EXECUTIVE SUMMARY

This project report gives the overview of the WALMART WAREHOUSE and what business the WALMART WAREHOUSE is into and also gives brief information about the services offered by the WALMART WAREHOUSE. This report also put emphasis on the WMS (warehouse management systems) which highlights the latest techniques in warehouse management.

The project warehouse Management System is a complete desktop based application designed on Eclipse IDE for Enterprise Java and Web Developers Software. The main aim of the project is to develop warehouse Management System Model software in which all the information regarding the stock of the organization will be presented. It is an intranet based desktop application which has admin component to manage the warehouse and maintenance of the warehouse system.

Each new stock is created and entitled with the named and the entry date of that stock and it can also be update any time when required as per the transaction or the sales is returned in case. Here the entry page is created in order to protect the management of the stock of organization in order to prevent it from the threads and misuse of the inventory.

INTRODUCTION

This project is aimed at developing a desktop based application named “WALMART WAREHOUSE” for managing the warehouse system of any organization.

WMS (warehouse management systems) refers to the system and processes to manage the stock of organization with the involvement of Technology system.

This system can be used to store the details of the inventory, stock maintenance, update the inventory based on the sales details, and distribute items for various suppliers. This project is categorize individual aspects for the sales and inventory management system. In this system we are solving different problem affecting to direct sales management and purchase management. Warehouse Management System is important to ensure quality control in businesses that handle transactions resolving around consumer goods.

Without proper inventory control, a large retail store may run out of stock on an important item. A good inventory management system will alert the wholesaler when it is time to record. Warehouse Management System is also on important means of automatically tracking large shipment.

An automated Warehouse Management System helps to minimize the errors while recording the stock.

INDUSTRY PROFILE / COMPANY PROFILE

AUDAZ VENTURES PVT. LTD., with the headquarter in New Delhi and Corporate Office in Bengaluru was established in the year 2020. It is a service - based company which provides service and solutions to 62 institutes across India. It has its presence in more than 12 cities across India.

Directors AUDAZ VENTURES PVT. LTD., are Mr. Man Mohan and Mr. Rahul Oberoi.

Its services include

- Software solutions
- Digital marketing
- SAP software
- ERP software
- Blockchain software
- Placement related training to the Engineering Graduates and many more
- Placement opportunities to students

OBJECTIVES AND SCOPE OF THE STUDY

Objectives

The main objective of the project on the WALMART WAREHOUSE System is to manage the details of stocks or items that needs to be stored in the warehouse before distributing. It manages all the information about items ,insertion, deletion and updation can be done on the . Also details can be viewed of each item individually. The project is totally built at administrative level and thus only the administrator is guaranteed the access. The purpose of the project is to build an application program to reduce the manual work for managing the warehouse

Scope

- It may help collecting perfect management in details in a very short time, the collection will be obvious simple and sensible
- It will help the person to know the management of a past year perfectly and vividly
- It also helps in current all works relative to warehouse management
- It will also be reduced the cost of collecting the management and collection procedure will go on smoothly.
- In computer system it is not necessary to create the manifest but we can directly printed which saves our time.
- To assess the staff in capturing the effort spent on their respective working areas
- To utilise resources in a efficient manner for increasing the productivity through automation
- The system generates types of information that can be used for various purposes.

THEORETICAL BACKGROUND

MySQL

MySQL is an open-source relational database management system (RDBMS). "SQL", the abbreviation **for Structured Query Language**. A relational database organizes data into one or more data tables in which data types may be related to each other; these relations help structure the data. SQL is a language programmers use to create, modify and extract data from the relational database, as well as control user access to the database. In addition to relational databases and SQL, an RDBMS like MySQL works with an operating system to implement a relational database in a computer's storage system, manages users, allows for network access and facilitates testing database integrity and creation of backups.

HTML

The **Hyper Text Markup Language**, or HTML is the standard markup language for documents designed to be displayed in a web browser. Web browsers receive HTML documents from a web server or from local storage and render the documents into multimedia web pages. HTML describes the structure of a web page semantically and originally included cues for the appearance of the document. HTML elements are the building blocks of HTML pages. With HTML constructs, images and other objects such as interactive forms may be embedded into the rendered page. HTML provides a means to create structured documents by denoting structural semantics for text such as headings, paragraphs, lists,links, quotes and other items. HTML elements are delineated by tags, written using angle brackets. Tags such as <p> surround and provide information about document text and may include other tags as sub-elements. Browsers do not display the HTML tags, but use them to interpret the content of the page.

CSS

Cascading Style Sheets (CSS) is a style sheet language used for describing the presentation of a document written in a markup language such as HTML. CSS is a cornerstone technology of the World Wide Web, alongside HTML and JavaScript. CSS is designed to enable the separation of presentation and content, including layout, colours, and fonts. This separation can improve content accessibility; provide more flexibility and control in the specification of presentation characteristics; enable multiple web pages to share formatting by specifying the relevant CSS in a separate .CSS file, which reduces complexity and repetition in the structural content; and enable the .CSS file to be cached to improve the page load speed between the pages that share the file and its formatting.

JAVA SERVER PAGE:

- JSP technology is used to create web application just like Servlet technology. It can be thought of as an extension to Servlet because it provides more functionality than servlet such as expression language, JSTL, etc.
- A JSP page consists of HTML tags and JSP tags. The JSP pages are easier to maintain than Servlet because we can separate designing and development. It provides some additional features such as Expression Language, Custom Tags, etc.
- The JSP pages follow these phases:

1. Translation of JSP Page
2. Compilation of JSP Page
3. Classloading (the classloader loads class file)
4. Instantiation (Object of the Generated Servlet is created).
5. Initialization (the container invokes jspInit() method).
6. Request processing (the container invokes _jspService() method).
7. Destroy (the container invokes jspDestroy() method).

RESEARCH METHODOLOGY

1. What is Java?
2. Discuss about Editor of java IDE like Eclispse, Netbeans etc. of JAVA.
3. Versions of Java.
4. Structure of Java Program.
5. Discuss about Memory Management and Compilation Program.
6. Discuss about API.
7. Discuss of Third party tools.
8. Discuss of Various Database Connectivity with Java Language.
9. Describe Java Security Regions and attacks on code.
10. Discuss about application and Project or software and implements in Java.
11. Future of JAVA.

HYPOTHESIS

Research work mentioned all the aspect relative to Java Programming Language.This is an attempt to investigate how students develop project and applications in java an understandings of all concepts in „Programming disciplines. In order to have a reasonable focus, its scope is limited to learning computer programming, and centrally, coming to understand the concepts of object-oriented programming (OOP) in Java. It is restricted to novices – students with little or no previous experience of programming.

Why Java?

While some investigation in this thesis looks at general notions of computers and the execution of short pieces of pseudo-code, the focus will be on the Java language and associated OOP concepts. There are several reasons for this. Java is currently a very widely used language, for desktop applications, client-server systems (using „Java Enterprise Edition) and mobile phone applications on Android.

Java is already familiar with these concepts, which of course is not true for novices.
A second aspect of Java is that it involves a set of inter-dependent ideas, which cannot be isolated. As a fairly „pure OOP language, even the simplest executable program makes reference to a host of unfamiliar concepts, represented by the keywords public, class, static, void and. Beyond the first program, OOP entails a number of ideas which are

distinct but closely linked, such as class and object. This presents a difficulty in designing a learning sequence, which one would ideally like to lead the student to encounter new ideas one at a time – impossible in Java because the concepts are dependent upon each other.

Concepts

What are the concepts used in OOP? Armstrong (2006) examined 239 sources published between 1966 and 2005 to identify the most commonly used set of OOP ideas. The 'top ten' were in order:

1. Inheritance
2. Object
3. Class
4. Encapsulation
5. Method
6. Message Passing
7. Polymorphism
8. Abstraction
9. Instantiation
10. Attribute

WORK PLAN AND METHODOLOGY

In this dissertation our main aim is to study and implement and make own structure or an Algorithm to improve the Securityand how student develop Applications or projects using java and how many library provided for security and packages in java ,how to make project or web application more robust, fast, and reliable in java and discuss various tools. Complete dissertation will be covered in a Five Chapters. The entire Chapter further divided into number of modules. Abstract of Five chapters is as follows:

1: Introduction of JAVA Language.

2: Literature Survey

3: Problem Definition

4: Implementation of Techniques for Make Java Application or other.

5: Discussion & Result

ANALYSIS AND INTERPRETATION OF DATA

Java Database Connectivity (JDBC) is an application programming interface (API) for the programming language Java, which defines how a client may access a database. It is a Java-based data access technology used for Java database connectivity. It is part of the Java Standard Edition platform, from Oracle Corporation. It provides methods to query and update data in a database, and is oriented toward relational databases. A JDBC-to-ODBC bridge enables connections to any ODBC-accessible data source in the Java virtual machine (JVM) host environment. These drivers fall into one of the following types:

1. Type 1 that calls native code of the locally available ODBC driver.
2. Type 2 that calls database vendor native library on a client side. This code then talks to database over the network.
3. Type 3 the pure-java driver that talks with the server-side middleware that then talks to the database.
4. Type 4, the pure-java driver that uses database native protocol.

Steps for connecting Java programs to database :

- Import the packages import java.sql.*
- Load the drivers using the forName() method of class Class.
- Register the drivers using Driver Manager.
- Establish a connection using the connection class object.
- Create a statement.
- Execute the query.
- Closed the connection.

FINDINGS

Figure1:Front page

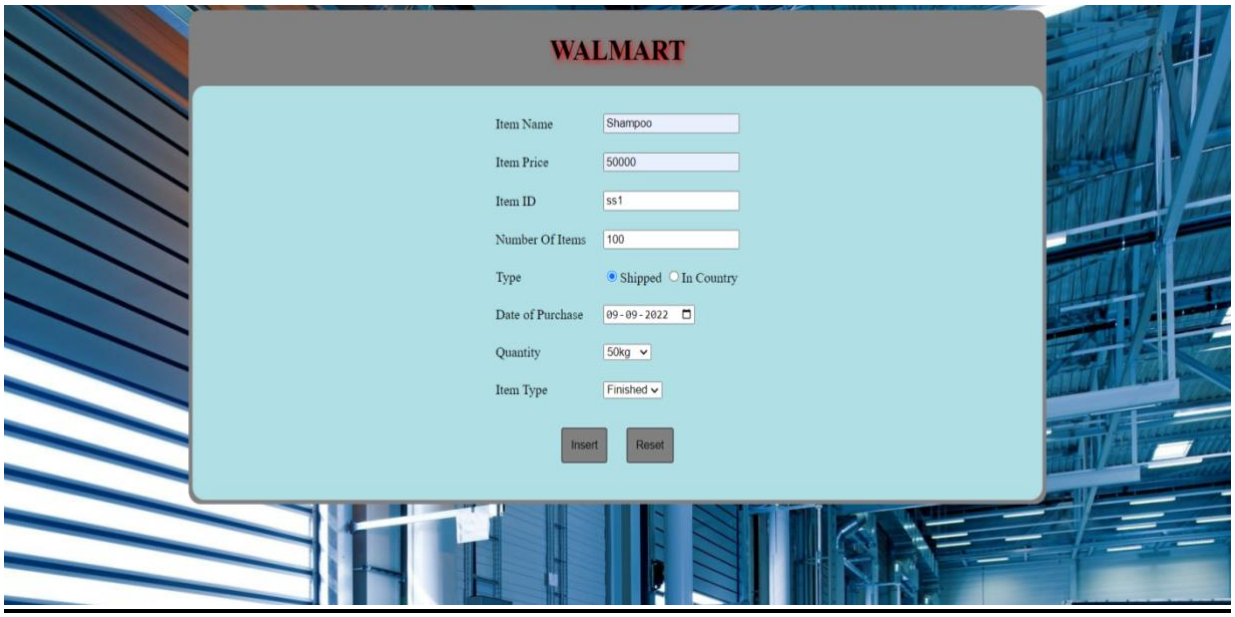

Figure2:Insert page

Figure3:Toggle page

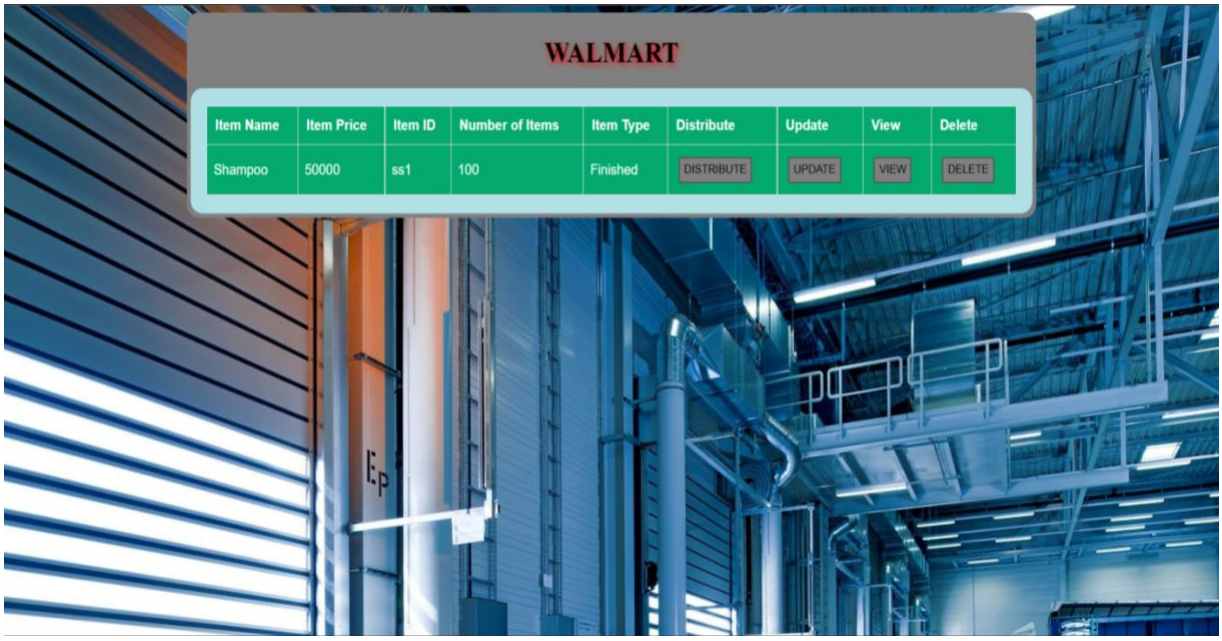

Figure4:View page

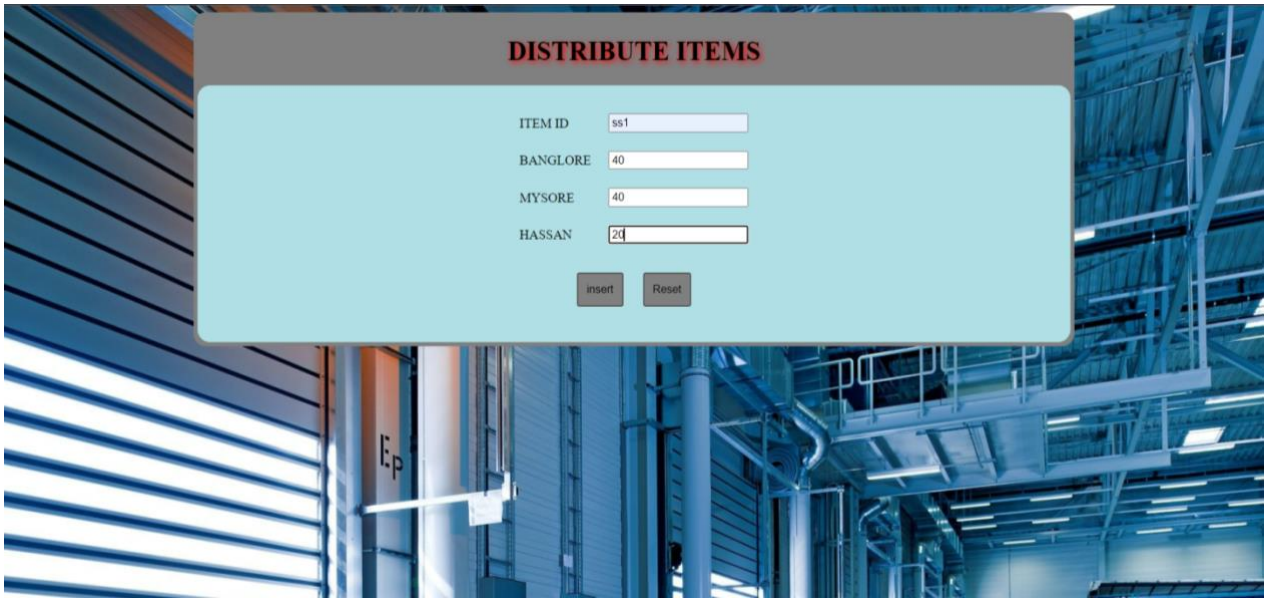

Figure5:Distribute page

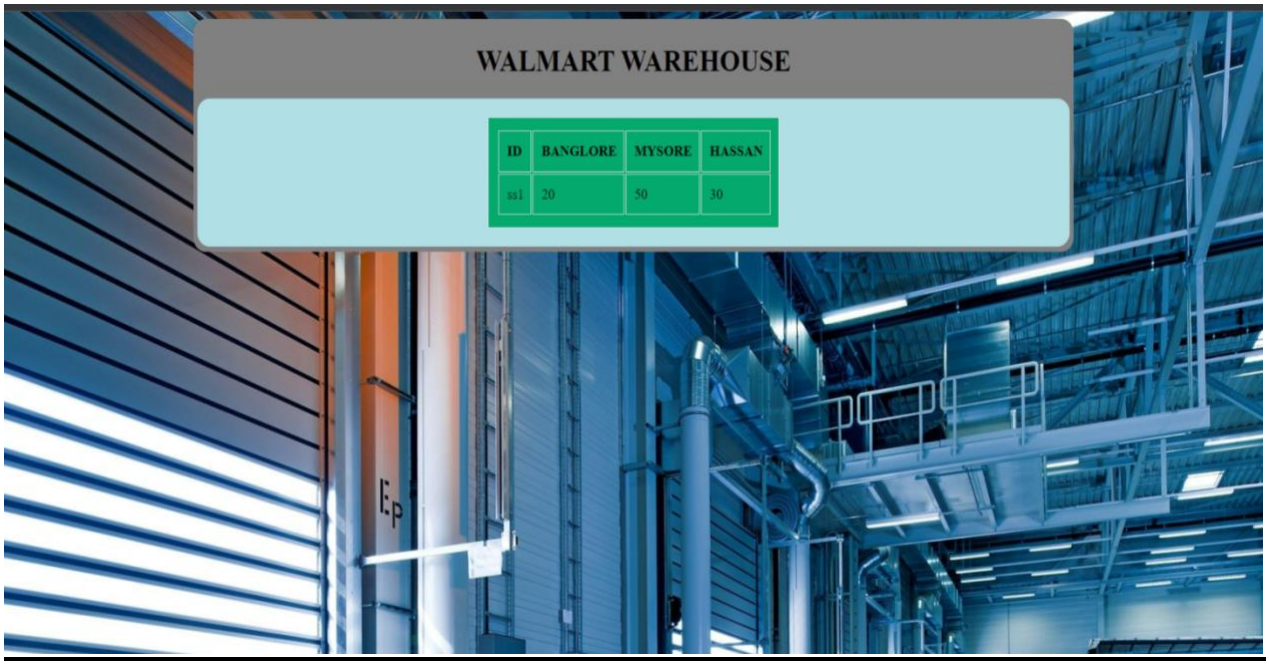

Figure6:Distributed view

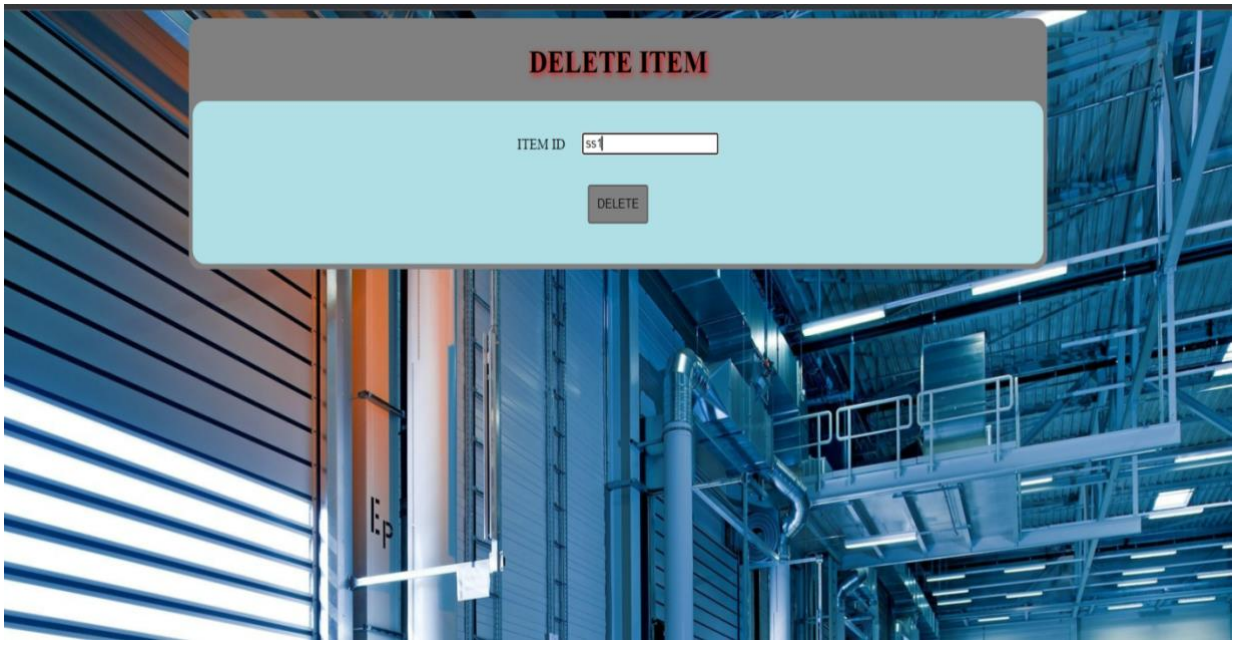

Figure7:Delete page

SUGGESTIONS / RECOMMENDATIONS

In a nutshell, it can be summarised that the future scope of the project circles around maintaining information regarding:

- We can add items in the future.
- We can give more advanced software for a warehouse management including more facilities.
- We will host the platform online service to make it accessible worldwide.
- Integrate multiple load balancers distribute the load of the system.
- Create the master and slave database structure to reduce the overall rating based queries.
- Implement the backup mechanism for taking backup of codebase and database on regular basis on different servers.
- The above mentioned points enhancements which can be done to increase their applicability and uses of the project.

PSEUDO CODE

1. Code for item entry:

```
<%@ page import="java.sql.*" %>
<%@ page language="java" contentType="text/html; charset=UTF-8"
   pageEncoding="UTF-8"%>
   <!DOCTYPE html>
<html>
<head>
<meta charset="UTF-8">
<title>INSERT ITEMS</title>
</head>
<body>
<% String itemname=request.getParameter("itemname");
String ID=request.getParameter("ID");
String quantity=request.getParameter("quantity");
String itemtype=request.getParameter("itemtype");
String itemprice=request.getParameter("itemprice");
String numberofitems=request.getParameter("numberofitems");
String type=request.getParameter("type");
String dateofpurchase=request.getParameter("dateofpurchase");
String query = "insert into
additem(itemname,ID,quantity,itemtype,itemprice,numberofitems,type,dateofpurchase)
values("'+itemname+"','"+ID+"','"+quantity+"','"+itemtype+"','"+itemprice+"','"+numberofite
ms+"','"+type+"','"+dateofpurchase+"');";
Class.forName("com.mysql.cj.jdbc.Driver");
Connection con = DriverManager.getConnection("jdbc:mysql://localhost:3306/walmart",
"root", "");
System.out.println("Connection Established successfully");
PreparedStatement st = con.prepareStatement(query);
st.executeUpdate(query);
 st.close();
 con.close();%>
```

2.Code for distributing items:

```
<%@ page import="java.sql.*" %>
<%@ page language="java" contentType="text/html; charset=UTF-8"
   pageEncoding="UTF-8"%>
<!DOCTYPE html>
<html>
<head>
<meta charset="UTF-8">
<title>WAREHOUSE DETAILS</title>
</head>
<body>
<%
String ID=request.getParameter("ID");
String banglore=request.getParameter("banglore");
String mysore=request.getParameter("mysore");
String hassan=request.getParameter("hassan");
String query = "insert into distribute values
("'+ID+'","'+banglore+'","'+mysore+'","'+hassan+'");";
Class.forName("com.mysql.cj.jdbc.Driver");
Connection con = DriverManager.getConnection("jdbc:mysql://localhost:3306/walmart",
"root", "");
System.out.println("Connection Established successfully");
PreparedStatement st = con.prepareStatement(query);
st.executeUpdate(query);
st.close();
con.close();
%>
```

3. Code for updating items:

```
<%@ page import="java.sql.*" %>
<%@ page language="java" contentType="text/html; charset=UTF-8"
```

```
   pageEncoding="UTF-8"%>
 <!DOCTYPE html>
<html>
<head>
<meta charset="UTF-8">
<title>WALMART WAREHOUSE</title>
</head>
<body>
<%
String ID=request.getParameter("ID");
String banglore=request.getParameter("banglore");
String mysore=request.getParameter("mysore");
String hassan=request.getParameter("hassan");
String query = "update distribute set
banglore='"+banglore+"',mysore='"+mysore+"',hassan='"+hassan+"' where ID='"+ID+"'";
Class.forName("com.mysql.cj.jdbc.Driver");
Connection con = DriverManager.getConnection("jdbc:mysql://localhost:3306/walmart",
"root", "");
System.out.println("Connection Established successfully");
PreparedStatement st = con.prepareStatement(query);
st.executeUpdate(query);
st.close();
con.close();
%>
```

4.Code for viewing items:

```
<%@ page import="java.sql.*" %>
<%@ page language="java" contentType="text/html; charset=UTF-8"
   pageEncoding="UTF-8"%>
<!DOCTYPE html>
<html>
<head>
```

```
<title>WAREHOUSE DETAILS</title>
  <meta charset="UTF-8" />
  <meta name="viewport" content="width=device-width,initial-scale=1" />
  <meta name="description" content="" />
  <link rel="icon" href="img/logo.png">
  <script src="script.js"></script>
<title>WAREHOUSE DETAILS</title>
</head>
<body>
  <div class="contents" style="width :70%" >
  <h1 style ="text-shadow: 2px 2px 7px red;">WALMART</h1>
  <div class="form">
  <table id="additem">
<tr>
<th>Item Name</th>
<th>Item Price</th>
<th>Item ID</th>
<th>Number of Items</th>
<th>Item Type</th>
<th>Distribute</th>
<th>Update </th>
<th>View </th>
<th>Delete </th>
</tr>
<%
String query = "select * from additem";
Class.forName("com.mysql.cj.jdbc.Driver");
Connection con = DriverManager.getConnection("jdbc:mysql://localhost:3306/walmart",
"root", "");
System.out.println("Connection Established successfully");
Statement st = con.createStatement();
ResultSet rs = st.executeQuery(query);
while(rs.next()){
```

```
String itemname = rs.getString("itemname");
    String itemprice = rs.getString("itemprice");
    String ID =rs.getString("ID");
    String numberofitems=rs.getString("numberofitems");
    String itemtype=rs.getString("itemtype");
    %>
    <% out.println(itemname);%>
    <% out.println(itemprice);%>
    <% out.println(ID );%>
    <% out.println(numberofitems );%>
    <% out.println(itemtype );%>
    <a href="insert.html">
    <button class="but">DISTRIBUTE</button></a>
    <td ><a href="update.html">
<button class="but">UPDATE</button></a>

    <a href="viewia.html">
<button class="but">VIEW</button></a>
    a href="delete.html">
<button class="but">DELETE</button></a>
    <%
}
st.close();
con.close();   %>
</table></body></html>
```

5.Code for deleting an item:

```
<%@ page import="java.sql.*" %>
<%@ page language="java" contentType="text/html; charset=UTF-8"
   pageEncoding="UTF-8"%>
<!DOCTYPE html>
<html>
<head>
```

```
<title>WALMART WAREHOUSE</title>
  <meta charset="UTF-8" />
  <meta name="viewport" content="width=device-width,initial-scale=1" />
  <meta name="description" content="" />
  <script src="script.js"></script>
<title>WALMART WAREHOUSE</title>
</head>
<body>
<%
String ID1=request.getParameter("ID");
String query = "delete  from distribute where ID ='"+ID1+"';";
String query1 = "delete  from additem where ID ='"+ID1+"';";
Class.forName("com.mysql.cj.jdbc.Driver");
Connection con = DriverManager.getConnection("jdbc:mysql://localhost:3306/walmart",
"root", "");
System.out.println("Connection Established successfully");
PreparedStatement st = con.prepareStatement(query);
st.executeUpdate(query);
PreparedStatement st1 = con.prepareStatement(query1);
st1.executeUpdate(query1);
st1.close();
st.close();
con.close();%>
<%String redirectURL = "view.jsp";
response.sendRedirect(redirectURL); %>
</body>
</html>
```

CONCLUSION

To conclude, warehouse Management System is a simple desktop based application basically suitable for all organizations. It has every basic items which are used for the organization. And I am successful in making the application where we can update, insert and delete the item as per the requirement.This application matches for all organization where there small limited if godwoms. Through it has some limitations, and I strongly believes that the implementation of this system will surely benefit the organization.

Nowadays, is manual process for updating details and bigger registers consumes more and more time and incorrect calculation military enterpreneur in huge loss.To overcome this to save time as well as money with correct automation of customer measurement detail man management and day-to-day updating of customer information and use talks of design we go with the software application. It is simple and easy to use and nobody and details are not accepted even not entered correctly.

LIMITATIONS

Although I have put my best efforts to make the software flexible easy to operate without limitations cannot be ruled out even by me. Though the software presents a broad range of options to you to its users some intricate options could not be covered into it ;partly because of logistic and partly due to lack of sophistication.Paucity of time was also a major constraint, thus it was not possible to the software foolproof and dynamic. Lack of time also compelled me to ignore some parts as storing old result of the candidate etc.

BILBLIOGRAPHY

1. Welling, L. and Thomson, L., 2003. Java and MySQL Web development.
2. Arnold, Ken, James Gosling and David Holmes(2005). The Java programming Language, 3rd edition. NJ: Prentice Hall.
3. Sams Publishing. Cornelio, A. and Navathe, S.B., 1988, February. A tool for integrating conceptual schemas and user views. In Proc. IEEE

   Fourth Int'l Conf. Data Eng.(ICDE'88).

4 .Gillenson, M.L., 2008. Fundamentals of database management systems.

5. DuBois, P., 2008. MySQL. Pearson Education.

6.Core Java, MySql, and JavaScripts, www.w3schools.com