



**MAKHANLAL CHATURVEDI RASTRIYA PATRAKARITA  
EVAM SANCHAR VISHWAVIDYALAY**

Established by the Act No.15/1990 of Madhya Pradesh Legislature



**Project Proposal No.:** .....

*(for office use only)*

**Enrolment No.:** .....

**Study Centre:** .....

**Regional Centre:....., RC Code:.....**

**E-mail:.....**

**Mobile/Tel No.:** .....

1. Name and Address of the Student .....

2. Title of the Project .....

3. Name and Address of the Guide .....

4. Educational Qualification of the Guide  
(Attach bio-data also)

Ph.D\*

M.Tech.\*

B.E\*/B.Tech.\*

MCA

M.Sc.\*

☐☐☐☐☐

(\*in Computer)

5. Working / Teaching experience of the Guide\*\* .....

6. Software used in the Project .....

9. Is this your first submission?

Yes

☐

No

☐

Signature of the Student

Date: .....

Signature of the Guide

Date: .....

**For Office Use Only**

☐☐

Approved

Not Approved

Name:.....

Signature, Designation, Stamp of the Project  
Proposal Evaluator

Date: .....

**Suggestions for reformulating the Project:**



**MAKHANLAL CHATURVEDI RASTRIYA PATRAKARITA  
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**POINT OF SALE**

**By**

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**Under Guidance**

**Of**

**SUMIT KUMAR SRIVASTAVA**

**Submitted to the *BHARAT MATA INSTITUTE OF INFORMATION***

***TECHNOLOGY, BMITT***

**In partial fulfilment of the requirements**

**For the award of the degree**

**Bachelor of Computer Applications (BCA)**

**2016-2017**



**MAKHANLAL CHATURVEDI RASTRIYA PATRAKARITA  
EVAM SANCHAR VISHWAVIDYALAY**

**Bhopal-462016**

## CERTIFICATE OF ORIGINALITY

This is to certify that the project report entitled \_\_\_\_\_  
submitted to Makhanlal Chaturvedi National University of Journalism and Communication in  
partial fulfilment of the requirement for the award of the degree of  
**BACHELOR OF COMPUTER APPLICATIONS (BCA)**, is  
An authentic and original work carried out by Mr. / Ms. \_\_\_\_\_  
with enrolment no. \_\_\_\_\_ under my guidance.

The matter embodied in this project is genuine work done by the student and has not been  
submitted whether to this University or to any other University / Institute for the fulfilment of the  
requirements of any course of study.

.....  
Signature of the Student:

Date: .....

Name and Address  
of the student

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Enrolment No.: .....

.....  
Signature of the Guide

Date: .....

Name, Designation  
and Address of the  
Guide:

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# POINT OF SALE

# PREFACE

The project "POINT OF SALE" aims to make automation of sales and purchases products. It's a combination of hardware and software programs used primarily by a business to processes sale and purchase by the merchant.

I am a student of computer application and during the course of BCA I have learned many languages and tools so that I can make any type of software with any amount of difficulties and facilities. The main aim behind the creation of the project is to apply all the tools that have been taught during BCA Course.

I have done the project in "Asp.net using C# Web Application" along with the "SQL server 2008". As per as Asp.net concerned is user friendly and one can give any type of user friendly facility to the Web Application.

# ACKNOWLEDGEMENT



We take this opportunity to express our sincere thanks to all who helped me in successfully completing this project synopsis.

First of all we thank our parents and my Parents, brother and sister for their love and moral as well as financial support during the completion of the project synopsis.

We are short of words to express our profound gratitude to our Guide **Mr. Sumit Kumar Srivastava** for her timely and continuous help during the completion of the project synopsis. I am thankful to her for her co-operation and the time she spent taken out of her busy schedule.

# Introduction

*The point of sale (POS) or point of purchase (POP) is the time and place where a retail transaction is completed. At the point of sale, the merchant would calculate the amount owed by the customer and indicate the amount, and may prepare an invoice for the customer (which may be a cash register printout), and indicate the options for the customer to make payment. It is also the point at which a customer makes a payment to the merchant in exchange for goods or after provision of a service. After receiving payment, the merchant may issue a receipt for the transaction, which is usually printed, but is increasingly being dispensed with or sent electronically.*

*"Point Of sale" To calculate the amount owed by a customer, the merchant may use any of a variety of aids available, such as weighing scales, barcode scanners, and cash registers. To make a payment, payment terminals, touch screens, and a variety of other hardware and software options are available.*

# OBJECTIVE OF PROJECT

*Through RIGHT technology and freedom of source code we will render hassle-free service that requires minimal maintenance and maximum performance.*

*The point of sale is often referred to as the point of service because it is not just a point of sale but also a point of return or customer order. Additionally, current POS terminal software may include additional features to cater for different functionality, such as inventory management, CRM, financials, or warehousing.*

*With regards to databases, POS systems are very demanding on their performance because of numerous submissions and retrievals of data - required for correct sequencing the receipt number, checking up on various discounts, membership, calculating subtotal, so forth - just to process a single sale transaction. The immediacy required of the system on the sale window such as may be observed at a checkout counter in a supermarket also cannot be compromised.*

## ***User interface design:***

*The design of the sale window is the most important one for the user. This user interface is highly critical when compared to those in other software packages such as word editors or spreadsheet programs where speed of navigation is not so crucial for business performance.*

*For businesses at prime locations where real estate comes at a premium, it can be common to see a queue of customers. The faster a sale is completed the shorter the queue and hence the more room available in a store for customers to shop around and employees to do their work. High-traffic operations like such as grocery outlets and cafes need to process sales quickly at the sales counter so the UI flow is often designed with as few popup or other interruptions to ensure the operator isn't distracted and the transaction can be processed as quickly as possible.*

*Although improving the ergonomics is possible, a clean, fast-paced look may come at the expense of sacrificing functions that are often wanted by end-users such as discounts, access to commission earned screens, membership and loyalty schemes can involve looking at a different function of the POS to ensure the point of sale screen contains only what a cashier needs at their disposal to serve customers.*

# Description of Modules

## **Purchase:**

*Purchasing refers to a business or organization attempting to acquire goods or services to accomplish the goals of its enterprise. Though there are several organizations that attempt to set standards in the purchasing process, processes can vary greatly between organizations. Typically the word "purchasing" is not used interchangeably with the word "procurement", since procurement typically includes expediting, supplier quality, and transportation and logistics (T&L) in addition to purchasing.*

*A Purchase Order authorizes a supplier to ship products to or perform services for the enterprise and invoice them for it. In some enterprises, the purchasing cycle starts with a purchase requisition, which is a request to Purchasing to locate a supplier and issue a purchase order.*

*It is similar to a purchase order except that it does not stipulate a supplier although it can recommend one. It is Purchasing job to find a suitable supplier. For large enterprises, this is the start of the Procure to pay process. Purchasing is the first step in the supply chain, Accounts Payable is the last.*



## ***Sale:***

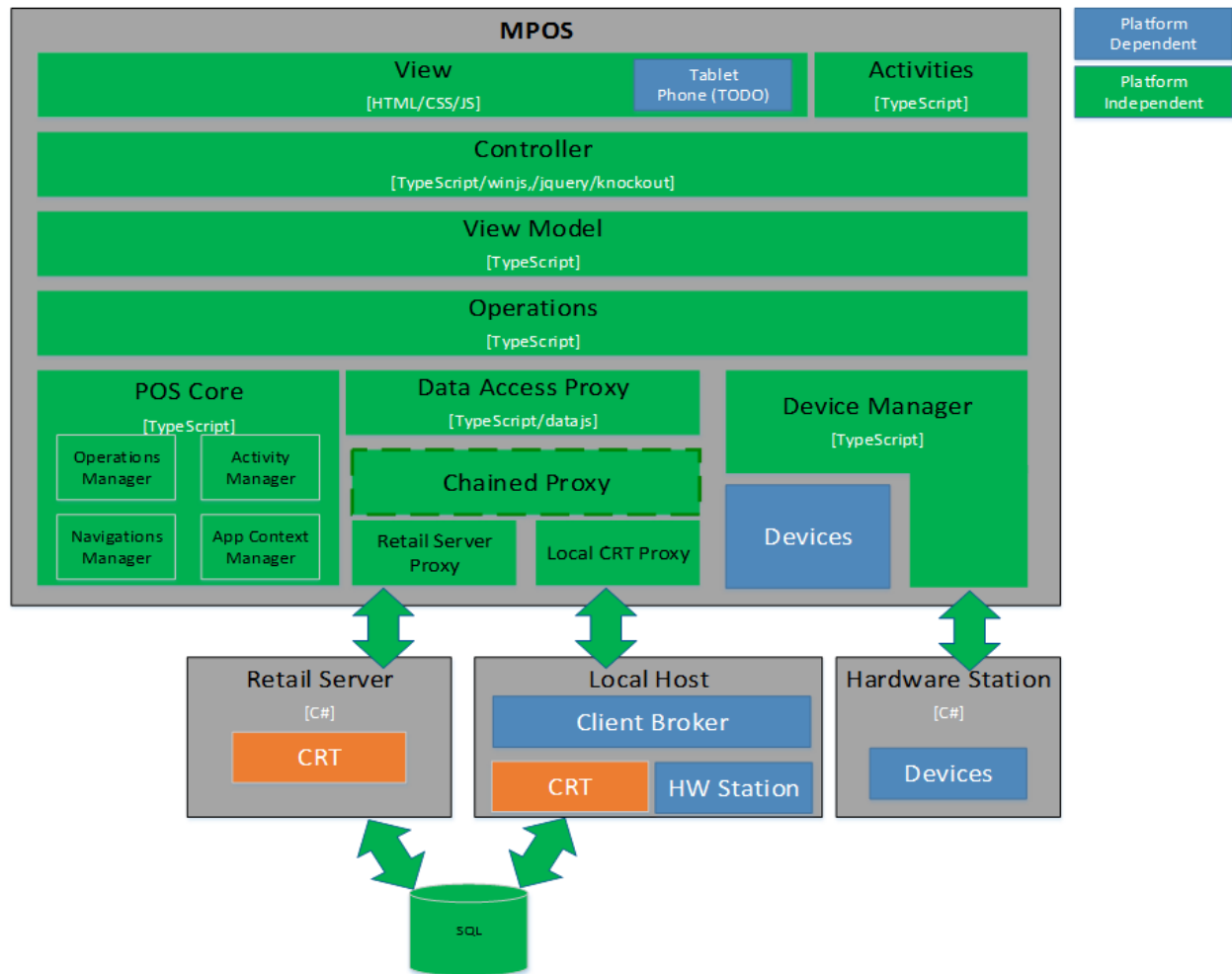
***A sale is the exchange of a commodity or money as the price of a good or a service. Sales (plural only) is activity related to selling or the amount of goods or services sold in a given time period.***

***The seller or the provider of the goods or services completes a sale in response to an acquisition, appropriation, requisition or a direct interaction with the buyer at the point of sale. There is a passing of title (property or ownership) of the item, and the settlement of a price, in which agreement is reached on a price for which transfer of ownership of the item will occur. The seller, not the purchaser generally executes the sale and it may be completed prior to the obligation of payment. In the case of indirect interaction, a person who sells goods or service on behalf of the owner is known as salesman or saleswoman.***

## **Vendor:**

*A vendor management system (VMS) is an Internet-enabled, often Web-based application that acts as a mechanism for business to manage and procure staffing services - temporary, and, in some cases, permanent placement services - as well as outside contract or contingent labour. Typical features of a VMS application include order distribution, consolidated billing and significant enhancements in reporting capability that outperforms manual systems and processes.*

*A vendor is a person or organization that vends or sells contingent labour. Specifically a vendor can be an independent consultant, a consulting company, or staffing company (who can also be called a supplier - because they supply the labour or expertise rather than selling it directly)*



# Analysis

## ***sAnalytics for SAP for Retail:***

*In an area challenged by slim profit margins, decreasing customer loyalty and high costs associated with investing in exclusive real estate, retailers are continuously looking for ways to improve their businesses by measuring performance against goals. With Analytics for SAP for Retail, retailers can begin to understand the rapidly changing market needs; knowledge they can use to increase overall profitability. Analytics for SAP for Retail supports decision making in:*

- *Price and Promotion optimization*
- *Demand Forecasting*
- *Product Affinity Metrics analysis*
- *Loss Prevention*
- *Merchandise and Assortment Planning*
- *Point of Sale analysis*

## ***Getting Started with Analytics for SAP for Retail***

- *Retail BI Content Documentation - The Retail BI Content is delivered as an add-on to SAP BI. The content is a preconfigured set of role and task-related information models that are based on consistent metadata in SAP Business Intelligence:*
  - *That it can be used within Retail without the need to modify it.*
  - *That it can be adapted so that you can work with it to any degree of detail.*
  - *To serve as a template or as an example for customer-defined BI Retail.*

## ***Business Objects Capabilities:***

### ***SAP and Business Objects - An Introduction***

*SAP has long been a pioneer and leader in the enterprise applications market, helping organizations automate and improve their business operations, which led to better business process execution. As a separate company, Business Objects was a pioneer and leader in the business (BI) market, helping organizations make more intelligent decisions, which led to a better business strategy.*

*The SAP portfolio, which includes the SAP Business Objects portfolio, gives customers superior execution and strategy and, most importantly, provides the means to align and connect them in a closed-loop system supporting strategic agility.*

*Combined, software from SAP and Business Objects supports greater efficiency within the company and across the business network; sharpens insight for users based on reliable, real-time data; and provides the flexibility to turn insight into strategic decisions. This results in optimized business performance, which enterprises need to stay ahead of the competition.*

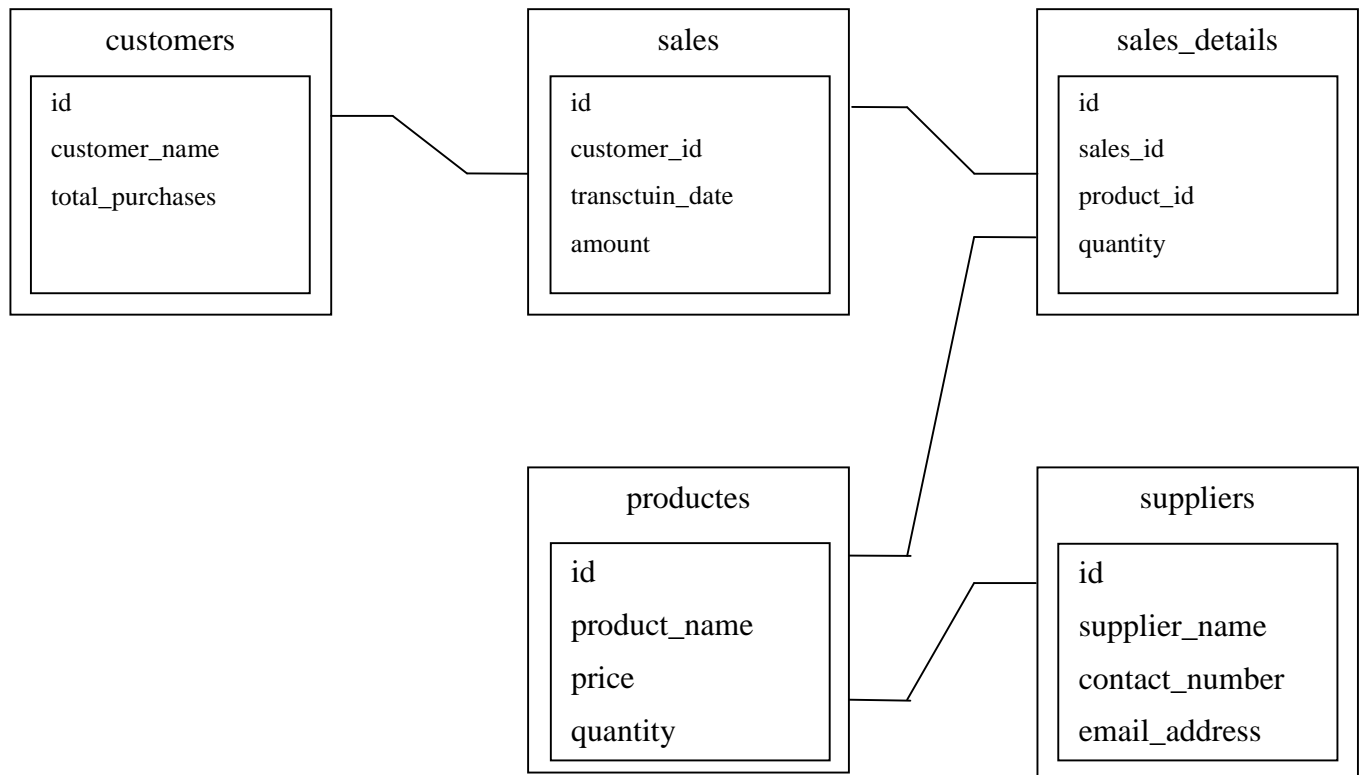
## ***Benefits of Using SAP Business Objects Solutions***

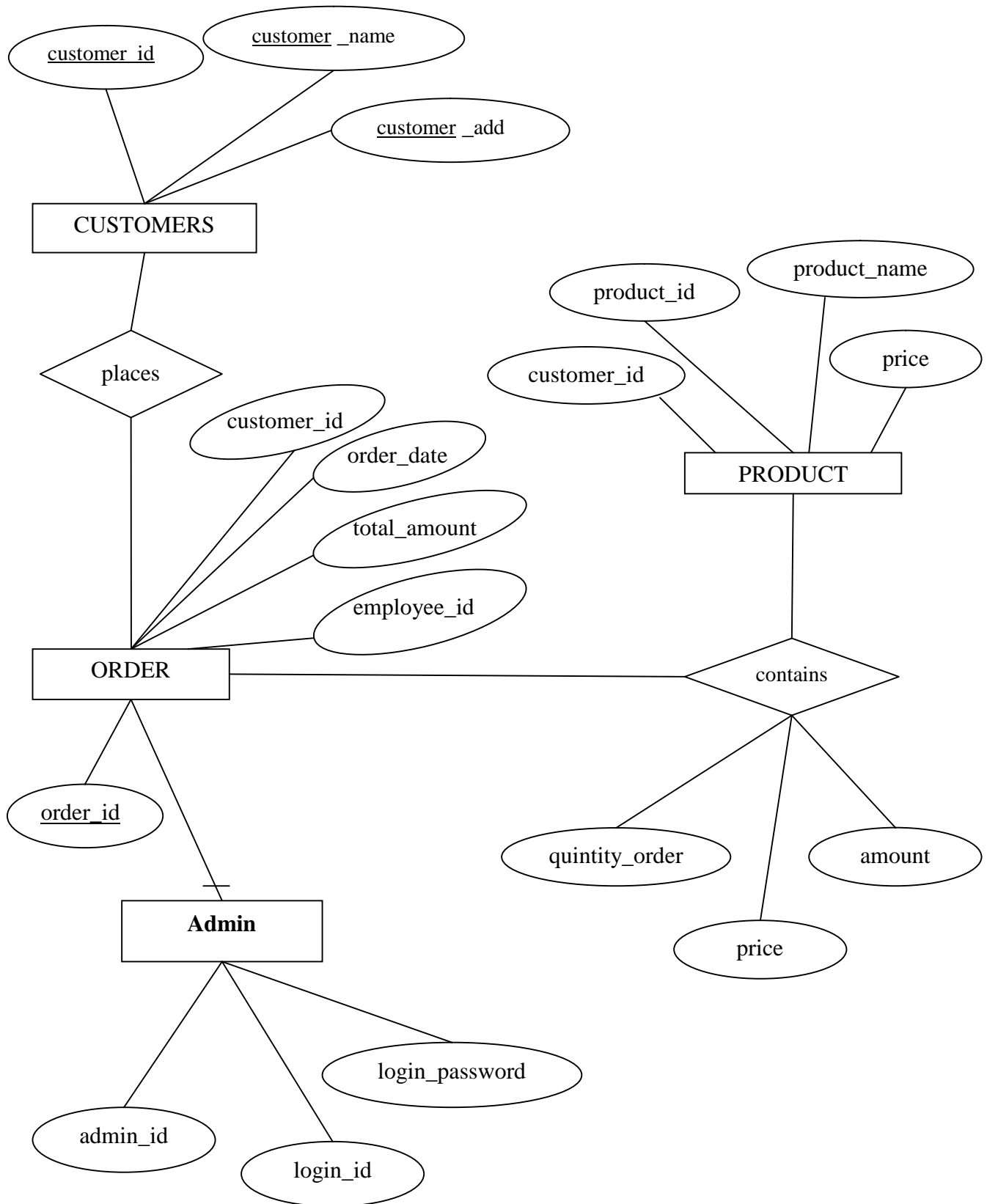
*SAP Business Objects solutions optimize business performance by:*

- ***Enabling*** collaborative business networks. The SAP Business Objects portfolio supports the efficient flow of information throughout a company's ecosystem.
- ***Empowering*** business insight into any data source. The SAP Business Objects portfolio helps companies make more effective decisions based on a broader array of data sources from both inside and outside the enterprise and from structured and unstructured sources, thus enabling prompt and appropriate corporate response.
- ***Enabling*** people to work as teams in a way that reflects how they really work. The SAP Business Objects portfolio provides business users tools and applications that handle the information needed within the business context teams work in, enhancing collaboration and decision making within groups and across work units.

# Entity Relationship Diagram (ERD)

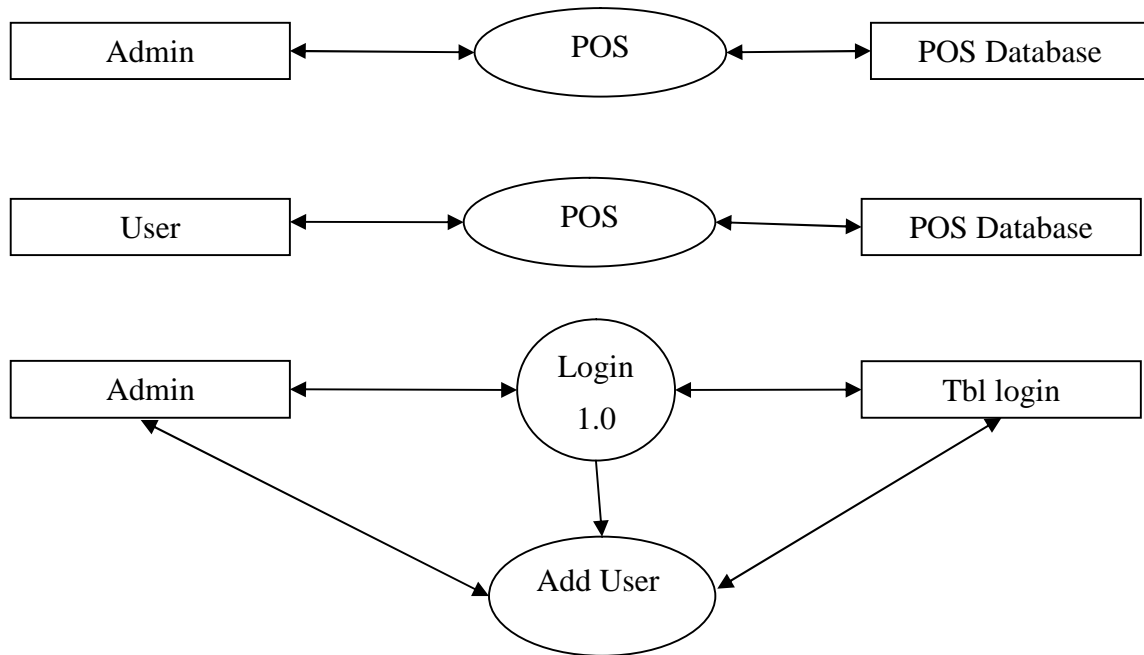


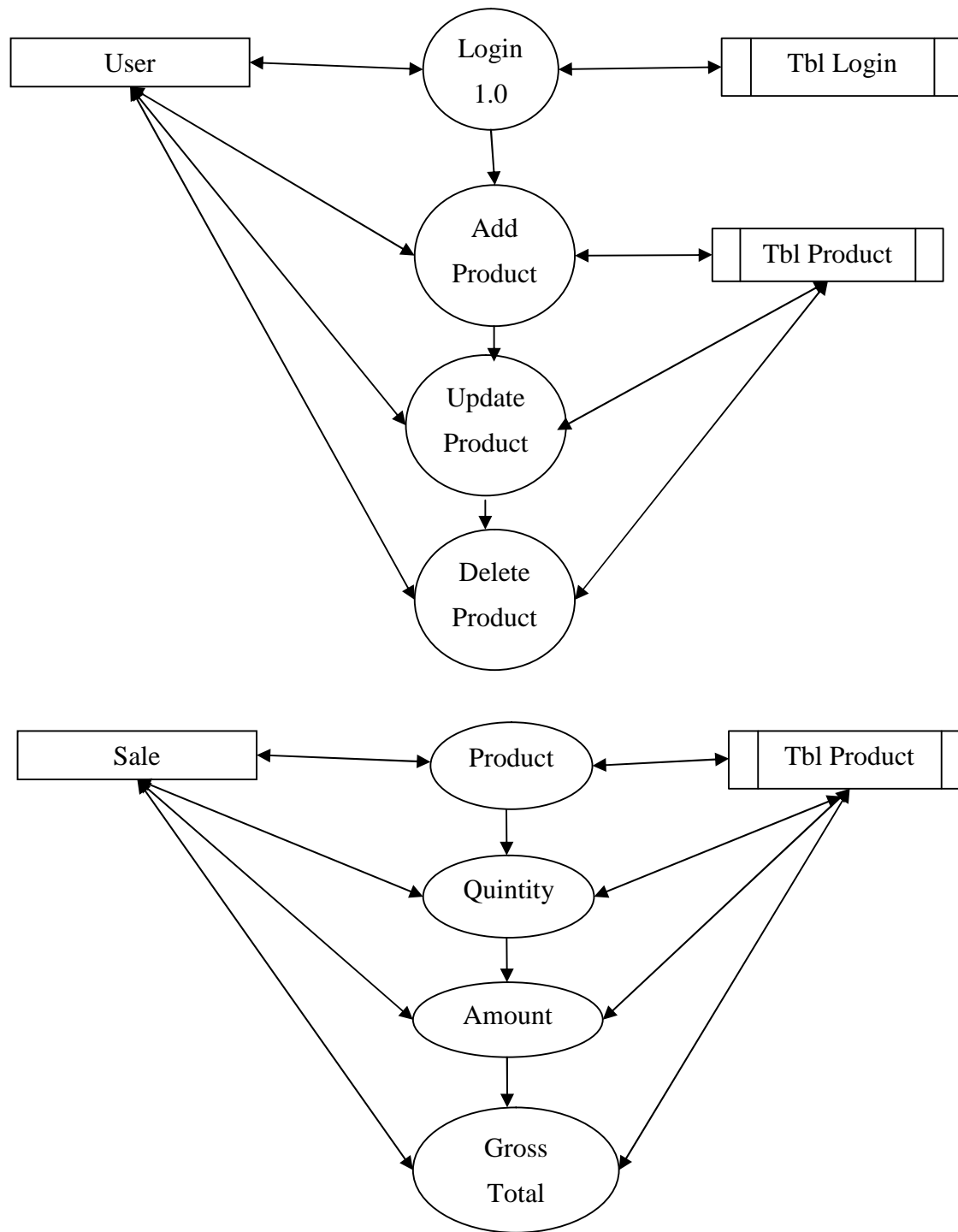




Entity Relationship Diagram (ERD)

# Data Flow Diagram (ERD)





(0-1 Level)  
Data Flow Diagram (DFD)

# Hardware Software Requirements

## HARDWARE REQUIREMENT SPECIFICATION

Hardware Specification: -

**Server side:**

Description	Minimum	Recommended
System type	IBM compatible PC with 1.6 GHz	IBM compatible PC with 2GHz
RAM	1 GB	2 GB
Cache	256 KB	512 KB
Storage	10 GB	120 GB (Convenient for Backup)
Disk Drive	Floppy or CD-RW (Back up purpose)	Floppy or CD-RW or DAT (Back up purpose)

Display	15'' VGA	17'' SVGA (LCD)
User Interface	Key Board and mouse	Compatible keyboard and mouse



## Client Side:

Description	Minimum	Recommended
System type	IBM compatible PC with 1GHz	IBM compatible PC with 1GHz
RAM	128 MB	256 MB
Cache	256 KB	512 KB
Storage	20 GB	40 GB (Convenient for Backup)

Disk Drive	Floppy or CD-RW (Back up purpose)	Floppy or CD-RW (Back up purpose)
Display (LCD)	14'' VGA	15'' SVGA
User Interface	Key Board	Compatible keyboard and mouse

# Bibliography

## **BOOKS**

- ❖ Simply Visual Basic 2008
- ❖ Beginning SQL Server

## **Website**

[www.wikipedia.org](http://www.wikipedia.org)

[www.slideshare.net](http://www.slideshare.net)

[www.freestudentprojects.com](http://www.freestudentprojects.com)

[www.javatpoint.com](http://www.javatpoint.com)