

SYNOPSIS

In an organization, a major portion of the time goes in data collection, processing, documenting and communicating it to the people. Hence, a major portion of the overheads goes into this kind of unproductive work in the organization. Every individual in an organization is continuously looking for some information which is needed to perform his/her task. Hence, the information is people-oriented and it varies with nature of the people in the organization.

Based on the above constraints we developed this “**MOBILE SHOP AUTOMATION SYSTEM**“, which has eight main modules. They are

- ❖ Product Info
- ❖ Supplier Info
- ❖ Purchase
- ❖ Credit Purchase Payment
- ❖ Sales
- ❖ Stock
- ❖ Report
- and
- ❖ Exit

In first module consists of a form for entering data for new products.

Second module shows a form for entering data for suppliers' detail.

The third module depicts a form for entering purchase details.

Fourth module gives employee transactions entry for various credit purchase payments.

The fifth module shows a form to enter details of sales.

The sixth module shows a form for stock view.

Seventh module has reports for Supplier, Stock, Sale and purchase.

And the final module is for exiting from the software.

1. INTRODUCTION

The social history of the mobile telephone involves both the history of technological development and an account of changing social and political frameworks into which the new technological developments become integrated. The technological innovations of mobile telephony were established from the 1940s, but it was not until the 1990s that adoption took off. It has been claimed that the mobile telephone revolution can be explained by changes in the way communication happens through social networks, away from old hierarchical forms. Several unique communicative and behavioral patterns have emerged in countries with mass use of the mobile telephone, including texting (SMS) and the development of new social norms. Nevertheless there is still huge global variation in use and development, and more research needs to be conducted which responds to very local patterns of use and reuse.

A social history of the mobile telephone is not just a history of a shifting concept of mobility. In fact, the linking of mobile telephones with mobility may be premature; young people, for example may use text to communicate across very small distances, even across the room. Even if mobility is the key social concept, it is cross-cut by cultural behaviours and beliefs about intimacy, the role of public space, the changing place of women in the labour market, customisation of commodities, to name just a few. The mobile telephone has a global history in the sense that it has been developed or stalled by national politics as much as engineering challenges, exemplified by the different ways in which third generation (3G) licences.

Meanwhile there have been vast societal changes in terms of production and consumption, largely embedded in cross-national processes of globalisation. Political

influences on design have been accompanied by huge social changes, such as the development of travel and the increasing car culture during the period of the mobile's early development.

Text messaging was an accidental success that took the mobile industry by surprise; there was very little promotion or mention of SMS by network operators until after it had taken off. SMS was a user triumph, particularly among young adolescents. Text messaging from the tiny keypad of the mobile telephone was and is a cumbersome exercise, but, paradoxically, because entry barriers to learning to use the service are high, or at least, higher than making a voice call, adolescents saw this as an advantage in that it enables them to exclude adults.

1.1 ORGANIZATION PROFILE

Samsung's organizational structure is designed to promote technological innovation throughout the enterprise. Technological innovation is at the heart of the company's strategies, as seen through rapid innovation involving smart phones and other consumer electronics. Structural facilitation contributes to the effectiveness of implementing [Samsung's generic competitive strategy and intensive strategies for growth](#). The corporate structure is also a manifestation of the evolution of the business from a small trading firm into a diversified multinational enterprise that offers advanced technologies. Considering its organizational structure's involvement in diverse operations, Samsung employs various operations management strategies for different markets and industries. The conglomerate's organizational design and structural system covers various markets and industries related to the development and utilization of technologies, such as computing technologies. Effective market penetration and market development strategies are enabled through Samsung's corporate structure, which also empowers competitive advantages to support business continuity and success in an increasingly saturated and aggressive competitive landscape.

Samsung Japan's organizational headquarters building. Samsung's corporate organizational structure and related organizational design characteristics are focused on divisions that support technological product innovation for consumer electronics, device solutions, and IT and mobile communications markets.

The Mobile Shop Management System has been developed for Sri Ganesh Mobiles, one of dealer for samsung and vivo and also deals with many accessories items and other supporting products.

The company was started in 1980 by N.Baseer, situated at Anna Nagar, Madurai. It is situated in one of the busiest area in Madurai. It is dealing with all types of customers, from small company to big concerns. It was started with only one shop, because of its sincere efforts in satisfying the customers and now it is extended as an organization with two big godown.

In any organization, small or big, a major portion of the time goes in data collection, processing, documenting and communicating it to the people. Hence, a major portion of the overheads goes into this kind of unproductive work in the organization. Every individual in an organization is continuously looking for some information which is needed to perform his/her task/ Hence, the information is people-oriented and it varies with nature of the people in the organization.

Stock control, the processing of sales orders, forecasting and subsequent planning are additional areas in which the computer assists in business and commercial organizations. In all these cases the company can benefit from the immediate availability of information which the computer provides.

The difficulty in handling this multiple requirement, we wanted to develop a software product for the Samsung (India) to satisfy their needs.

Samsung is a leading IT Training company, which is placed in Madurai to provide best training for **Networking, Server Administration, VMware Administration and Internet Security**. IT Navigation Ltd gives importance to take care of students career and provide high quality training to all class of people. Our organization not only provide the platform to build up the bright professional career in networking, Server Administration, VMware Administration and Internet Security but also provides the placement support in reputed companies.

We are proud to be the pioneers in "**Hardware and Networking**". Just when everyone was bent upon Software, we foresaw the tremendous potential in Hardware and Networking, and successfully emerged as one of the best IT Company for Hardware and Networking Solutions and the best institute for Hardware and Networking Training. Today the two sides of its business are equally balanced. The expertise of its training is coupled with a strong commitment to provide the best Hardware and Networking solutions. This has put IT in the unique position of deriving synergies between Network Solutions and IT Training.

IT is an educational and professional development organization working on various divisions including Software Development, Training, Web development, Corporate Training, Business process and Consultancy. They strive to excel a quality output in training individuals, Organization coders, development and business process with Professionals who are best in the business. They provide industrial exposure by making fresher work on real time projects. They have world class quality trainers who have the

industry exposure of around 8 years. Hence, it provides the best training in .Net Technologies, J2EE Programming, PHP Programming and Web Designing.

Services includes: Professional Web Design, Internet Marketing, Link Building, Ecommerce Solution, Web Application Development, Multimedia Presentations, Customized Software Development, and Business Process Outsourcing- IT/IT

On-line Interactive Learning

We believe in On-line Interactive learning. That is to say, the problems, or doubts which students often face, while sitting before a system, is cleared by our staff as soon as they surface. This way our students learn more.

Get experienced while learning

After extensive learning, we subject our students to some Real Time situations (which is often created by our staff) and student left alone, to handle the situation, to overcome the problem, with his own solutions in this way, he is getting experienced, even before the completion of course and is very much ready to seek the job with tremendous confidence.

Teaching Strategy

There is a saying, which goes like "It takes lot of beatings to make a pot". here we literally follow this method of beatings; Beatings it is now in the beginning to beat the world later. Our training is vigorous. At IT Navigation Ltd we run strict schedules and conduct several crucial tests so as to prepare you for the challenges you are going to face in the IT world as soon as you step out of IT Navigation Ltd.

1.2 PROJECT OVERVIEW

In an organization, a major portion of the time goes in data collection, processing, documenting and communicating it to the people. Hence, a major portion of the overheads goes into this kind of unproductive work in the organization. Every individual in an organization is continuously looking for some information which is needed to perform his/her task. Hence, the information is people-oriented and it varies with nature of the people in the organization.

Based on the above constraints we developed this “**MOBILE SHOP MANAGEMENT SYSTEM**“, which has eight main modules. They are

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2. SYSTEM ANALYSIS

2.1 SYSTEM ANALYSIS AND FUNDAMENTALS

What is system?

The term system is derived from the greek work systema, which means an organized relationship among functioning units or component. A system is an orderly grouping of interdependent components' linked together according to a plan to achieve a specific objective. The word component may refer to physical parts, managerial steps or a subsystem in a multilevel structure. The components may be simple or complex, basic or advanced.

Analysis is detailed study of the various operations performed by a system and their relationships within and outside of the system. One aspect of analysis is defining the boundaries off the system and determining whether or not a candidate system should consider other related systems. During analysis, data are collected on the available files, decision points and transactions should handle by the system.

Initial Investigation

This is a user's request to change, improve to enhance an existing system. The initial investigation is likely to be a stream of such requests standard procedures must be established to deal with them. The objectives of the initial investigation is to determine whether the request is valid and feasible before a recommendation is reached to do nothing, improve or modify the existing system or build a new one.

Function requirement

As data are collected, they must be organized and evaluated and conclusions drawn for preparing functional requirement. Many tools are used for data organization and analysis. The function analysis identifies the elements that are related to the inputs and outputs of given system. The functional requirement can be very effective in setting that post of few constraints on the development or modification of the system under study.

Information gathering

Information gathering is an art and a science. The approach and manner in which information is gathered require persons with sensitivity, common sense and knowledge of what and when to gather and what channels to use in securing information. Additionally, the methodology and tools for information gathering require training and experience that the analyst is expected to have. This means that information gathering is neither easy nor routine. Much preparation, experience and training are required.

Feasibility study

An initial investigation culminates in a proposal that determine whether an alternative system is feasible. To do a feasibility study, the analyst needs to consider the economic, technical and operational feasibility.

Economic feasibility

Economic analysis is the most frequently used method for evaluating the effectiveness of a system. More commonly known as cost/benefit analysis, the

procedure is to determine and savings that are expected from a proposed system and compare them with costs.

Technical feasibility

Technical feasibility centers around the existing computer system (hardware, software etc.) and to what extent it can support the proposed addition. If the current computer is operating at 80 percent capacity an arbitrary ceiling then running another application could overload the system or require additional hardware. This involves financial considerations to accommodate technical enhancements. If the budget is a serious constraint, then the project is judged not feasible.

Operational feasibility

People or inherently resistant to change and computer have been known to facilitate change an estimate should be made of how strong a reaction the user staff is likely to have toward the development of a computerized system. It is common knowledge that computer installations have something to do with turnover, transfers, retraining and changes in employee job status. Therefore, it is understandable that the introduction of a candidate system requires special effort to educate, sell and train the staff on new ways of conducting business.

2.2 EXISTING SYSTEM

In present system every work is carried out manually which is time consuming and leads to miss entry of details. Searching and updating records is tedious as many books are to be traversed. Storage of data needs separate and provide to store the books if not so; it leads to loss of data. This system is also much time consuming and expensive.

Drawbacks:

- Any small mistake in any process may include much confusion.
- The existing system is time consuming.
- The maintenance process takes long time.
- Lack of accuracy

The above result in these factors leads to formulate a new system, which could help the organization in all aspects to make things easier, faster and efficient than the existing manual system.

2.3 PROPOSED SYSTEM

The drawbacks, which are faced in the existing system, can be eradicated by using this project, which has been computerized. The system, which is proposed now to computerize all the details, is maintained manually in previous days. The proposed system is an effective menu driven package. This package used is much powerful and large number of is much powerful and large number of data required. The package also aims to provide faster service to the management proposed system thus aim at removing all the complexities in the existing system

Advantage of proposed system:

- Proposed application developed in user friendly manner and enriched facility GUI development
- Fast and efficient system makes easy the work of administrator
- Stock maintenance and customer management is easy compared with manual system
- Developed in VISUAL BASIC and implementation for the customer is also low in cost
- Have the facility to extend modules in future based on their requirements

SCOPE OF THE PROPOSED SYSTEM

- Provides a highly secure environment for carrying out all sales and purchase activities.
- Monitoring the overall order details.
- Keep track of the order information for each customer.

FEATURES OF THE PROPOSED SYSTEM

- User friendly
- Ease of access.
- Fast retrieval.
- Reduce manpower and stationary charges.

3. SYSTEM SPECIFICATION

3.1 HARDWARE SPECIFICATION

Processor	: Core 2 Duo
Speed	: 2 GHz
Hard disk capacity	: 500GB
RAM capacity	: 2GP RAM
Keyboard	: 104 keys
Mouse	: Logitech
Monitor	: 15" Monitor

3.2 SOFTWARE SPECIFICATION:

Operating system	: Windows 7
Front end	: Visual Basic 6.0
Back End	: MS Access

3.2.1 About Windows 7

Windows 7 is a line of operating systems developed by Microsoft for use on general-purpose computer systems, including home and business desktops, notebook computers, and media centers. The name "7" stands for experience. It was codenamed "Whistler", after Whistler, British Columbia, as many Microsoft employees skied at the Whistler-Blackcomb ski resort during its development [citation needed].

Windows 7 is the successor to both Windows 2000 Professional and Windows Me, and is the first consumer-oriented operating system produced by Microsoft to be built on the Windows NT kernel (version 5.1) and architecture. Windows 7 was first released on October 25, 2001, and over 400 million copies were in use in January 2006, according to an estimate in that month by an IDC analyst. It is succeeded by Windows Vista, which was released to volume license customers on November 8, 2006, and worldwide to the general public on January 30, 2007.

The most common editions of the operating system are Windows 7 Home Edition, which is targeted at home users, and Windows 7 Professional, which has additional features such as support for Windows Server domains and two physical processors, and is targeted at power users and business clients. Windows 7 Media Center Edition has additional multimedia features enhancing the ability to record and watch TV shows, view DVD movies, and listen to music. Windows 7 Tablet PC Edition is designed to run the ink-aware Tablet PC

platform. Two separate 64-bit versions of Windows 7 were also released, Windows 7 64-bit Edition for IA-64 (Itanium) processors and Windows 7 Professional x64 Edition for x86-64.

Windows 7 is known for its improved stability and efficiency over the 9x versions of Microsoft Windows. It presents a significantly redesigned graphical user interface, a change Microsoft promoted as more user-friendly than previous versions of Windows. New software management capabilities were introduced to avoid the "DLL hell" that plagued older consumer-oriented 9x versions of Windows. It is also the first version of Windows to use product activation to combat software piracy, a restriction that did not sit well with some users and privacy advocates. Windows 7 has also been criticized by some users for security vulnerabilities, tight integration of applications such as Internet Explorer 6 and Windows Media Player, and for aspects of its default user interface. Later versions with Service Pack 2, and Internet Explorer 7 addressed some of these concerns.

New and updated features:

- Faster start-up and hibernation sequences
- The ability to discard a newer device driver in favor of the previous one (known as driver rollback), should a driver upgrade not produce desirable results

- A new, arguably more user-friendly interface, including the framework for developing themes for the desktop environment
- Fast user switching, which allows a user to save the current state and open applications of their desktop and allow another user to log on without losing that information
- The Clear Type font rendering mechanism, which is designed to improve text readability on Liquid Crystal Display (LCD) and similar monitors
- Remote Desktop functionality, which allows users to connect to a computer running Windows 7 from across a network or the Internet and access their applications, files, printers, and devices
- Support for most DSL modems and wireless network connections, as well as networking over FireWire, and Bluetooth.

User Interface:

Windows 7 features a new task-based graphical user interface. The Start menu and search capability were redesigned and many visual effects were added, including:

- A translucent blue selection rectangle in Explorer
- Drop shadows for icon labels on the desktop
- Task-based sidebars in Explorer windows ("common tasks")

- The ability to group the taskbar buttons of the windows of one application into one button,
- The ability to lock the taskbar and other toolbars to prevent accidental changes
- The highlighting of recently added programs on the Start menu

Shadows under menus (Windows 2000 had shadows under mouse pointers, but not menus) Windows 7 analyses the performance impact of visual effects and uses this to determine whether to enable them, so as to prevent the new functionality from consuming excessive additional processing overhead. Users can further customize these settings. Some effects, such as alpha blending (transparency and fading), are handled entirely by many newer video cards. However, if the video card is not capable of hardware alpha blending, performance can be substantially hurt and Microsoft recommends the feature should be turned off manually. Windows7 adds the ability for Windows to use "Visual Styles" to change the user interface. However, visual styles must be cryptographically signed by Microsoft to run. Luna is the name of the new visual style that ships with Windows7, and is enabled by default for machines with more than 64 MB of video RAM. Luna refers only to one particular visual style, not to all of the new user interface features of Windows7 as a whole. Some users "patch" the uxtheme.dll file that restricts the ability to use visual styles, created by the general public or the user, on Windows7.

In addition to the included Window7 themes, there is one previously unreleased Windows 7 theme with a black taskbar and window bars similar to Windows Vista titled "Royale Noir" available for download, albeit unofficially. Microsoft officially released a modified version of this theme as the "Zune" theme; the only difference being the color of the start button (from black to orange). Additionally, the Media Center "Royale" theme is also available for download on non-Media Center PCs.

3.2.2 SOFTWARE FEATURES

Visual Basic is a tool that allows you to develop Windows (Graphic User Interface - **GUI**) applications. The applications have a familiar appearance to the user.

Visual Basic is **event-driven**, meaning code remains idle until called upon to respond to some event (button pressing, menu selection,). Visual Basic is governed by an event processor. Nothing happens until an event is detected. Once an event is detected, the code corresponding to that event (event procedure) is executed. Program control is then returned to the event processor.

Some Features of Visual Basic

- Full set of objects - you 'draw' the application

- Lots of icons and pictures for your use

- Response to mouse and keyboard actions

- Clipboard and printer access

- Full array of mathematical, string handling and graphics functions

- Can handle fixed and dynamic variable and control arrays

- Sequential and random access files support

- Useful debugger and error-handling facilities

- Powerful database access tools

- ActiveX support

- Package & Deployment Wizard makes distributing your applications simple

Visual Basic 6.0 versus Other Versions of Visual Basic

The original Visual Basic for DOS and Visual Basic for Windows were introduced in 1991. Visual Basic 3.0 (a vast improvement over previous versions) was released in 1993. Visual Basic 4.0 released in late 1995 (added 32 bit application support). Visual Basic 5.0 released in late 1996. New environment, supported creation of ActiveX controls, deleted 16 bit application support. And, now Visual Basic 6.0 - some identified new features of Visual Basic 6.0:

- Faster compiler

- New ActiveX data control object

- Allows database integration with wide variety of applications

- New data report designer

- New Package & Deployment Wizard

- Additional internet capabilities

16 Bits versus 32 Bits

Applications built using the Visual Basic 3.0 and the 16 bit version of Visual Basic 4.0 will run under Windows 3.1, Windows for Workgroups, Windows NT, or Windows 95.

Applications built using the 32 bit version of Visual Basic 4.0, Visual Basic 5.0 and Visual Basic 6.0 will only run with Windows 95 or Windows NT (Version 3.5.1 or higher).

In this class, we will use Visual Basic 6.0 under Windows 95, recognizing such applications will not operate in 16 bit environments.

Application (Project) is made up of:

Forms - Windows that you create for user interface

Controls - Graphical features drawn on forms to allow user interaction (text boxes, labels, scroll bars, command buttons, etc.) (Forms and Controls are **objects**.)

Properties - Every characteristic of a form or control is specified by a property. Example properties include names, captions, size, color, position, and contents. Visual Basic applies default properties. You can change properties at design time or run time.

Methods - Built-in procedure that can be invoked to impart some action to a particular object.

Event Procedures - Code related to some object. This is the code that is executed when a certain event occurs.

General Procedures - Code not related to objects. This code must be invoked by the application.

Modules - Collection of general procedures, variable declarations, and constant definitions used by application.

Visual Basic Functions

Visual Basic offers a rich assortment of built-in **functions**. The on-line help utility will give you information on any or all of these functions and their use.

Some examples are:

Function	Value Returned
Abs	Absolute value of a number
Asc	ASCII or ANSI code of a character

Chr	Character corresponding to a given ASCII or ANSI code
Cos	Cosine of an angle
Date	Current date as a text string
Format	Date or number converted to a text string
Left	Selected left side of a text string
Len	Number of characters in a text string
Mid	Selected portion of a text string
Now	Current time and date
Right	Selected right end of a text string
Rnd	Random number
Sin	Sine of an angle
Sqr	Square root of a number
Str	Number converted to a text string
Time	Current time as a text string
Timer	Number of seconds elapsed since midnight
Val	Numeric value of a given text string

3.2.3I NTRODUCTION TO BACK END

Microsoft Access is a relational database used on desktop computers to manage information on different levels for different purposes. Microsoft Access can be used for personal information management, in a small business to organize and manage all data, or in an enterprise to communicate with servers.

Database Management System:

A database is an organized collection of data. Organization means method, it assumes discipline, it also anticipates efficient manner in using that information. Unless you are creating small applications for your personal use, you will usually need to share your data either with other people (users, database developers, etc) or other machines. To make your job easier, Microsoft Access provides in one package the database information and the tools you need to use your database. To be organized, you will divide your database in different related parts.

When you create a database in Microsoft Access, you create a file that will include different parts of your database. These are referred to as tables queries, forms, reports, etc.

Microsoft Access as a Software Product

Microsoft Access is a classic computer application and it gets launched like the usual products you have probably been using. As such, to start this program, you could click Start -> Program -> Microsoft Access. As a regular member of the Microsoft Office suite of applications, if your installation created a

sub-menu on the Start menu, you could click Start -> New Office Application and proceed from the new dialog box.

Although Microsoft Office 97 and Microsoft Office 2000 get installed in the C:\Program Files\Microsoft Office folder, they treat the shortcuts that launch them differently. The applications that are part of Microsoft Office 97 designate their shortcuts with full names and these are installed in the Microsoft Office folder. Microsoft Office 2000 (Premium) uses shortcut names to designate its shortcuts and they are installed in the Microsoft Office\Office folder. This means you could launch an application from Windows Explorer or My Computer. Therefore, in order to launch Microsoft Access, locate its shortcut in Windows Explorer or My Computer and double-click it.

If you have a Microsoft Access database such as an E-Mail attachment, a file on a floppy disk, on the network, or in any other means, once you see its icon, you can double-click it. Not only will this action launch Microsoft Access, but also it will open the file.

You can also launch Microsoft Access from a shortcut. If you happen to use the software on a regular basis, you can create a shortcut on your desktop or on the Quick Launch area. Many users also take advantage of the Microsoft Office Shortcut Bar. Sometimes, the icon you need will not be there; in that case you should insert it manually.

When Microsoft Access starts, you are presented with a special dialog box that inquires about your intentions. From this dialog, you can do one of four things: create a database using one of the sample files, create a database from scratch, open an existing database, or open a "raw" program.

4. SYSTEM DESIGN

System design is the process or art of defining the architecture, components, modules, interface, and data for a system to satisfy specified requirements. One could see it as the application of systems theory to product development.

There is some overlap and synergy with the disciplines of system analysis, system architecture and system engineering. System design is therefore the process of defining and developing a system to satisfy specified requirement of the market or a customer.

The system design document describes how to transform the requirements and the functional design into more technical system design specification. This design involves conceiving and planning out in the mind and making a drawing, pattern, or sketch of.

It includes three types of activities: External Design, Architectural Design, and Detailed Design. The architectural design and detailed design collectively referred to as internal design.

The external design involves specifying the externally observable characteristics of a software product and the internal design involves specifying the internal structure and processing details of the system.

The fundamental concepts of the system design include abstraction, structure, information hiding, modularity, concurrency, verification, and design aesthetics.

Architectural Design

Architectural design involves identifying the software components, decoupling, and decomposing them into processing modules and conceptual data structure, and specifying the interconnection among components.

System architecture is the design or set of relations between the parts of a system. There is no strict definition of which an aspect constitutes system architecture, and various organizations define it in different ways.

System architecture is primarily concerned with the internal interfaces among the system's components or subsystem, and the interface between the system and its external environment, especially the user.

The internal structure of the software product and tests that attempt to break the system are open during implementation. The architectural design is also called as internal design. The goal of this design is to specify the internal structure and processing details, to record design decisions.

4.1 INPUT DESIGN

Internal design involves conceiving, planning out and specifying the internal structure and processing details of the software product.

The goals of internal design are to specify the internal structure and processing details, to record design decisions and indicate why certain alternatives and tradeoffs were chosen, to elaborate the test and plan, and to provide a blueprint for implementation, testing and maintenance activities. The work products of internal design include a specification of architectural, the details of algorithms and data structures, and the test plan.

For example, the customer master details form is designed with the following field to get input about the customer. Customer Id, Customer name, Customer Address, Contact number and their Mail ID. This simple customer details form reads input from the data entry operator, and stores the valuable customer details into database.

Likewise, the product master and the transaction details like purchase and sales are also store the information regarding their activity. It will be helpful when computing the values in later.

4.2 OUTPUT DESIGN

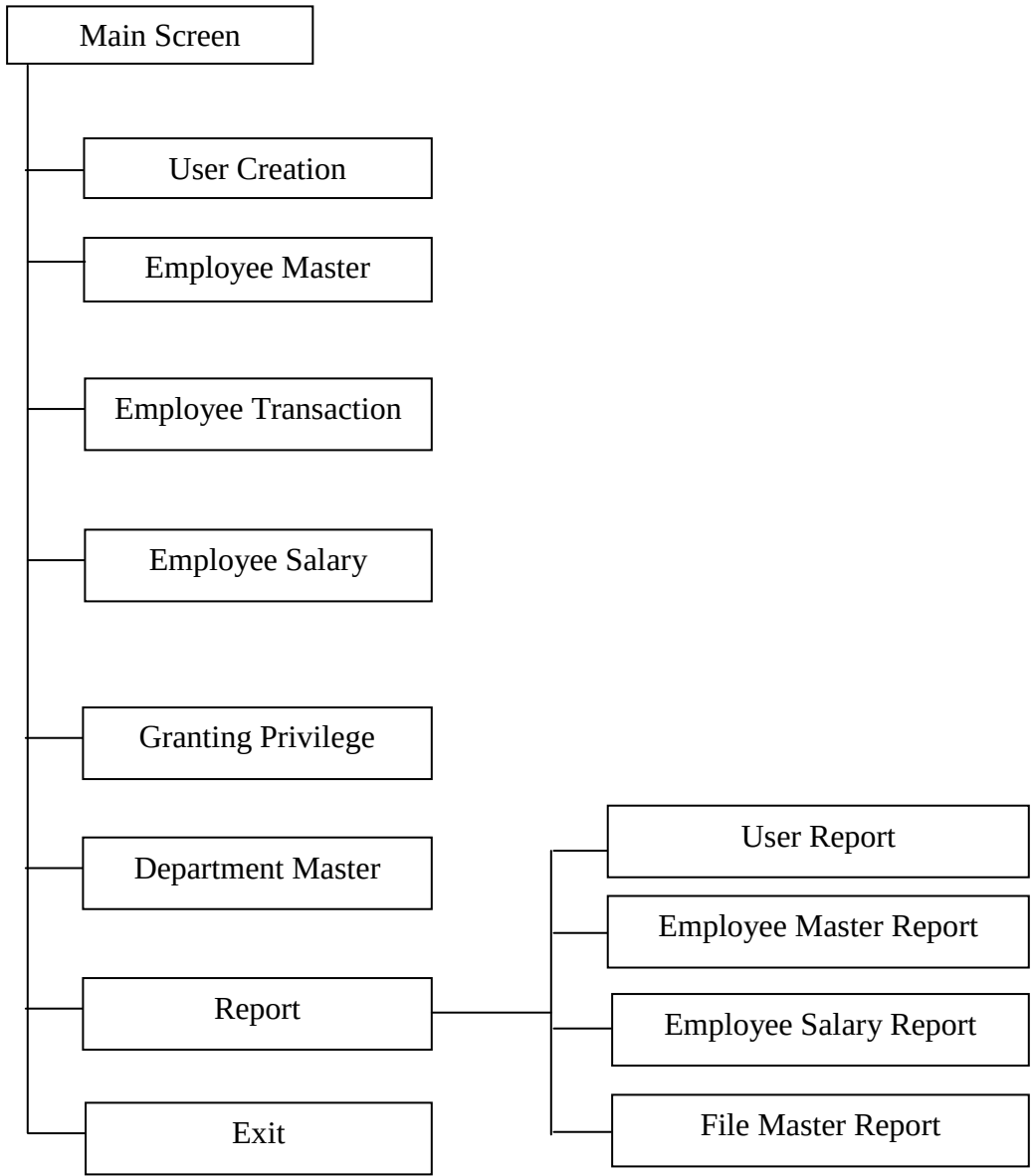
Output design is the process of converting computer data into hard copy that is understood by all. The various outputs have been designed in such a way that they represent the same format that the office and management used to display the data.

Computer output is the most important and direct source of information to the user. Efficient, intelligible output design should improve the systems relationships with the user and help in decision making. A major form of output is the hardcopy from the printer.

Output requirements are designed during system analysis. A good starting point for the output design is the Data Flow Diagram (DFD). Human factors educe issues for design involves addressing internal controls to ensure readability.

Want something to happen when the user clicks a button. You don't need code that checks to see whether the user clicks the button. You attach the code to the button so it's run when the Click event occurs. When the event occurs, Microsoft Access runs your code automatically.

4.3. SYSTEM FLOW CHART

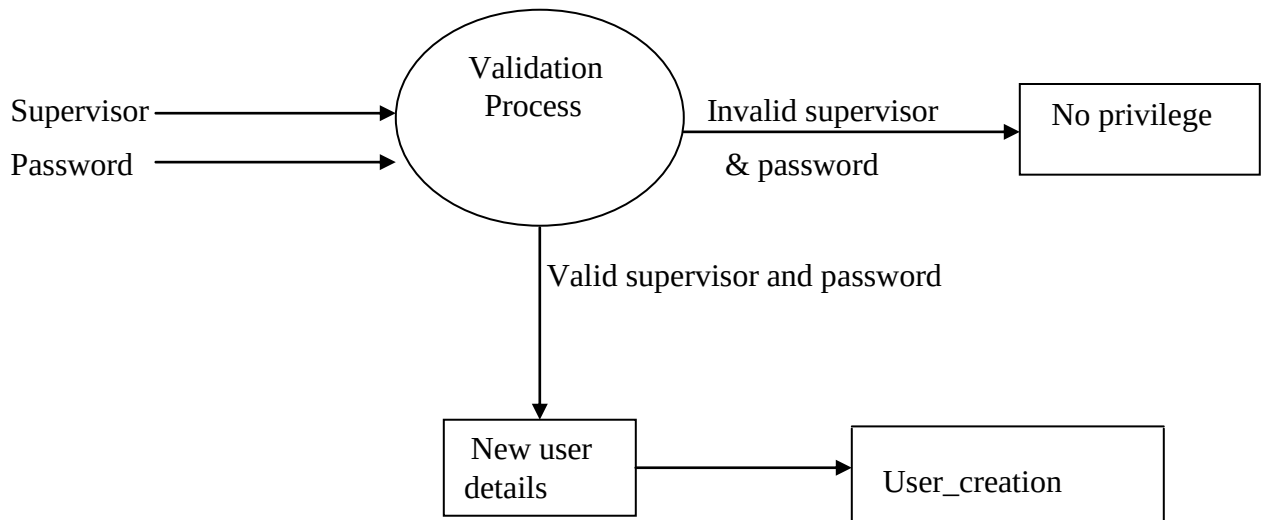


4.4 DATA FLOW DIAGRAM

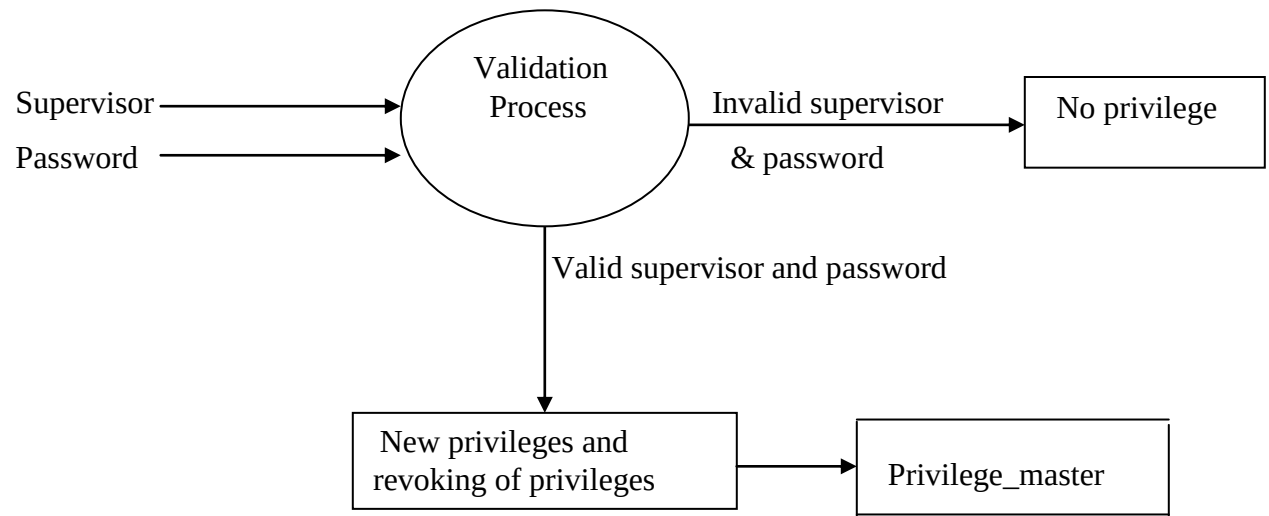
Data Flow Diagram

This is a analysis tool to architect's blueprint as for system design. The DFD presents a picture of what is being specified and is a conceptually easy-to-understand presentation of the application. The process is partitioned so that a clear picture of the progression from general to specific in the system flow.

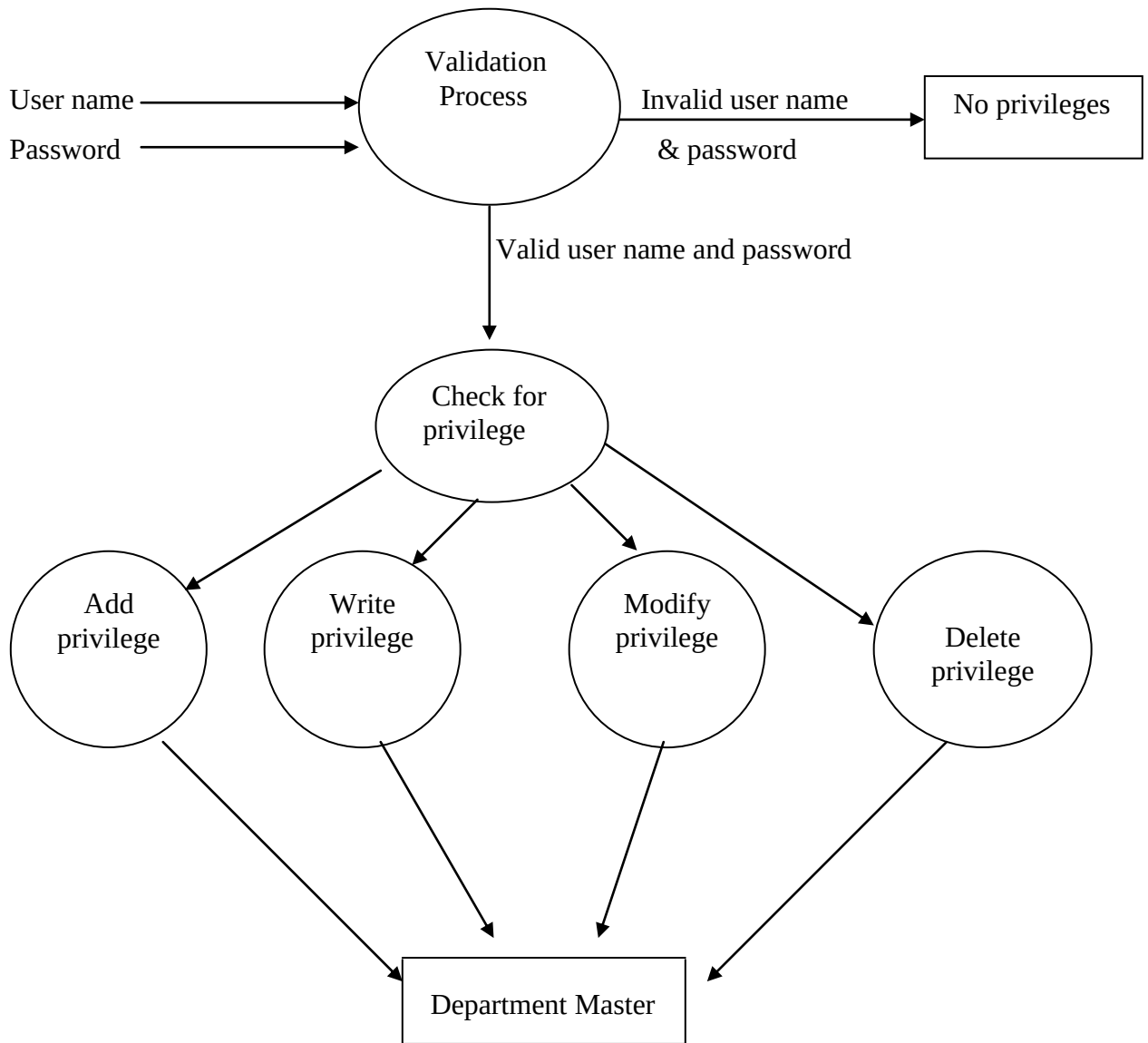
1. User_Creation



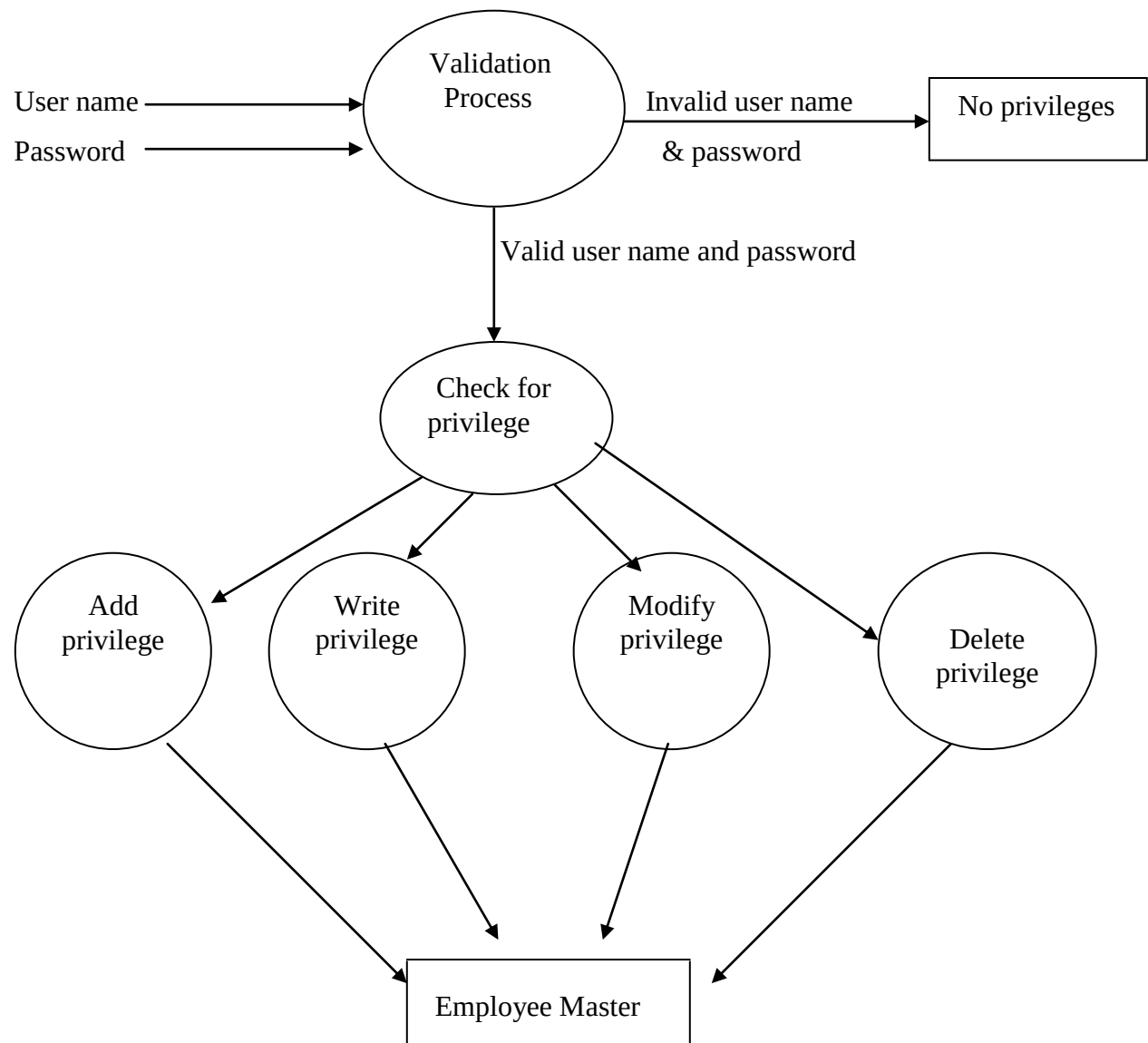
2. Privilege_master



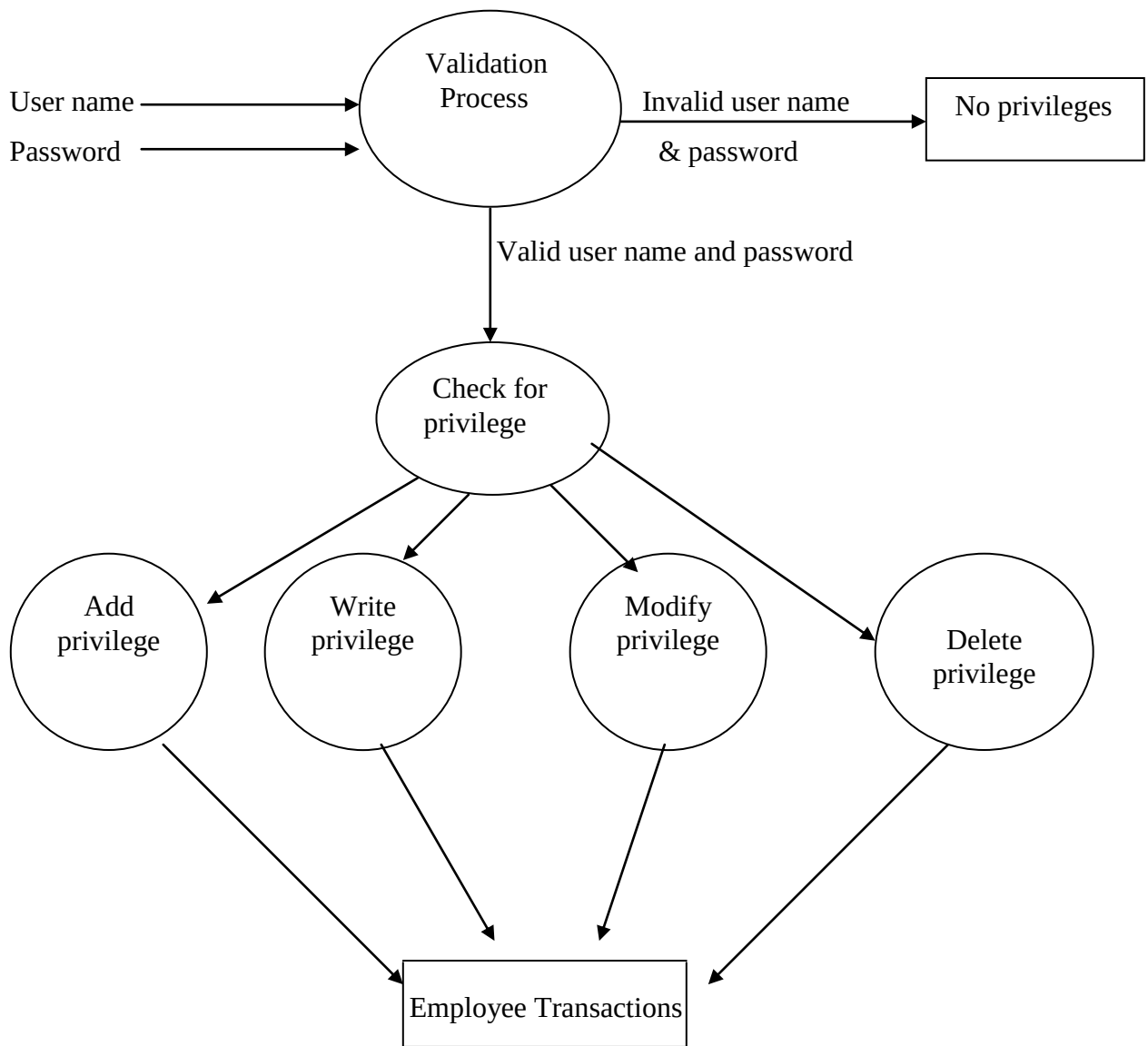
3. Department Master



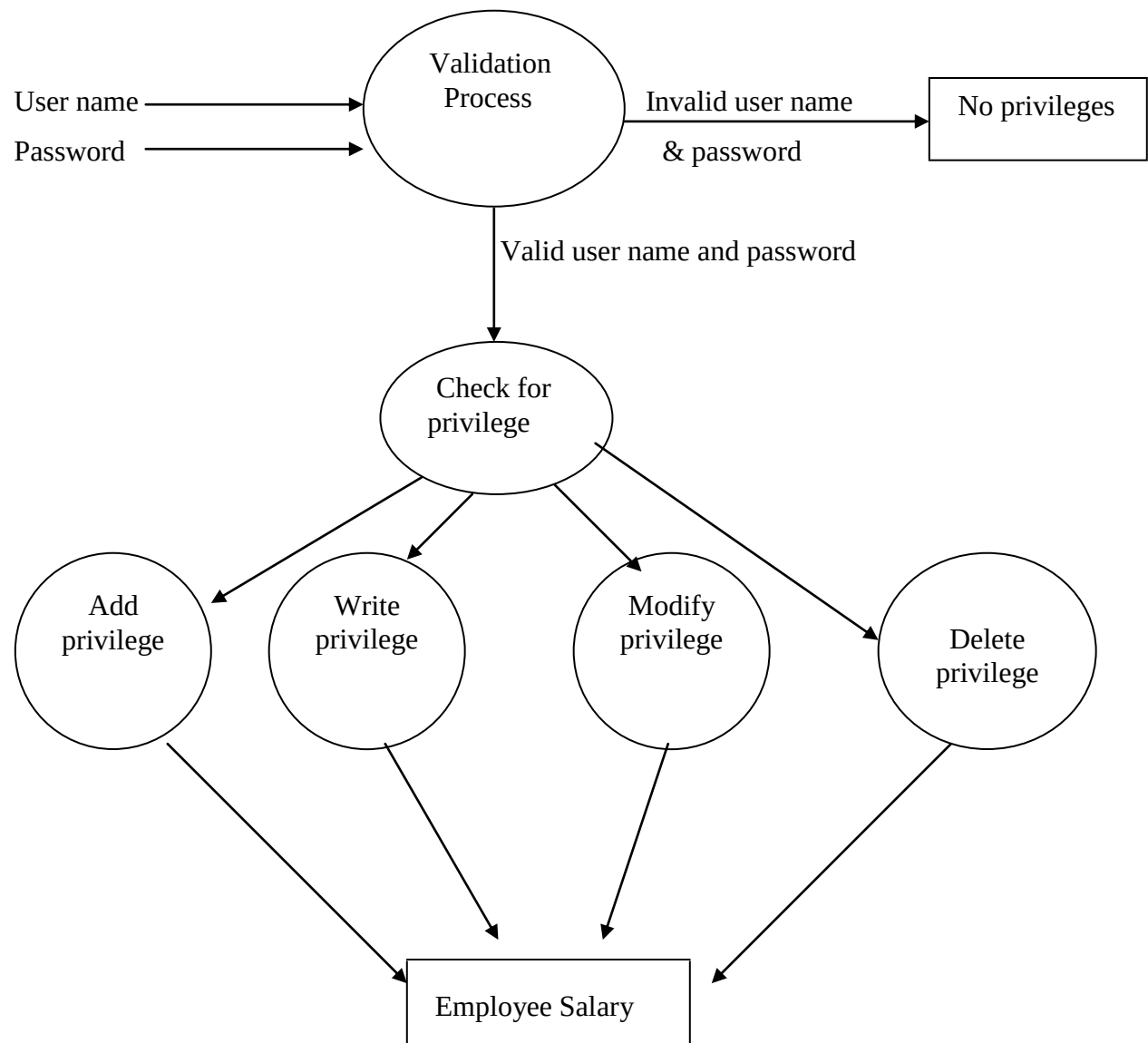
4. Employee Master



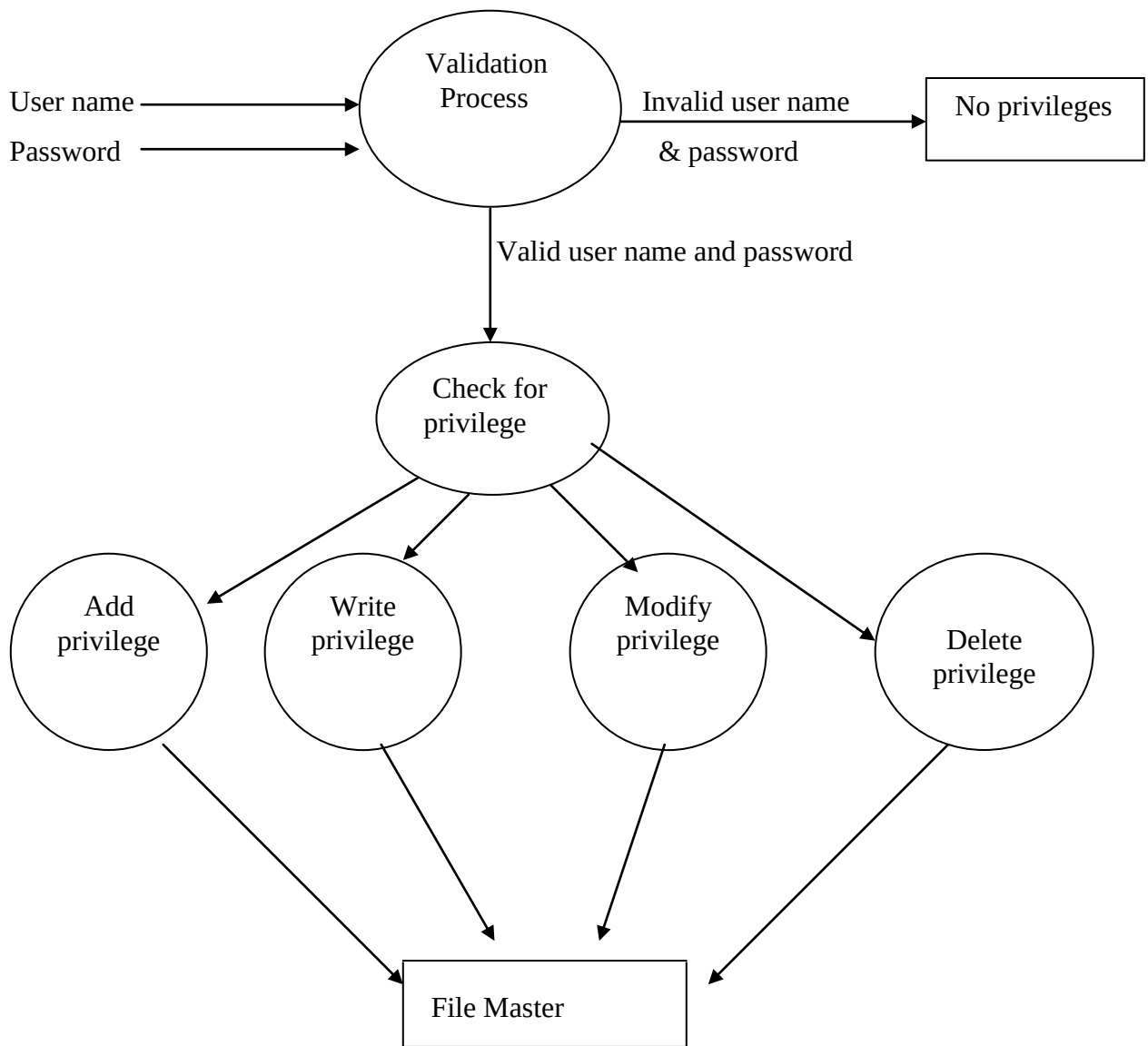
5. Employee Transaction



6. Employee Salary



7. Employee File



4.5 DATA BASE DESIGN

User_Creation

Field Name	Type
DEPT_NAME	TEXT
USER_ID	INTEGER
USER_NAME	TEXT
PASSWORD	TEXT

Department_Master

Field Name	Type
DEPT_CODE	INTEGER
DEPT_NAME	TEXT
HOD_NAME	TEXT

File_Master

Field Name	Type
FILE_ID	INTEGER
FILE_NAME	TEXT
AUTHOR	TEXT
DATE_CREATED	DATE

Employee Master

Field Name	Type
EMP_CODE	INTEGER
EMP_NAME	TEXT
BIRTH_DATE	DATE
DESIGNATION	TEXT
JOIN_DATE	DATE
ADDRESS	TEXT

Employee Transaction

Field Name	Type
EMP_CODE	INTEGER
DEPARTMENT	TEXT
DESIGNATION	TEXT
DUTY_TIME	TEXT
BASIC_SALARY	SINGLE

Employee Salary

Field Name	Type
EMP_CODE	INTEGER
BASIC_SALARY	SINGLE
HRA	INTEGER
DA	INTEGER
LOAN	INTEGER
PF	INTEGER
NET_PAY	INTEGER
MONTH	TEXT

Result

Field Name	Type
USER_NAME	TEXT
ACTIVITY_NAME	TEXT
PRIVILEGE	BOOLEAN
TABLE_NAME	TEXT

5. SYSTEM TESTING AND IMPLEMENTATION

5.1 TESTING FUNDAMENTALS

Software testing is an important element of S/W quality assurance and represents the ultimate review of specification, design and coding. The increasing visibility of S/W as a system element and the costs associated with a S/W failure are motivating forces for well planned, through testing.

Though the test phase is often thought of as separate and distinct from the development effort--first develop, and then test--testing is a concurrent process that provides valuable information for the development team.

Internal Testing

The software testing was given equal priority to the system study phase. The question raised during system study was “how to do?” and during testing the importance was given to the question that “how it should be done?”.

Each and every user screen, database structures etc., have been designed after consulting the considering the user requirements.

Unit Testing

For successful implementation each and every module of the new system was tested separately to rectify the error within it’s boundaries. Detail design description was used as a guide in the process. The database was checked with sample data to ensure its normal form. Each query result and reports were also checked for their integrity.

The tests that were done under the unit testing are,

(a) Interface Testing

To assure that the information properly flows into and out of program unit.

(b) Data Structure Testing

To ensure that the data are stored properly in the underlying tables.

(c) Independent Path Testing

All independent paths through the module were executed at least once to assure that they are behaving as per expectations.

Integration Testing

It is a system technique for construction of the program structure while at the same time conducting tests to uncover errors associates with interfacing. The objective is to take unit-tested modules and build a program structure as specified by the system design.

All the modules that go under the unit testing are integrated together to get the whole software as a single module. Integration separate modules are done in a systematic manner. This integration is a formal procedure that must be executed carefully and according to the need.

Validation Testing

To cover functional errors ie., to check whether functional characteristic confirm to the specifications or not. The goal of validation testing is to demonstrate the software traceability to the requirements. Validation test confirms whether the software is functional.

Testing plays a vital role to reach the cent percentage perfectness in any system. It is the major quality control measure used to determine the status and usefulness of the system. Its basic function is to find the errors in the software by examining all the possible loop holes. The goal of testing is to find out uncovered requirements, designs or coding errors or invalid acceptance or storage of data etc.

Testing of the new system has been done successfully in different levels. There are so many testing activities that help to find the errors and to reach a safer state in the system implementation.

In the case of on-line response it is found out that the response time is normal. In volume testing even when the number of records increased the software and hardware was found to be functioning satisfactorily. By stress testing, it gives good response to the volume testing and also takes only short time interval to finish. Hence pass the stress test too.

In the usability test, the user friendly nature of the system was tested and found to be outstanding. All these tests make the expectation about the well functioning of the system helpful.

5.2 VERIFICATION AND VALIDATION

This system has been verified and validated by using the

(a). Test data

(b). Live data

Verified With Test Data

In this case of testing, the data were developed artificially and these data are applied to the system. The result of the system was checked, whether it satisfies the specification of the system. Each module in this system has been tested independently and finally tested as a package.

Verified With Live Data

In this case, the real data are applied to the system and its result was checked with original result that was calculated manually.

The goals of verification and validation activities are to access and improve the quality of the work products generated during development and modification of software. Quality attributes of interest include correctness, completeness, consistency, reliability, usefulness, usability, efficiency to standards and overall cost effectiveness.

Verification is a rigorous mathematics demonstration that source code confirms to its specification. Validation is the process of evaluating software at the end of the software development process to determine the compliance with requirements.

5.3 SYSTEM IMPLEMENTATION

The new system was started to operate along with existing system. The result of the new system was compared with the old system. Suppose the result is wrong, the error must be debugged. After the acceptance of the user, the existing system will be placed by the new system. This software package has been made user friendly and menu driven. So any user can handle this package very easily and it does not require any intensive training for the user.

Documentation

Before implementing the system two important documents should be proposed.

User Manual

It explains the user about the guidelines and procedures to use various functions available in the system. It includes the complete list of error message and the appropriate action to be taken.

System Manual

It explains all the aspects of design, which is useful mainly for the further maintenance of the system.

User Training and Documentation

After successful completing of acceptance testing, the application project is ready to use. In order to put new application system into use, following activities should be completed.

- ❖ Preparation of User & System documentation
- ❖ User training kit
- ❖ Test run for a period of one month to ensure smooth switching over.

A presentation of the project will be made to user followed by demonstration explaining about the usage of the software. General training would be given to the user of the system. The main aim of the training would to furnish the user with a working knowledge of newly developed system. User manuals describing the procedures for invoking the function listed on menu will be circulated to user departments.

6. MAINTENANCE

MAINTENANCE FUNDAMENTALS

The term “software maintenance” is used to describe the software engineering activities that occur following delivery of a software product to the customer. The maintenance phase of the software life cycle is the time period in which a software product performs useful work.

Maintenance activities involve making enhancement to software products, adapting products to new environments and correcting problems. Software product enhancement may involve providing new functional capabilities, improving user display and modes of interaction, and upgrading external documents. Adaptation of software to a new environment may involve moving the software to a different machine. Problem correction involves modification and revalidation of software to correct errors.

The enhancement of this project can be accomplished easily. That is, any new functional capabilities can be added to the project by simply including the new module in the homepage and giving a hyperlink to that module. Adaptation of this project to a new environment is also performed easily.

6.1. CORRECTIVE MAINTENANCE

Even with the best quality assurance activities, it is likely that the customer will uncover defects in the software. Corrective maintenance changes the software to correct defects.

6.2. ADAPTIVE MAINTENANCE

An activity that modifies the software to properly interface with a changing environment. The system has been modified so that various changes include to the new system.

In case of Fund Transfer, adaptive maintenance has been performed, that is in earlier system (character based UNIX system) changes are fixed and if any new changes are to be included, was a difficult task. Now provisions are given so that the user can define various changes. Such as it designed to accommodate the new change in further.

6.3. ENHANCEMENT MAINTENANCE

As software is used, the customer/user will recognize additional functions that will provide benefit. Perceptive maintenance extends the software beyond its original functional requirements.

In the case of Net banking system can be added new functions such that the user can be able to retrieve the information in a user friendly and it will be very helpful for future development.

7. CONCLUSION

The system fully reconciles with the need of the organization. It has been designed according to the convenience of the user. The documentation of “**MOBILE SHOP AUTOMATION SYSTEM**” is made simple for the operator to under the operation of the package easier and under clearly. The manual system involves its own disadvantages which can be overcomes through the implementation of computerization.

The system is very flexible and can be used even for other branches of the same Mobile shop with a minor change. After testing the system with the sample data it was found that all the inconveniences of the existing system have been removed.

The software is presently being used in the purchase and sales of mobiles for generating invoice and for maintaining the stock control.

And the system is designed in such a way that it is capable of including more operations requirements by the end users of the system.

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