Database Connection

```
public class CustomDbConnection {
  public static Connection getConnection() {
    Connection conn = null;
    try {
  conn = DriverManager.getConnection("jdbc:mysql://localhost:3306/dhaka1", "root",
"1234");
      System.out.println("Connected database dhaka1");
    } catch (SQLException ex) {
      Logger.getLogger(CustomDbConnection.class.getName()).log(Level.SEVERE, null, ex);
    }
    return conn;
  }
  public static void main(String[] args) {
    Connection conn = CustomDbConnection.getConnection();
  }
}
public class ProductDaoImpl implements ProductDao {
  Connection conn = CustomDbConnection.getConnection();
  public static void main(String[] args) {
    ProductDaoImpl pdi = new ProductDaoImpl();
    pdi.createTable();
```

```
}
  @Override
  public void createTable() {
    String sql = "create table if not exists product(id int(11) auto_increment primary key,"
        + " product_name varchar(50), product_code varchar(50), qty int(11), unite_price
double, "
        + "total price double)";
    try {
      PreparedStatement pstmt = conn.prepareStatement(sql);
      pstmt.execute();
      System.out.println("Product table created");
    } catch (SQLException ex) {
      Logger.getLogger(ProductDaoImpl.class.getName()).log(Level.SEVERE, null, ex);
    }
  }
  @Override
  public void save(Product p) {
    String sql = "insert into product(product name,product code,qty,unite price,total price)
values(?,?,?,?,?)";
    try {
      PreparedStatement pstmt = conn.prepareStatement(sql);
      pstmt.setString(1, p.getProductName());
      pstmt.setString(2, p.getProcutCode());
      pstmt.setInt(3, p.getQty());
      pstmt.setDouble(4, p.getUnitePrice());
      pstmt.setDouble(5, p.getTotalPrice());
```

```
pstmt.executeUpdate();
      System.out.println("insert success");
    } catch (SQLException ex) {
      Logger.getLogger(ProductDaoImpl.class.getName()).log(Level.SEVERE, null, ex);
   }
  }
  @Override
  public void update(Product p) {
    throw new UnsupportedOperationException("Not supported yet."); //To change body of
generated methods, choose Tools | Templates.
  }
  @Override
  public void delete(Product p) {
    throw new UnsupportedOperationException("Not supported yet."); //To change body of
generated methods, choose Tools | Templates.
 }
  @Override
  public Product getProductById(int id) {
    throw new UnsupportedOperationException("Not supported yet."); //To change body of
generated methods, choose Tools | Templates.
 }
  @Override
  public Product getProductByProductCode(String code) {
    Product product = null;
```

```
String sql = "select * from product where product_code=?";
    try {
      PreparedStatement pstmt = conn.prepareStatement(sql);
      pstmt.setString(1, code);
      ResultSet rs = pstmt.executeQuery();
      while (rs.next()) {
        product = new Product(rs.getInt(1), rs.getString(2), rs.getString(3), rs.getInt(4),
             rs.getDouble(5), rs.getDouble(6));
      }
    } catch (SQLException ex) {
      Logger.getLogger(ProductDaoImpl.class.getName()).log(Level.SEVERE, null, ex);
    }
    return product;
  }
  @Override
  public List<Product> getList() {
    List<Product> list = new ArrayList();
    String sql = "select * from product";
    try {
       PreparedStatement pstmt = conn.prepareStatement(sql);
       ResultSet rs = pstmt.executeQuery();
      while (rs.next()) {
        Product product = new Product(rs.getInt(1), rs.getString(2), rs.getString(3),
rs.getInt(4),
             rs.getDouble(5), rs.getDouble(6));
        list.add(product);
```

```
}
    }catch (SQLException ex) {
      Logger.getLogger(ProductDaoImpl.class.getName()).log(Level.SEVERE, null, ex);
    }
  return list;
  }
}
public class ProdcutSalesDaoImpl implements ProductSalesDao {
  Connection conn = CustomDbConnection.getConnection();
  public static void main(String[] args) {
    ProductSalesDaoImpl pdi = new ProductSalesDaoImpl();
    pdi.createTable();
  @Override
  public void createTable() {
    String sql = "create table if not exists sales(id int(11) auto increment primary key,"
        + " product_name varchar(50), product_code varchar(50), qty int(11), unite_price
double, "
        + "total_price double, product_id int(11), FOREIGN KEY (product_id) REFERENCES
product(id))";
    try {
      PreparedStatement pstmt = conn.prepareStatement(sql);
      pstmt.execute();
      System.out.println("Sales table created");
    } catch (SQLException ex) {
```

```
Logger.getLogger(ProdcutSalesDaoImpl.class.getName()).log(Level.SEVERE, null, ex);
    }
  }
  @Override
  public void save(ProductSales ps) {
    String sql = "insert into
sales(product_name,product_code,qty,unite_price,total_price,product_id) "
        + "values(?,?,?,?,?)";
    try {
      PreparedStatement pstmt = conn.prepareStatement(sql);
      pstmt.setString(1, ps.getProductName());
      pstmt.setString(2, ps.getProcutCode());
      pstmt.setInt(3, ps.getQty());
      pstmt.setDouble(4, ps.getUnitePrice());
      pstmt.setDouble(5, ps.getTotalPrice());
      pstmt.setInt(6, ps.getProduct().getId());
      pstmt.executeUpdate();
      System.out.println("insert success");
    } catch (SQLException ex) {
      Logger.getLogger(ProdcutSalesDaoImpl.class.getName()).log(Level.SEVERE, null, ex);
    }
  }
  @Override
  public void update(ProductSales ps) {
    throw new UnsupportedOperationException("Not supported yet."); //To change body of
generated methods, choose Tools | Templates.
```

```
}
  @Override
  public void delete(ProductSales ps) {
    throw new UnsupportedOperationException("Not supported yet."); //To change body of
generated methods, choose Tools | Templates.
  }
  @Override
  public ProductSales getProductSalesById(int id) {
    throw new UnsupportedOperationException("Not supported yet."); //To change body of
generated methods, choose Tools | Templates.
  }
  @Override
  public ProductSales getProductSalesByProductCode(String code) {
    ProductSales productSales = null;
    String sql = "select * from sales where product code=?";
    try {
      PreparedStatement pstmt = conn.prepareStatement(sql);
      pstmt.setString(1, code);
      ResultSet rs = pstmt.executeQuery();
      while (rs.next()) {
        productSales = new ProductSales(rs.getInt(1), rs.getString(2), rs.getString(3),
rs.getInt(4),
            rs.getDouble(5), rs.getDouble(6), new Product(rs.getInt(7)));
      }
    } catch (SQLException ex) {
```

```
Logger.getLogger(ProdcutSalesDaoImpl.class.getName()).log(Level.SEVERE, null, ex);
    }
    return productSales;
 }
  @Override
  public List<ProductSales> getList() {
    List<ProductSales> list = new ArrayList();
    String sql = "select * from product";
    try {
      PreparedStatement pstmt = conn.prepareStatement(sql);
      ResultSet rs = pstmt.executeQuery();
      while (rs.next()) {
        ProductSales productSales = new ProductSales(rs.getInt(1), rs.getString(2),
rs.getString(3), rs.getInt(4),
             rs.getDouble(5), rs.getDouble(6), new Product(rs.getInt(7)));
        list.add(productSales);
      }
    } catch (SQLException ex) {
      Logger.getLogger(ProdcutSalesDaoImpl.class.getName()).log(Level.SEVERE, null, ex);
    }
    return list;
 }
```

}

```
public class SummaryDaoImpl implements SummaryDao {
  Connection conn = CustomDbConnection.getConnection();
  public static void main(String[] args) {
    SummaryDaoImpl pdi = new SummaryDaoImpl();
    pdi.createTable();
  }
  @Override
  public void createTable() {
    String sql = "create table if not exists summary(id int(11) auto_increment primary key,"
        + " product_name varchar(50), product_code varchar(50), total_qty int(11), sold_qty
int(11), "
        + "available_qty int(11), product_id int(11), FOREIGN KEY (product_id) REFERENCES
product(id))";
    try {
      PreparedStatement pstmt = conn.prepareStatement(sql);
      pstmt.execute();
      System.out.println("Summary table created");
    } catch (SQLException ex) {
      Logger.getLogger(SummaryDaoImpl.class.getName()).log(Level.SEVERE, null, ex);
   }
  }
  @Override
  public void save(Summary s) {
    String sql = "insert into
summary(product name,product code,total qty,sold qty,available qty,product id) "
```

```
+ "values(?,?,?,?,?)";
    try {
      PreparedStatement pstmt = conn.prepareStatement(sql);
      pstmt.setString(1, s.getProductName());
      pstmt.setString(2, s.getProcutCode());
      pstmt.setInt(3, s.getTotalQty());
      pstmt.setInt(4, s.getSoldQty());
      pstmt.setInt(5, s.getAvailableQty());
      pstmt.setInt(6, s.getProduct().getId());
      pstmt.executeUpdate();
      System.out.println("insert success");
    } catch (SQLException ex) {
      Logger.getLogger(SummaryDaoImpl.class.getName()).log(Level.SEVERE, null, ex);
    }
  }
  @Override
  public void update(Summary s) {
    String sql = "update summary set(total qty=?,sold qty=?,available qty=? where
product code=?)";
    try {
      PreparedStatement pstmt = conn.prepareStatement(sql);
      pstmt.setInt(1, s.getTotalQty());
      pstmt.setInt(2, s.getSoldQty());
      pstmt.setInt(3, s.getAvailableQty());
      pstmt.setString(4, s.getProcutCode());
    } catch (SQLException ex) {
```

```
Logger.getLogger(SummaryDaoImpl.class.getName()).log(Level.SEVERE, null, ex);
    }
  }
  @Override
  public void delete(Summary s) {
    throw new UnsupportedOperationException("Not supported yet."); //To change body of
generated methods, choose Tools | Templates.
  }
  @Override
  public Summary getSummaryById(int id) {
    throw new UnsupportedOperationException("Not supported yet."); //To change body of
generated methods, choose Tools | Templates.
  }
  @Override
  public Summary getSummaryByProductCode(String code) {
    Summary summary = null;
    String sql = "select * from summary where product_code=?";
    try {
      PreparedStatement pstmt = conn.prepareStatement(sql);
      pstmt.setString(1, code);
      ResultSet rs = pstmt.executeQuery();
      while (rs.next()) {
        summary = new Summary(rs.getInt(1), rs.getString(2), rs.getString(3), rs.getInt(4),
            rs.getInt(5), rs.getInt(6), new Product(rs.getInt(7)));
      }
```

```
} catch (SQLException ex) {
      Logger.getLogger(SummaryDaoImpl.class.getName()).log(Level.SEVERE, null, ex);
    }
    return summary;
 }
  @Override
  public List<Summary> getList() {
    List<Summary> list = new ArrayList();
    String sql = "select * from summary";
    try {
      PreparedStatement pstmt = conn.prepareStatement(sql);
      ResultSet rs = pstmt.executeQuery();
      while (rs.next()) {
        Summary summary = new Summary(rs.getInt(1), rs.getString(2), rs.getString(3),
rs.getInt(4),
            rs.getInt(5), rs.getInt(6), new Product(rs.getInt(7)));
        list.add(summary);
      }
    } catch (SQLException ex) {
      Logger.getLogger(SummaryDaoImpl.class.getName()).log(Level.SEVERE, null, ex);
    }
    return list;
 }
```

}


```
public void displayProductListIntoTable() {
    clearTable();
    ProductDao productDao = new ProductDaoImpl();
    List<Product> list = productDao.getList();
    DefaultTableModel model = (DefaultTableModel) tblDisplay.getModel();
    Object[] cols = new Object[6];
    for (int i = 0; i < list.size(); i++) {
      cols[0] = list.get(i).getId();
      cols[1] = list.get(i).getProductName();
      cols[2] = list.get(i).getProcutCode();
      cols[3] = list.get(i).getQty();
      cols[4] = list.get(i).getUnitePrice();
      cols[5] = list.get(i).getTotalPrice();
      model.addRow(cols);
    }
 }
  public void clearTable() {
    DefaultTableModel model = (DefaultTableModel) tblDisplay.getModel();
    model.setRowCount(0);
  }
```

```
purchase view
// TODO add your handling code here:
    ProductDao productDao = new ProductDaoImpl();
    Product product = new Product(txtPName.getText().trim(), txtPCode.getText().trim(),
       Integer.parseInt(txtQty.getText().trim()),
Double.parseDouble(txtUPrice.getText().trim()),
        Double.parseDouble(txtTPrice.getText().trim()));
    productDao.save(product);
    SummaryDao summaryDao = new SummaryDaoImpl();
    try {
      Summary summary =
summaryDao.getSummaryByProductCode(txtPCode.getText().trim());
      if (summary.getProcutCode()!= null) {
       int totalQty = summary.getTotalQty() + Integer.parseInt(txtQty.getText().trim());
       int availableqty = summary.getAvailableQty() +
Integer.parseInt(txtQty.getText().trim());
       Summary summaryUp = new Summary(summary.getProcutCode(), totalQty,
summary.getSoldQty(),
            availableqty);
       summaryDao.update(summaryUp);
       JOptionPane.showMessageDialog(null, "Purchase Again success");
      } else {
```

```
Product product1 =
productDao.getProductByProductCode(product.getProcutCode());
        Summary summary2 = new Summary(txtPName.getText().trim(),
txtPCode.getText().trim(),
            Integer.parseInt(txtQty.getText().trim()), 0,
Integer.parseInt(txtQty.getText().trim()), product1);
       summaryDao.save(summary2);
       JOptionPane.showMessageDialog(null, "Purchase success");
      }
    } catch (Exception e) {
      Product product1 = productDao.getProductByProductCode(product.getProcutCode());
      Summary summary = new Summary(txtPName.getText().trim(),
txtPCode.getText().trim(),
         Integer.parseInt(txtQty.getText().trim()), 0,
Integer.parseInt(txtQty.getText().trim()),
          product1);
      summaryDao.save(summary);
      JOptionPane.showMessageDialog(null, "Purchase success");
    }
    displayProductListIntoTable();
_____
Sales View
public void displayProductSalesListIntoTable() {
    clearTable();
    SummaryDao summaryDao = new SummaryDaoImpl();
```

```
ProductDao productDao = new ProductDaoImpl();
    List<Summary> list = summaryDao.getList();
    DefaultTableModel model = (DefaultTableModel) tblDisplay.getModel();
    Object[] cols = new Object[7];
    for (int i = 0; i < list.size(); i++) {
      cols[0] = list.get(i).getId();
      cols[1] = list.get(i).getProductName();
      cols[2] = list.get(i).getProcutCode();
      cols[3] = list.get(i).getTotalQty();
      cols[4] = list.get(i).getSoldQty();
      cols[5] = list.get(i).getAvailableQty();
      cols[5] = list.get(i).getAvailableQty();
      Product product = productDao.getProductByProductCode(list.get(i).getProcutCode());
      model.addRow(cols);
    }
 }
  public void clearTable() {
    DefaultTableModel model = (DefaultTableModel) tblDisplay.getModel();
    model.setRowCount(0);
```

```
// TODO add your handling code here:
    ProductDao pDao = new ProductDaoImpl();
    ProductSalesDao salesDao = new ProdcutSalesDaoImpl();
    Product product = pDao.getProductByProductCode(txtPCode.getText().trim());
    ProductSales sales = new ProductSales(txtPName.getText().trim(),
txtPCode.getText().trim(),
        Integer.parseInt(txtSoldQty.getText().trim()),
Double.parseDouble(txtUPrice.getText().trim()),
        Double.parseDouble(txtTPrice.getText().trim()), product);
    salesDao.save(sales);
    SummaryDao summaryDao = new SummaryDaoImpl();
    Summary summary = summaryDao.getSummaryByProductCode(sales.getProcutCode());
    if (summary.getProcutCode() != null) {
      int totalQty = summary.getTotalQty();
      int soldQty = summary.getSoldQty() + Integer.parseInt(txtSoldQty.getText().trim());
      int availableqty = summary.getAvailableQty() -
Integer.parseInt(txtSoldQty.getText().trim());
      Summary summaryUp = new Summary(summary.getProcutCode(), totalQty, soldQty,
availableqty);
      summaryDao.update(summaryUp);
```

```
JOptionPane.showMessageDialog(null, "Sales success");
      displayProductSalesListIntoTable();
   }
 }
 private void tblDisplayMouseClicked(java.awt.event.MouseEvent evt) {
   // TODO add your handling code here:
   int i = tblDisplay.getSelectedRow();
    DefaultTableModel model = (DefaultTableModel) tblDisplay.getModel();
    txtPName.setText(model.getValueAt(i, 1).toString());
    txtPCode.setText(model.getValueAt(i, 2).toString());
    lblAvailQty.setText(model.getValueAt(i, 5).toString());
 }
<<<<<<<<<<
Summary view
public void displayListIntoTable() {
    clearTable();
    SummaryDao summaryDao = new SummaryDaoImpl();
    ProductDao productDao = new ProductDaoImpl();
    List<Summary> list = summaryDao.getList();
    DefaultTableModel model = (DefaultTableModel) tblDisplay.getModel();
```

```
Object[] cols = new Object[7];

for (int i = 0; i < list.size(); i++) {
    cols[0] = list.get(i).getId();
    cols[1] = list.get(i).getProductName();
    cols[2] = list.get(i).getProcutCode();
    cols[3] = list.get(i).getTotalQty();
    cols[4] = list.get(i).getSoldQty();
    cols[5] = list.get(i).getAvailableQty();
    cols[6] = list.get(i).getAvailableQty();

    Product product = productDao.getProductByProductCode(list.get(i).getProcutCode());
    model.addRow(cols);
}</pre>
```