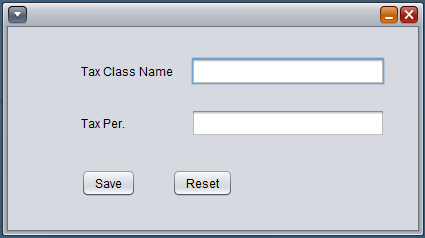
// TODO add your handling code here:

}//GEN-LAST:event\_jButton3ActionPerformed

**Update User**

****

**Tax class master**

****

private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event\_jButton1ActionPerformed

try

{

Class.forName("com.mysql.jdbc.Driver");

Connection cn= DriverManager.getConnection("jdbc:mysql://localhost/gstapp","root","");

String sql = "insert into taxclass values(?,?,?)";

PreparedStatement pst = cn.prepareStatement(sql);

pst.setInt(1, 0);

pst.setString(2, jTextField1.getText());

pst.setString(3, jTextField2.getText());

int x=pst.executeUpdate();

if(x>0)

{

JOptionPane.showMessageDialog(this, "Saved");

jTextField1.setText("");

jTextField2.setText("");

}

else

{

JOptionPane.showMessageDialog(this, "Error");

}

cn.close();

}

catch(SQLException e)

{

e.printStackTrace();

}

catch(Exception ee)

{

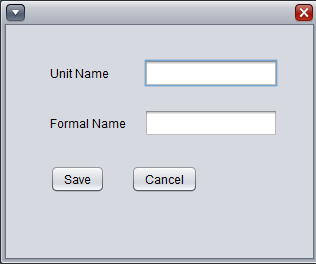
ee.printStackTrace();

}

// TODO add your handling code here:

}

**Unit Master**

****

private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event\_jButton1ActionPerformed

try

{

Class.forName("com.mysql.jdbc.Driver");

Connection cn= DriverManager.getConnection("jdbc:mysql://localhost/gstapp","root","");

String sql = "insert into Unit values(?,?,?)";

PreparedStatement pst = cn.prepareStatement(sql);

pst.setInt(1, 0);

pst.setString(2, jTextField1.getText());

pst.setString(3, jTextField2.getText());

int x=pst.executeUpdate();

if(x>0)

{

JOptionPane.showMessageDialog(this, "Saved");

jTextField1.setText("");

jTextField2.setText("");

}

else

{

JOptionPane.showMessageDialog(this, "Error");

}

cn.close();

}

catch(SQLException e)

{

e.printStackTrace();

}

catch(Exception ee)

{

ee.printStackTrace();

}// TODO add your handling code here:

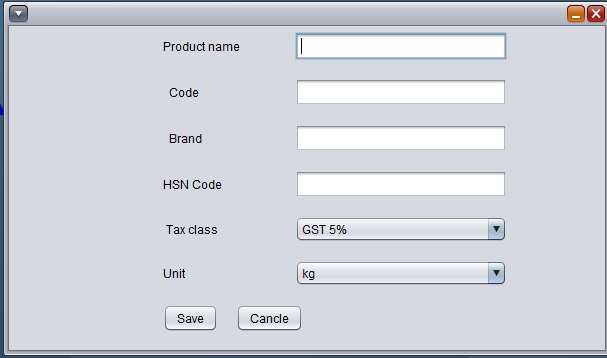
}//GEN-LAST:event\_jButton1ActionPerformed

private void jTextField2ActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event\_jTextField2ActionPerformed

// TODO add your handling code here:

}

**Product Master**

****

private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event\_jButton1ActionPerformed

try

{

Class.forName("com.mysql.jdbc.Driver");

Connection cn= DriverManager.getConnection("jdbc:mysql://localhost/gstapp","root","");

String sql="insert into product values(?,?,?,?,?,?,?)";

PreparedStatement pst=cn.prepareStatement(sql);

pst.setInt(1, 0);

pst.setString(2, jTextField1.getText());

pst.setString(3, jTextField2.getText());

pst.setString(4, jTextField3.getText());

pst.setString(5, jTextField4.getText());

pst.setString(6, String.valueOf(jComboBox2.getSelectedItem()));

pst.setString(7, String.valueOf(jComboBox1.getSelectedItem()));

int x=pst.executeUpdate();

if(x>0)

{

JOptionPane.showMessageDialog(this, "Saved!");

jTextField1 .setText("");

jTextField2.setText("");

jTextField3.setText("");

jTextField4.setText("");

}

else

{

JOptionPane.showMessageDialog(this, "Error!");

}

cn.close();

}

catch(SQLException e)

{

e.printStackTrace();

}

catch(Exception ee)

{

ee.printStackTrace();

}

// T ODO add your handling code here:

}//GEN-LAST:event\_jButton1ActionPerformed

private void formInternalFrameOpened(javax.swing.event.InternalFrameEvent evt) {//GEN-FIRST:event\_formInternalFrameOpened

// TODO add your handling code here:

try

{

Class.forName("com.mysql.jdbc.Driver");

Connection cn= DriverManager.getConnection("jdbc:mysql://localhost/gstapp","root","");

String sql="select taxclass.class\_name,unit.uname from taxclass,unit where taxclass.id=unit.id";

PreparedStatement pst=cn.prepareStatement(sql);

ResultSet rs=pst.executeQuery();

while(rs.next())

{

String data=rs.getString(1);

jComboBox1.addItem(data);

jComboBox2.addItem(rs.getString(2));

}

rs.close();

cn.close();

}

catch(SQLException ee)

{

ee.printStackTrace();

}

catch(Exception e)

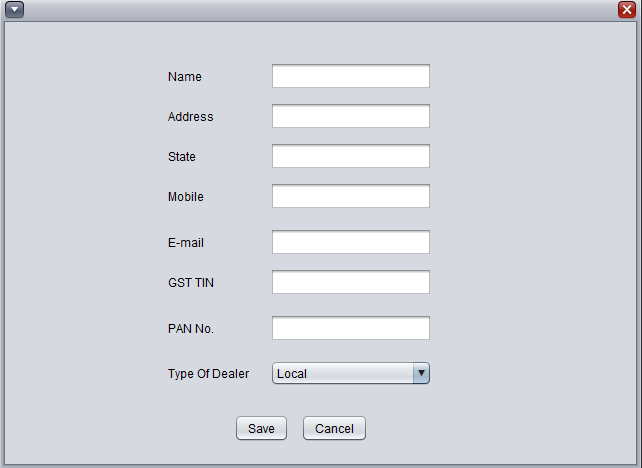
{

e.printStackTrace();

}

}

**Supplier Registration**

****

private void jComboBox1ActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event\_jComboBox1ActionPerformed

// TODO add your handling code here:

}//GEN-LAST:event\_jComboBox1ActionPerformed

private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event\_jButton1ActionPerformed

try

{

Class.forName("com.mysql.jdbc.Driver").newInstance();

Connection cn=DriverManager.getConnection("jdbc:mysql://localhost/gstapp","root","");

String sql="insert into supplier values(?,?,?,?,?,?,?,?,?)";

PreparedStatement pst=cn.prepareStatement(sql);

pst.setInt(1, 0);

pst.setString(2, jTextField1.getText());

pst.setString(3, jTextField2.getText());

pst.setString(4, jTextField3.getText());

pst.setString(5, jTextField4.getText());

pst.setString(6, jTextField5.getText());

pst.setString(7, jTextField6.getText());

pst.setString(8, jTextField7.getText());

pst.setString(9, String.valueOf(jComboBox1.getSelectedItem()));

int x=pst.executeUpdate();

if(x>0)

{

JOptionPane.showMessageDialog(this, "Saved!");

jTextField1 .setText("");

jTextField2.setText("");

jTextField3.setText("");

jTextField4.setText("");

jTextField5.setText("");

jTextField6.setText("");

jTextField7.setText("");

}

else

{

JOptionPane.showMessageDialog(this, "Error!");

}

cn.close();

}

catch(SQLException e)

{

e.printStackTrace();

}

catch(Exception ee)

{

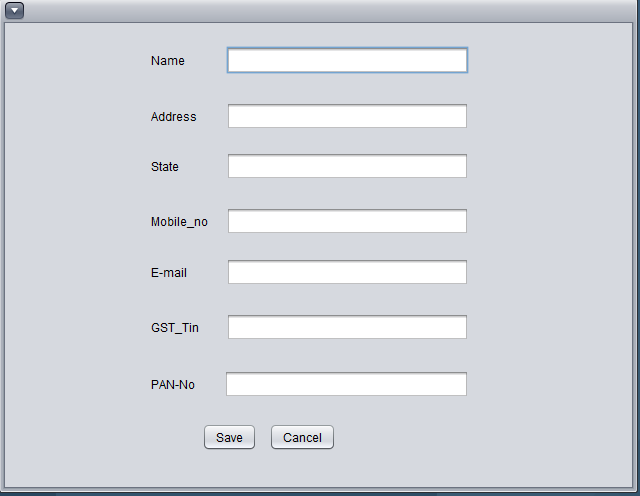
ee.printStackTrace();

}

// TODO add your handling code here:

}//GEN-LAST:event\_jButton1ActionPerformed

**Customer Registration**

****

private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event\_jButton1ActionPerformed

try

{

Class.forName("com.mysql.jdbc.Driver");

Connection cn= DriverManager.getConnection("jdbc:mysql://localhost/gstapp","root","");

String sql="insert into customer values(?,?,?,?,?,?,?,?)";

PreparedStatement pst=cn.prepareStatement(sql);

pst.setInt(1, 0);

pst.setString(2, jTextField1.getText());

pst.setString(3, jTextField2.getText());

pst.setString(4, jTextField3.getText());

pst.setString(5, jTextField4.getText());

pst.setString(6, jTextField5.getText());

pst.setString(7, jTextField6.getText());

pst.setString(8, jTextField7.getText());

int x=pst.executeUpdate();

if(x>0)

{

JOptionPane.showMessageDialog(this, "Saved!");

jTextField1 .setText("");

jTextField2.setText("");

jTextField3.setText("");

jTextField4.setText("");

jTextField5.setText("");

jTextField6.setText("");

jTextField7.setText("");

}

else

{

JOptionPane.showMessageDialog(this, "Error!");

}

cn.close();

}

catch(SQLException e)

{

e.printStackTrace();

}

catch(Exception ee)

{

ee.printStackTrace();

}

// TODO add your handling code here:

}//GEN-LAST:event\_jButton1ActionPerformed

private void jTextField3ActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event\_jTextField3ActionPerformed

// TODO add your handling code here:

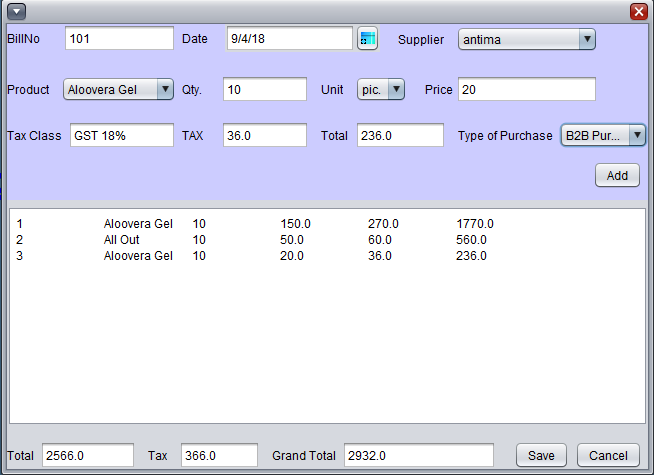
}//GEN-LAST:event\_jTextField3ActionPerformed

private void jTextField2ActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event\_jTextField2ActionPerformed

// TODO add your handling code here:

}//GEN-LAST:event\_jTextField2ActionPerformed

**Purchase Entry**

****

private void formInternalFrameOpened(javax.swing.event.InternalFrameEvent evt) {//GEN-FIRST:event\_formInternalFrameOpened

try

{

Class.forName("com.mysql.jdbc.Driver");

Connection cn= DriverManager.getConnection("jdbc:mysql://localhost/gstapp","root","");

///////////////////////////////////////////////////////////////////////////////

String sql1="select id,name from supplier";

PreparedStatement pst1=cn.prepareStatement(sql1);

ResultSet rs1=pst1.executeQuery();

while(rs1.next())

{

int id=rs1.getInt(1);

String name=rs1.getString(2);

jComboBox1.addItem(name);

}

///////////////////////////////////////////////////////////////////////////////

String sql3="select id,product\_name from product";

PreparedStatement pst2=cn.prepareStatement(sql3);

ResultSet rs2=pst2.executeQuery();

while(rs2.next())

{

int id=rs2.getInt(1);

String name=rs2.getString(2);

jComboBox2.addItem(name);

}

/////////////////////////////////////////////////////////////////////////////

String sql4="select id,uname from unit";

PreparedStatement pst3=cn.prepareStatement(sql4);

ResultSet rs3=pst3.executeQuery();

while(rs3.next())

{

int id=rs3.getInt(1);

String name=rs3.getString(2);

jComboBox3.addItem(name);

}

////////////////////////////////////////////////////////////////////////////

cn.close();

}

catch(SQLException ee)

{

ee.printStackTrace();

}

catch(Exception e)

{

e.printStackTrace();

}

// TODO add your handling code here:

}//GEN-LAST:event\_formInternalFrameOpened

private void jComboBox2ItemStateChanged(java.awt.event.ItemEvent evt) {//GEN-FIRST:event\_jComboBox2ItemStateChanged

// TODO add your handling code here:

try

{

Class.forName("com.mysql.jdbc.Driver");

Connection cn= DriverManager.getConnection("jdbc:mysql://localhost/gstapp","root","");

String sql="select TaxClass from product where product\_name=?";

PreparedStatement pst=cn.prepareStatement(sql);

pst.setString(1,String.valueOf(jComboBox2.getSelectedItem()));

ResultSet rs=pst.executeQuery();

if(rs.next())

{

jTextField6.setText(rs.getString(1));

}

cn.close();

}

catch(SQLException ee)

{

ee.printStackTrace();

}

catch(Exception e)

{

e.printStackTrace();

}

}//GEN-LAST:event\_jComboBox2ItemStateChanged

private void jTextField4KeyReleased(java.awt.event.KeyEvent evt) {//GEN-FIRST:event\_jTextField4KeyReleased

double total=0;

double tax=0;

if(jTextField6.getText().equals("GST 5%"))

{

total=Double.parseDouble(jTextField4.getText())\*Double.parseDouble(jTextField2.getText());

tax=total\*5/100;

total=total+tax;

jTextField5.setText(String.valueOf(total));

jTextField3.setText(String.valueOf(tax));

}

if(jTextField6.getText().equals("GST 12%"))

{

total=Double.parseDouble(jTextField4.getText())\*Double.parseDouble(jTextField2.getText());

tax=total\*12/100;

total=total+tax;

jTextField5.setText(String.valueOf(total));

jTextField3.setText(String.valueOf(tax));

}

if(jTextField6.getText().equals("GST 18%"))

{

total=Double.parseDouble(jTextField4.getText())\*Double.parseDouble(jTextField2.getText());

tax=total\*18/100;

total=total+tax;

jTextField5.setText(String.valueOf(total));

jTextField3.setText(String.valueOf(tax));

}

if(jTextField6.getText().equals("GST 28%"))

{

total=Double.parseDouble(jTextField4.getText())\*Double.parseDouble(jTextField2.getText());

tax=total\*28/100;

total=total+tax;

jTextField5.setText(String.valueOf(total));

jTextField3.setText(String.valueOf(tax));

}

// TODO add your handling code here:

}//GEN-LAST:event\_jTextField4KeyReleased

private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event\_jButton1ActionPerformed

// TODO add your handling code here:

int billno=Integer.parseInt(jTextField1.getText());

String supplier=String.valueOf(jComboBox1.getSelectedItem());

String product=String.valueOf( jComboBox2.getSelectedItem());

int qty=Integer.parseInt(jTextField2.getText());

String unit=String.valueOf(jComboBox3.getSelectedItem());

Double price=Double.parseDouble(jTextField4.getText());

String cls=String.valueOf(jTextField6.getText());

Double tax=Double.parseDouble(jTextField3.getText());

Double total=Double.parseDouble(jTextField5.getText());

try

{

Class.forName("com.mysql.jdbc.Driver");

Connection cn= DriverManager.getConnection("jdbc:mysql://localhost/gstapp","root","");

String sql="insert into orderdata(id,order\_id,item\_name,qty,price,tax\_class,tax,total) values(?,?,?,?,?,?,?,?)";

PreparedStatement pst=cn.prepareStatement(sql);

pst.setInt(1, 0);

pst.setInt(2, billno);

pst.setString(3, product);

pst.setInt(4, qty);

pst.setDouble(5,price );

pst.setString(6, cls);

pst.setDouble(7,tax );

pst.setDouble(8,total );

int x=pst.executeUpdate();

if(x>0)

{

javax.swing.JOptionPane.showMessageDialog(this, "Added");

k="";

}

String sql1="select \* from orderdata where order\_id=?";

PreparedStatement pst1=cn.prepareStatement(sql1);

pst1.setInt(1, billno);

ResultSet rs1=pst1.executeQuery();

int count=0;

while(rs1.next())

{

count=count+1;

String item\_name=rs1.getString(3);

int q=rs1.getInt(4);

double p=rs1.getDouble(5);

double t=rs1.getDouble(7);

double tot=rs1.getDouble(8);

k+=String.valueOf(count)+"\t" + item\_name+"\t"+String.valueOf(q)+ "\t"+String.valueOf(p)+ "\t"+String.valueOf(t)+"\t"+String.valueOf(tot)+"\n";

jTextArea1.setText(k);

}

double sum=0;

double tax1=0;

String sql2="select sum(total) from orderdata where order\_id=?";

PreparedStatement pst2=cn.prepareStatement(sql2);

pst2.setInt(1, billno);

ResultSet rs2=pst2.executeQuery();

if(rs2.next())

{

sum=rs2.getDouble(1);

jTextField7.setText(String.valueOf(sum));

}

String sql3="select sum(tax) from orderdata where order\_id=?";

PreparedStatement pst3=cn.prepareStatement(sql3);

pst3.setInt(1, billno);

ResultSet rs3=pst3.executeQuery();

if(rs3.next())

{

tax1=rs3.getDouble(1);

jTextField11.setText(String.valueOf(tax1));

}

double grandt=sum+tax1;

jTextField10.setText(String.valueOf(grandt));

cn.close();

}

catch(SQLException e)

{

e.printStackTrace();

}

catch(Exception ee)

{

ee.printStackTrace();

}

}//GEN-LAST:event\_jButton1ActionPerformed

private void jButton2ActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event\_jButton2ActionPerformed

// TODO add your handling code here:

try

{

int billno=Integer.parseInt(jTextField1.getText());

String supplier=String.valueOf(jComboBox1.getSelectedItem());

Class.forName("com.mysql.jdbc.Driver");

Connection cn= DriverManager.getConnection("jdbc:mysql://localhost/gstapp","root","");

String sql="insert into purchase\_book values(?,?,?,?,?)";

PreparedStatement pst=cn.prepareStatement(sql);

pst.setInt(1, 0);

pst.setInt(2, billno);

java.sql.Date sqldate = new java.sql.Date(dateChooserCombo1.getFormat());

pst.setDate(3, sqldate);

pst.setDouble(4, Double.parseDouble(jTextField10.getText()));

pst.setString(5,supplier);

int x=pst.executeUpdate();

if(x>0)

{

javax.swing.JOptionPane.showMessageDialog(this, "Bill Saved!");

}

}

catch(SQLException ee)

{

}

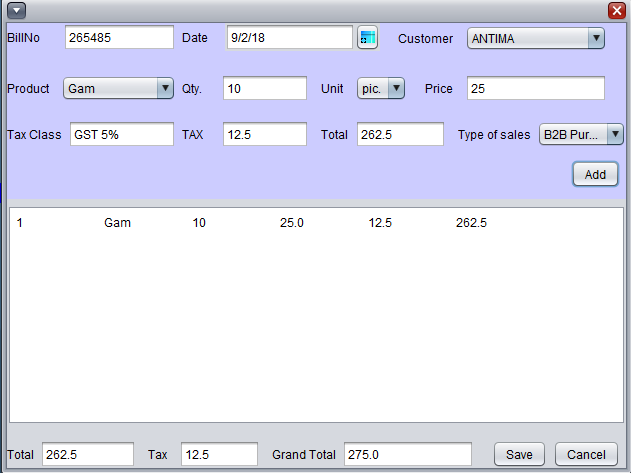
catch(Exception e)

{

}

}//GEN-LAST:event\_jButton2ActionPerformed

**Sales Invoicing**



private void formInternalFrameOpened(javax.swing.event.InternalFrameEvent evt) {//GEN-FIRST:event\_formInternalFrameOpened

try

{

Class.forName("com.mysql.jdbc.Driver");

Connection cn= DriverManager.getConnection("jdbc:mysql://localhost/gstapp","root","");

///////////////////////////////////////////////////////////////////////////////

String sql1="select id,name from customer";

PreparedStatement pst1=cn.prepareStatement(sql1);

ResultSet rs1=pst1.executeQuery();

while(rs1.next())

{

int id=rs1.getInt(1);

String name=rs1.getString(2);

jComboBox1.addItem(name);

}

///////////////////////////////////////////////////////////////////////////////

String sql3="select id,product\_name from product";

PreparedStatement pst2=cn.prepareStatement(sql3);

ResultSet rs2=pst2.executeQuery();

while(rs2.next())

{

int id=rs2.getInt(1);

String name=rs2.getString(2);

jComboBox2.addItem(name);

}

/////////////////////////////////////////////////////////////////////////////

String sql4="select id,uname from unit";

PreparedStatement pst3=cn.prepareStatement(sql4);

ResultSet rs3=pst3.executeQuery();

while(rs3.next())

{

int id=rs3.getInt(1);

String name=rs3.getString(2);

jComboBox3.addItem(name);

}

////////////////////////////////////////////////////////////////////////////

cn.close();

}

catch(SQLException ee)

{

ee.printStackTrace();

}

catch(Exception e)

{

e.printStackTrace();

}

// TODO add your handling code here:

}//GEN-LAST:event\_formInternalFrameOpened

private void jComboBox2ItemStateChanged(java.awt.event.ItemEvent evt) {//GEN-FIRST:event\_jComboBox2ItemStateChanged

// TODO add your handling code here:

try

{

Class.forName("com.mysql.jdbc.Driver");

Connection cn= DriverManager.getConnection("jdbc:mysql://localhost/gstapp","root","");

String sql="select TaxClass from product where product\_name=?";

PreparedStatement pst=cn.prepareStatement(sql);

pst.setString(1,String.valueOf(jComboBox2.getSelectedItem()));

ResultSet rs=pst.executeQuery();

if(rs.next())

{

jTextField6.setText(rs.getString(1));

}

cn.close();

}

catch(SQLException ee)

{

ee.printStackTrace();

}

catch(Exception e)

{

e.printStackTrace();

}

}//GEN-LAST:event\_jComboBox2ItemStateChanged

private void jTextField4KeyReleased(java.awt.event.KeyEvent evt) {//GEN-FIRST:event\_jTextField4KeyReleased

double total=0;

double tax=0;

if(jTextField6.getText().equals("GST 5%"))

{

total=Double.parseDouble(jTextField4.getText())\*Double.parseDouble(jTextField2.getText());

tax=total\*5/100;

total=total+tax;

jTextField5.setText(String.valueOf(total));

jTextField3.setText(String.valueOf(tax));

}

if(jTextField6.getText().equals("GST 12%"))

{

total=Double.parseDouble(jTextField4.getText())\*Double.parseDouble(jTextField2.getText());

tax=total\*12/100;

total=total+tax;

jTextField5.setText(String.valueOf(total));

jTextField3.setText(String.valueOf(tax));

}

if(jTextField6.getText().equals("GST 18%"))

{

total=Double.parseDouble(jTextField4.getText())\*Double.parseDouble(jTextField2.getText());

tax=total\*18/100;

total=total+tax;

jTextField5.setText(String.valueOf(total));

jTextField3.setText(String.valueOf(tax));

}

if(jTextField6.getText().equals("GST 28%"))

{

total=Double.parseDouble(jTextField4.getText())\*Double.parseDouble(jTextField2.getText());

tax=total\*28/100;

total=total+tax;

jTextField5.setText(String.valueOf(total));

jTextField3.setText(String.valueOf(tax));

}

// TODO add your handling code here:

}//GEN-LAST:event\_jTextField4KeyReleased

private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event\_jButton1ActionPerformed

// TODO add your handling code here:

int billno=Integer.parseInt(jTextField1.getText());

String supplier=String.valueOf(jComboBox1.getSelectedItem());

String product=String.valueOf( jComboBox2.getSelectedItem());

int qty=Integer.parseInt(jTextField2.getText());

String unit=String.valueOf(jComboBox3.getSelectedItem());

Double price=Double.parseDouble(jTextField4.getText());

String cls=String.valueOf(jTextField6.getText());

Double tax=Double.parseDouble(jTextField3.getText());

Double total=Double.parseDouble(jTextField5.getText());

try

{

Class.forName("com.mysql.jdbc.Driver");

Connection cn= DriverManager.getConnection("jdbc:mysql://localhost/gstapp","root","");

String sql="insert into salesorder(id,sales\_id,item\_name,qty,price,tax\_class,tax,total) values(?,?,?,?,?,?,?,?)";

PreparedStatement pst=cn.prepareStatement(sql);

pst.setInt(1, 0);

pst.setInt(2, billno);

pst.setString(3, product);

pst.setInt(4, qty);

pst.setDouble(5,price );

pst.setString(6, cls);

pst.setDouble(7,tax );

pst.setDouble(8,total );

int x=pst.executeUpdate();

if(x>0)

{

javax.swing.JOptionPane.showMessageDialog(this, "Added");

k="";

}

String sql1="select \* from salesorder where sales\_id=?";

PreparedStatement pst1=cn.prepareStatement(sql1);

pst1.setInt(1, billno);

ResultSet rs1=pst1.executeQuery();

int count=0;

while(rs1.next())

{

count=count+1;

String item\_name=rs1.getString(3);

int q=rs1.getInt(4);

double p=rs1.getDouble(5);

double t=rs1.getDouble(7);

double tot=rs1.getDouble(8);

k+=String.valueOf(count)+"\t" + item\_name+"\t"+String.valueOf(q)+ "\t"+String.valueOf(p)+ "\t"+String.valueOf(t)+"\t"+String.valueOf(tot)+"\n";

jTextArea1.setText(k);

}

double sum=0;

double tax1=0;

String sql2="select sum(total) from salesorder where sales\_id=?";

PreparedStatement pst2=cn.prepareStatement(sql2);

pst2.setInt(1, billno);

ResultSet rs2=pst2.executeQuery();

if(rs2.next())

{

sum=rs2.getDouble(1);

jTextField7.setText(String.valueOf(sum));

}

String sql3="select sum(tax) from salesorder where sales\_id=?";

PreparedStatement pst3=cn.prepareStatement(sql3);

pst3.setInt(1, billno);

ResultSet rs3=pst3.executeQuery();

if(rs3.next())

{

tax1=rs3.getDouble(1);

jTextField11.setText(String.valueOf(tax1));

}

double grandt=sum+tax1;

jTextField10.setText(String.valueOf(grandt));

cn.close();

}

catch(SQLException e)

{

e.printStackTrace();

}

catch(Exception ee)

{

ee.printStackTrace();

}

}//GEN-LAST:event\_jButton1ActionPerformed

private void jButton2ActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event\_jButton2ActionPerformed

// TODO add your handling code here:

try

{

int billno=Integer.parseInt(jTextField1.getText());

String customer=String.valueOf(jComboBox1.getSelectedItem());

Class.forName("com.mysql.jdbc.Driver");

Connection cn= DriverManager.getConnection("jdbc:mysql://localhost/gstapp","root","");

String sql="insert into sales\_book values(?,?,?,?,?)";

PreparedStatement pst=cn.prepareStatement(sql);

pst.setInt(1, 0);

pst.setInt(2, billno);

java.sql.Date sqldate = new java.sql.Date(dateChooserCombo1.getFormat());

pst.setDate(3, sqldate);

pst.setDouble(4, Double.parseDouble(jTextField10.getText()));

pst.setString(5,customer);

int x=pst.executeUpdate();

if(x>0)

{

javax.swing.JOptionPane.showMessageDialog(this, "Bill Saved!");

}

}

catch(SQLException ee)

{

}

catch(Exception e)

{

}

}//GEN-LAST:event\_jButton2ActionPerformed

**Conclusion**

**Inventory Management system is a automated system for stock management or GST billing. It eases the task of the business holder and its operator or accountant.**

**This system provides easy to enter purchase bill, sales and GST compliance.** The GST solution is easy-to-use accounting, inventory and invoicing systems that aim to cater the specific needs of various business organizations for tracking GST.

**BIBLIOGRAPHY**

**Books:**

# JAVA 2 Swing, Servlets, JDBC and JavaBeans Programming Black Book.

# Mastering Java 2, J2SE 1.4