<u>SL-1</u>

A Mini Project Report

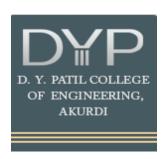
on

SALES AND INVENTORY

by

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<u>GitHub Link:- github.com/AtharvaChavan/SalesAndInventory/</u>



Department of Information Technology

D. Y. PATIL COLLEGE OF ENGINEERING, AKURDI, PUNE

SAVITRIBAI PHULE PUNE UNIVERSITY

2020-2021



Date: 19/12/2020

CERTIFICATE

This is to certify that,

Atharva Chavan (T1851010) Satyam Raj (T1851051) Tejaswa Wadekar (T1851079) Aditya Bhatt (T1851102)

of class T.E IT; have successfully completed their mini project work on "SALES AND INVENTORY" at D. Y. Patil College of Engineering in the partial fulfillment of the Graduate Degree course in T.E at the department of **Information Technology**, in the academic Year 2020-2021 Semester – I as prescribed by the Savitribai Phule Pune University.

Dr. Preeti Patil
Head of the Department
(Department of Information Technology)

Acknowledgement

We take this opportunity to thank our project guide Mrs. Madhuri Gurale and Head of the Department Dr. Preeti Patil for their valuable guidance and for providing all the necessary facilities, which were indispensable in the completion of this project report. We are also thankful to all the staff members of the Department of Information Technology of D. Y. Patil College of Engineering, Akurdi for their valuable time, support, comments, suggestions and persuasion. We would also like to thank the institute for providing the required facilities, Internet access and important books.

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Acronyms

POS Point Of Sales

JDBC Java DataBase Connectivity

SQL Structured Query Language

QTY Quantity

Abstract

This system helps in tracking records so that past records can be verified through them and one can make decisions based on the past records. This system completes the work in a very less time resulting in less time consumption and high level of efficiency.

This system is developed in such a way that even a naive user can also operate the system easily. The calculations are made very quickly and the records are directly saved into databases and the databases can be maintained for a longer period of time. Also this system provides a high level of security for data. The advantages are,

- Ensure data accuracy
- Proper control of the higher authority
- Minimize manual data entry
- Greater efficiency
- Better service
- User friendliness and interactive
- Minimum time required

Introduction

1.1 Motivation

1.1.1 Reducing Data Redundancy

The file based data management systems contained multiple files that were stored in many different locations in a system or even across multiple systems. Because of this, there were sometimes multiple copies of the same file which lead to data redundancy.

This is prevented in a database as there is a single database and any change in it is reflected immediately. Because of this, there is no chance of encountering duplicate data.

1.1.2 Sharing of Data

In a database, the users of the database can share the data among themselves. There are various levels of authorization to access the data, and consequently the data can only be shared based on the correct authorisation protocols being followed.

Many remote users can also access the database simultaneously and share the data between themselves.

1.1.3 Data Integrity

Data integrity means that the data is accurate and consistent in the database. Data Integrity is very important as there are multiple databases in a DBMS. All of these databases contain data that is visible to multiple users. So it is necessary to ensure that the data is correct and consistent in all the databases and for all the users.

1.1.4 Data Security

Data Security is a vital concept in a database. Only authorised users should be allowed to access the database and their identity should be authenticated using a username and password. Unauthorised users should not be allowed to access the database under any circumstances as it violates the integrity constraints.

1.1.5 Backup and Recovery

Database Management System automatically takes care of backup and recovery. The users don't need to backup data periodically because this is taken care of by the DBMS. Moreover, it also restores the database after a crash or system failure to its previous condition.

1.1.6 Privacy

The privacy rule in a database means only the authorized users can access a database according to its privacy constraints. There are levels of database access and a user can only view the data he is allowed to. For example - In social networking sites, access constraints are different for different accounts a user may want to access.

1.1.7 Data Consistency

Data consistency is ensured in a database because there is no data redundancy. All data appears consistently across the database and the data is the same for all the users viewing the database. Moreover, any changes made to the database are immediately reflected to all the users and there is no data inconsistency.

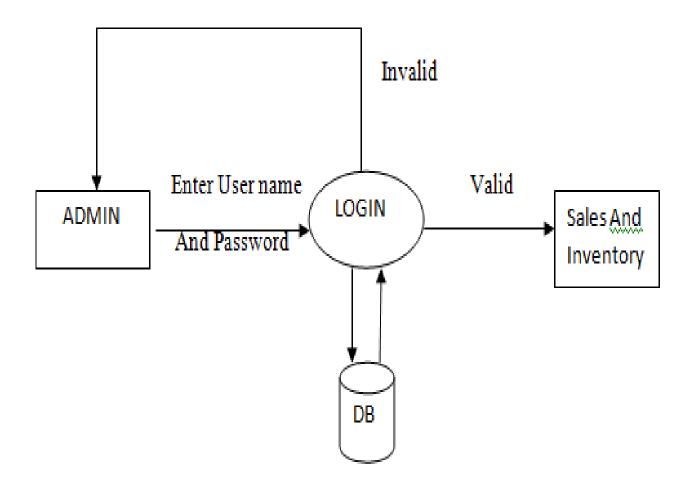
1.2 Problem Statement

What is a POS (Point of Sale)?

Point Of Sale Definition: A Point of Sale (POS) is technically a system in a retail store from which you conduct the sale of physical goods. In a store, a POS is where the checkout happens, orders are processed and bills are paid.

Sales is an integral part of most companies. It is one of the most critical sections which have a direct impact on the profitability of the company. Sales staff has to rely mostly on the old systems or paperwork to access information about the potential customer. The main perspective of this system is to solve all these problems. The system will help the Persons and Managers to manage to Sales and System in a better way.

1.3 Framework of the proposed work in project



Software Requirement Specification

1. Hardware Requirements

- 1.1. Hard Disk: SQL Server requires a minimum of 6 GB of available hard-disk space. Disk space requirements will vary with the SQL Server components you install. For more information, see Hard Disk Space Requirements later in this article. For information on supported storage types for data files, see Storage Types for Data Files. Installing SQL Server on computers with the NTFS or ReFS file formats is recommended. The FAT32 file system is supported but not recommended as it is less secure than the NTFS or ReFS file systems. Read-only, mapped, or compressed drives are blocked during installation.
- 1.2. Drive: A DVD drive, as appropriate, is required for installation from disc.
- 1.3. Monitor: SQL Server requires Super-VGA (800x600) or higher resolution monitor.
- 1.4. Internet: Internet functionality requires Internet access (fees may apply).
- 1.5. **Memory *:**

Minimum:

Express Editions: 512 MB

All other editions: 1 GB

Recommended:

Express Editions: 1 GB

1All other editions: At least 4 GB and should be increased as database size increases to ensure optimal performance.

1.6. **Processor Speed:**

Minimum: x64 Processor: 1.4 GHz

Recommended: 2.0 GHz or faster

1.7. Processor Typex64 Processor: AMD Opteron, AMD Athlon 64, Intel Xeon with Intel

EM64T support, Intel Pentium IV with EM64T support

Software Requirements 2.

2.1. .NET Framework: SQL Server 2016 (13.x) and later require .NET Framework 4.6 for the Database Engine, Master Data Services, or Replication. SQL Server setup automatically installs .NET Framework. You can also manually install .NET Framework from Microsoft .NET Framework 4.6 (Web Installer) for Windows. For more information, recommendations, and guidance about .NET Framework 4.6 see .NET Framework Deployment Guide for Developers.

Windows 8.1, and Windows Server 2012 R2 require KB2919355 before installing .NET Framework 4.6.

2.2. Network Software: Supported operating systems for SQL Server have built-in network software. Named and default instances of a stand-alone installation support the following network protocols: Shared memory, Named Pipes, TCP/IP, and VIA.

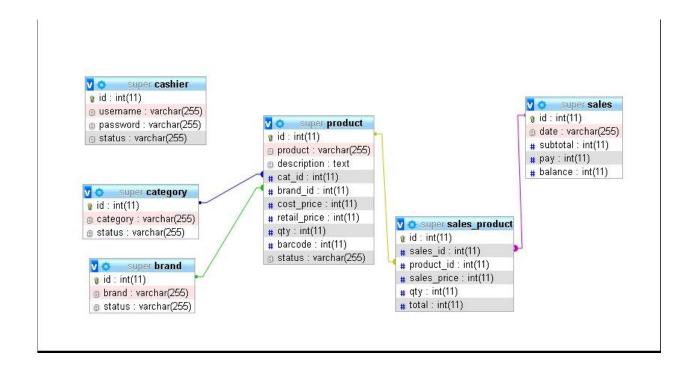
Note: VIA protocol is not supported on failover clusters. Clients or applications running on the same node of the failover cluster as the SQL Server instance, can use Shared Memory protocol to connect to SQL Server using its local pipe address. However this type of connection is not cluster-aware and will fail after an instance failover. It is therefore not recommended and should only be used in very specific scenarios.

Important: The VIA protocol is deprecated. This feature will be removed in a future version of Microsoft SQL Server. Avoid using this feature in new development work, and plan to modify applications that currently use this feature.

For more information about Network Protocols and Network Libraries, see **Network Protocols and Network Libraries.**

Chapter 3

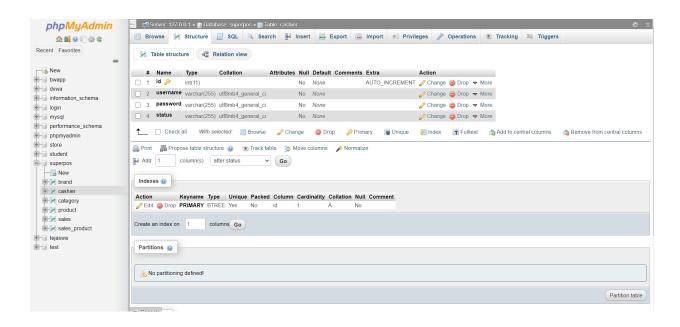
Entity-Relationship Diagram



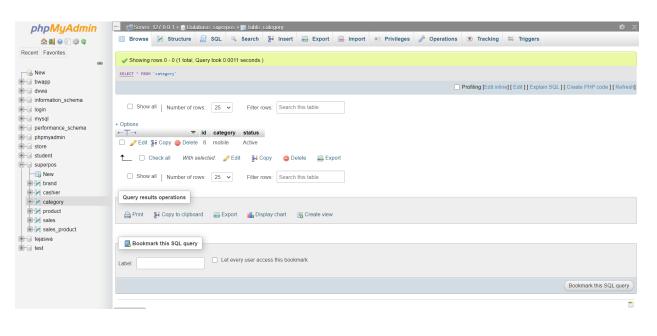
Chapter 4

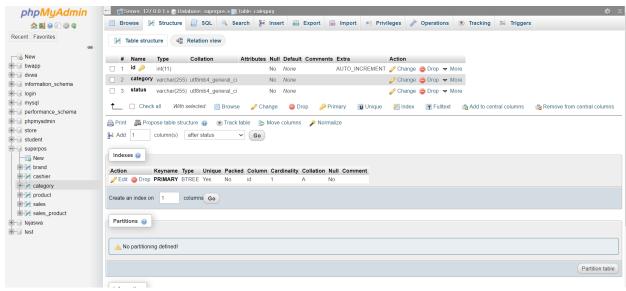
Tables/Entities

1. Login



2. Category

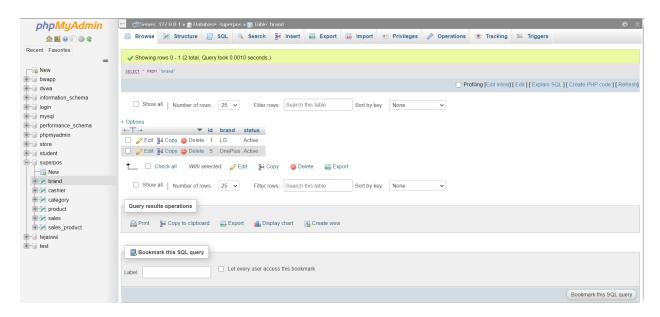


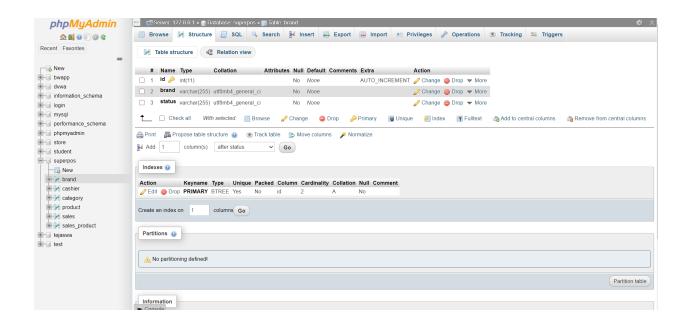


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3. Brand

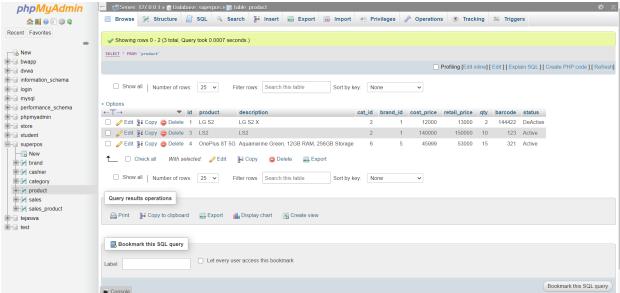
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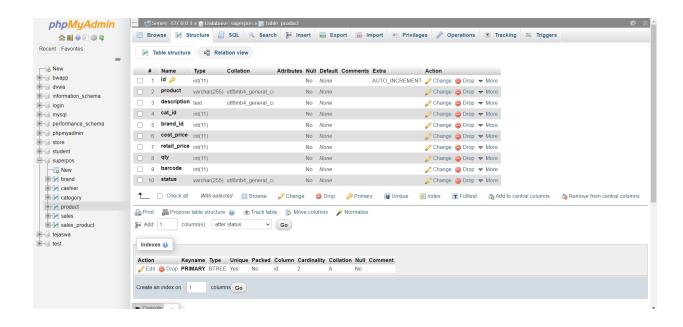




4. Product

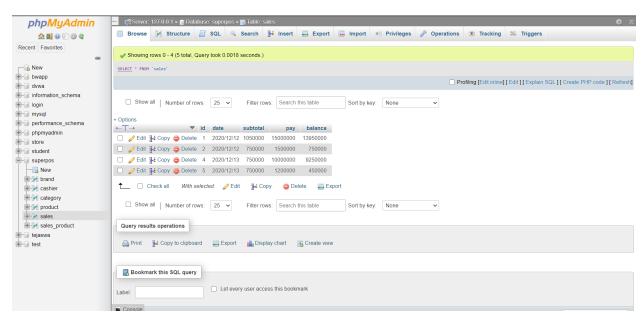


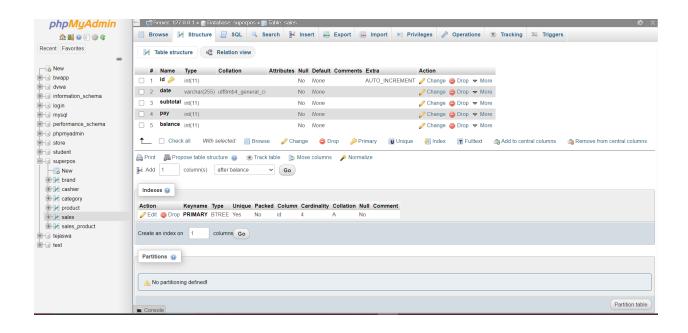


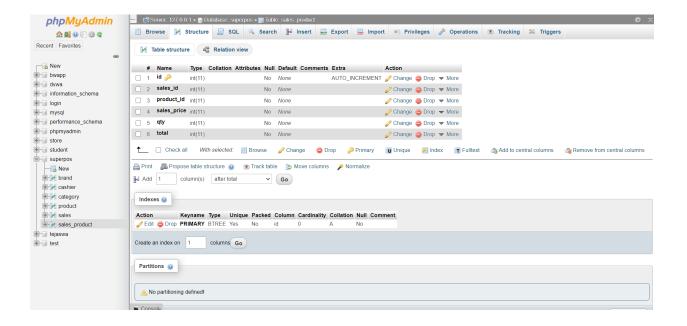


5. POS

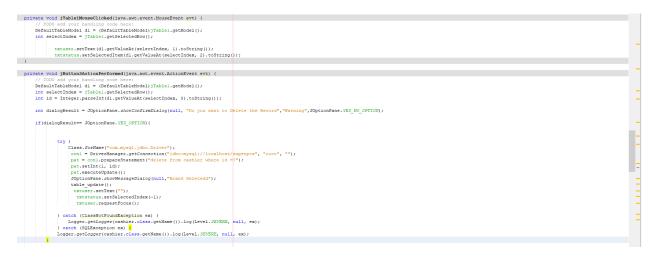
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private void makes ()
DateTimeFormatter dif = DateTimeFormatter, ofFattern(*yyyy/BM/da*);
LocalisetEme now = LocalisetEme, now();
Sting date = dif.format(now);
Sting pay = timps/perform();
Insert.edSting(); date);
Insert.edSting(); date);
Insert.edSting(); pay);
Insert.e
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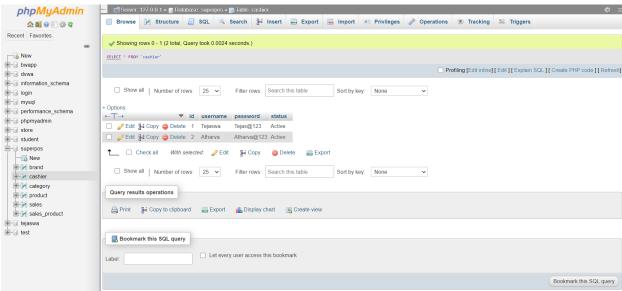


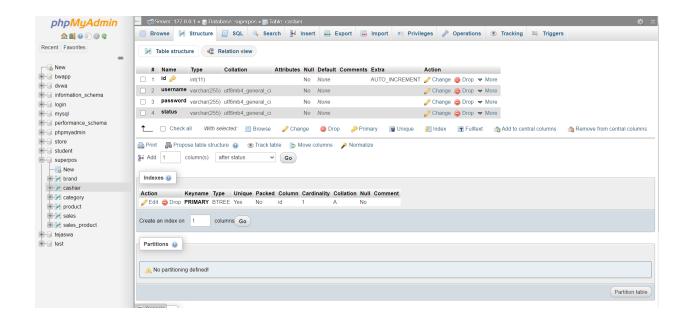




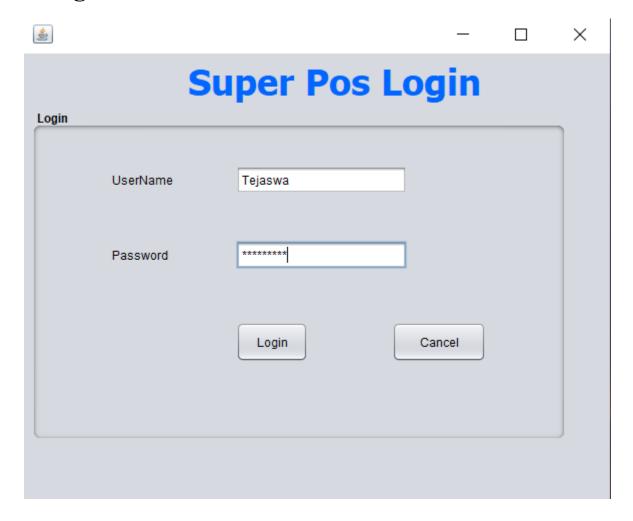
6. Cashier



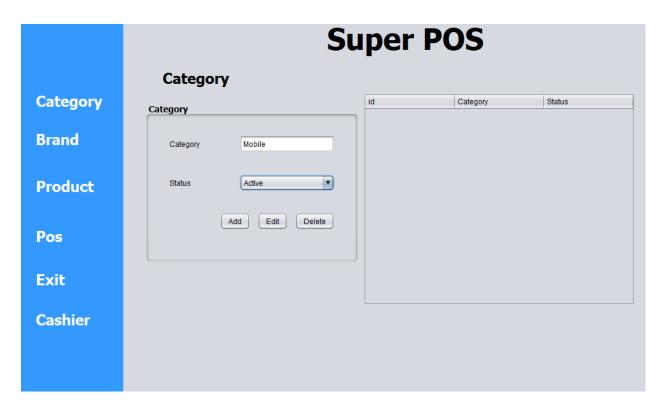




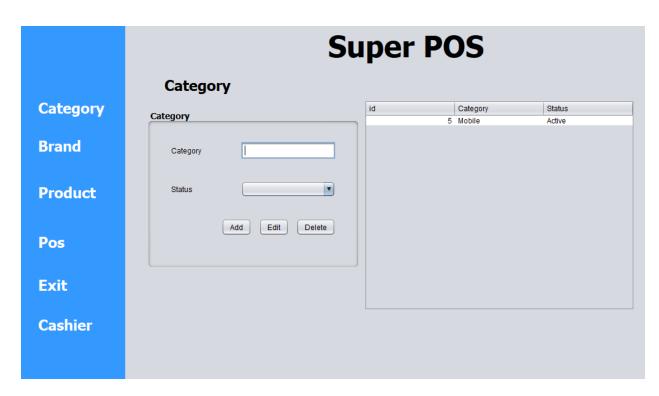
1.Login Form



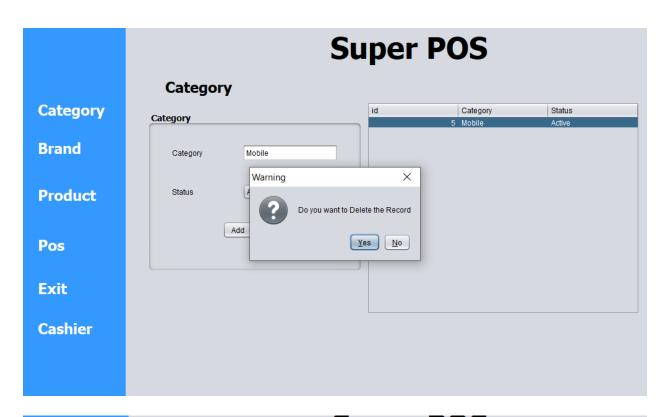
2) Category Form





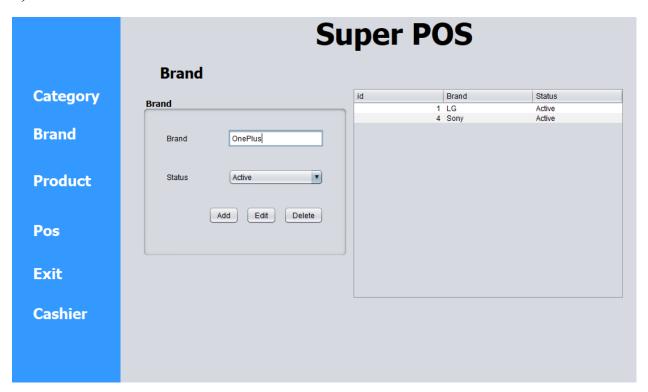


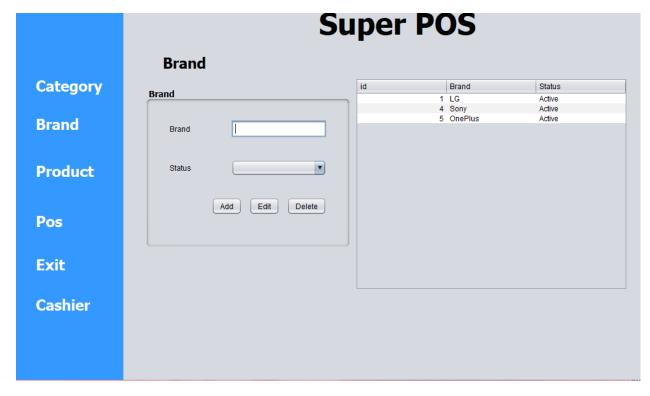


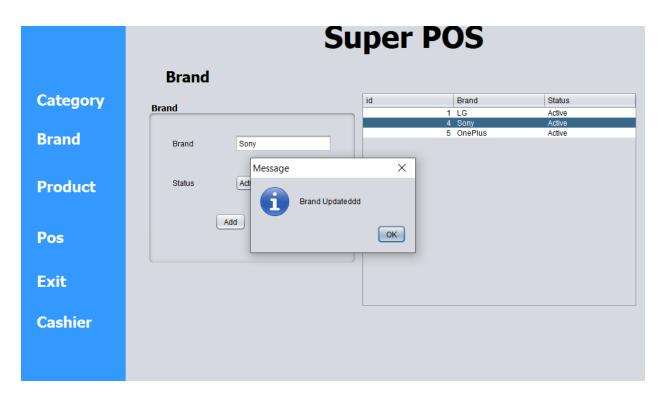




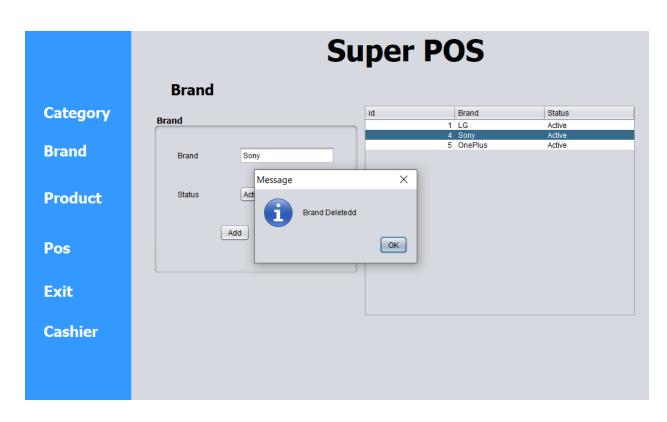
2) Brand Form







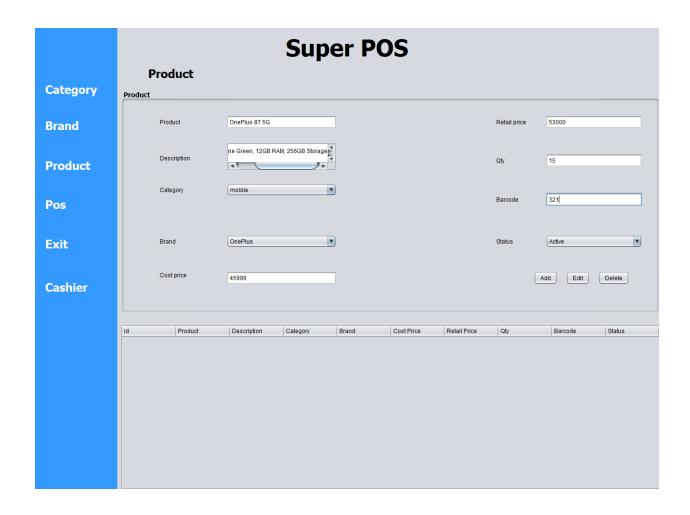






4) Product Form





	Super POS
	Product
Category	Product
Brand	Product Retail price
Product	Description Qty
Pos	Category Barcode
Exit	Brand Status 🔻
Cashier	Cost price Add Edit Delete
	id Product Description Category Brand Cost Price Retail Price Qty Barcode Status 4 OnePlus 8T 5G Aquamarine Gre mobile OnePlus 45999 53000 15 321 Active





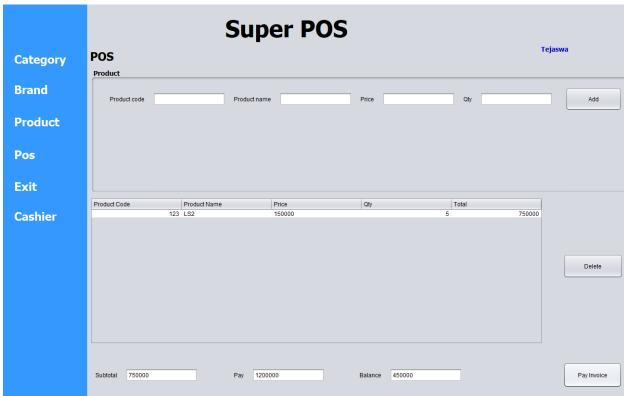


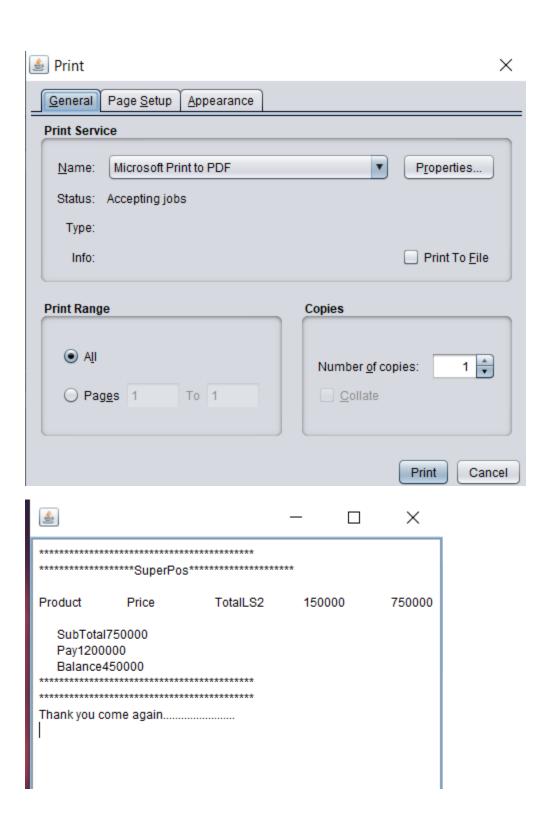


5) POS Form

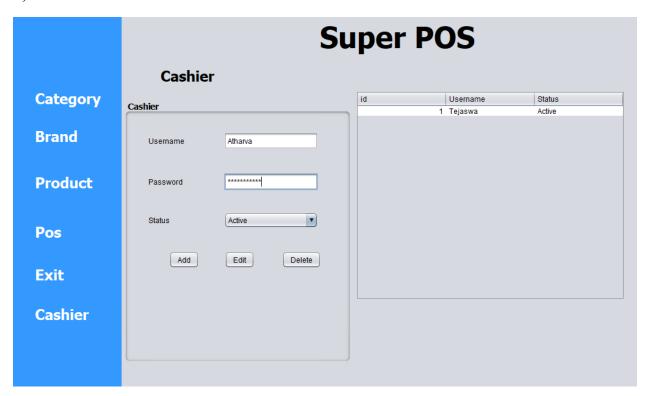




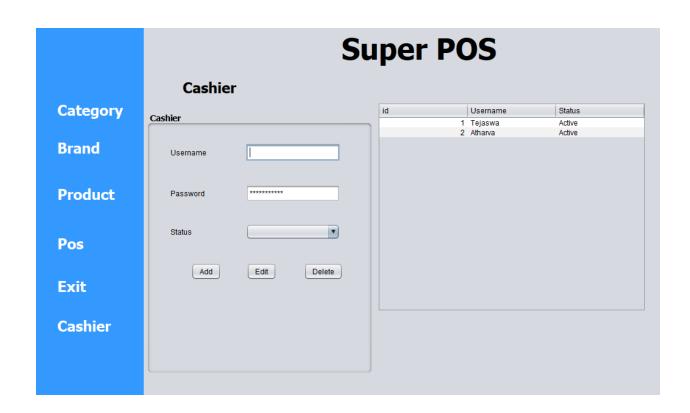




6) Cashier Form







Features

1. TECHNICAL FEASIBILITY

The system must be evaluated from the technical point of view first. The assessment of this feasibility must be based on an outline design of the system requirement in the terms of input, output, programs and procedures. Having identified an outline system, the investigation must go on to suggest the type of equipment, required method developing the system, of running the system once it has been designed.

The project should be developed such that the necessary functions and performance are achieved within the constraints. The project is developed within the latest technology. Though the technology may become obsolete after some period of time, due to the fact that never versions of the same software supports older versions, the system may still be used. So there are minimal constraints involved with this project. The system has been developed using Java. The project is technically feasible for development.

2. ECONOMIC FEASIBILITY

The developing system must be justified by cost and benefit. Criteria to ensure that effort is concentrated on a project, which will give the best, return at the earliest. One of the factors, which affect the development of a new system, is the cost it would require.

Since the system is developed as part of project work, there is no manual cost to spend for the proposed system. Also all the resources are already available, it gives an indication that the system is economically possible for development.

3. BEHAVIORAL FEASIBILITY

The project would be beneficial because it satisfies the objectives when developed and installed. All behavioural aspects are considered carefully and conclude that the project is behaviourally feasible.

Conclusion

The project titled as "Sales Management System" is a desktop based application. This system provides facilities for assigning targets, add lead, add product, add activity, view previous sales etc. This system is developed with scalability in mind. Additional modules can be easily added when necessary. The system is developed with a modular approach. All modules in the system have been tested with valid data and invalid data and everything works successfully. Thus the system has fulfilled all the objectives identified and is able to replace the existing system.

The project has been completed successfully with the maximum satisfaction of the organization. The constraints are met and overcome successfully. The system is designed as it was decided in the design phase. The project gives a good idea on developing a full fledged application satisfying the user requirements. The system is very flexible and versatile. This system has a user-friendly screen that enables the user to use without any inconvenience. Validation checks induced have greatly reduced errors. Provisions have been made to upgrade the system. The application has been tested with live data and has provided a successful result. Hence the system has proved to work efficiently

References

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