



OBJECTIVE AND APPRAISAL SETTING

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Degree Programme in Information Technology
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ABSTRACT

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Adefemi Alao: Objective and Appraisal Setting

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The aim of this thesis was to design and implement a web application as an objectives and appraisal setting for a company, which consists of website interface and database.

The purpose of the work was to find a feasible way that will help a company to assess their staff against defined objectives, which will give company the chance to give constructive feedback and to praise staff for their good work, which in turn will make them feel valued, It also offers the opportunity to address any problems, discuss apparent weaknesses and find solutions e.g. additional training.

The system were includes an employee, line manager and an administrator application. The objectives and appraisal system provides the online administrative processes. It includes different functions, such as create new employee, new department, sending email to line manager, and admin management system and so on.

Employee can login to the system at the beginning of the quarter and submit his or her objective for the quarter and the system will automatically send a mail to the line manager that an employee has submit his or her objectives for the quarter.

When employee was an administrator, after login to the system he or she can manage the application, by creating new employee (staff), create new department and many more.

To design and implement the objective and appraisal system, programming technologies was used by Java, Tomcat as a java container, Oracle and SQLplus as a database.

Key words: Web application system Objectives and Appraisal Java Tomcat Oracle Sqlplus.

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ABBREVIATIONS AND TERMS

KPA	Key Performance Areas
KPI	Key performance indicator
IIS	Internet Information Server
JVM	Java Virtual Machine
JSP	JavaServerPages
SQL	Structured Query Language
JRE	Java Runtime Enterprise

1 INTRODUCTION

1.1 Background

With the development and improvement of computer science, internet technology and database technology are used widely. During my undergraduate and my master level, i had already studied some courses like software design project, programming project and PHP, Java language and database system. For the future work i need to review and strengthen knowledge. Designing and implementing an objective and appraisal system.

1.2 What is Objective setting

Objective setting is a useful skill for a number of reasons. Within the context of the work, the ability to set an objective and appraisal would allow a company to evaluate employee progress and performance. (Latham & Locke, 1981). Being able to measure the progress will also enable them to improve on their motivation. With these an employer should ask an employee to set objectives which will be appraised against to monitor and evaluate the performance.

An objectives and appraisal settings improve a company performance and also help in assess how well employees are working, and if establishing clear, defined objectives helps employees to focus on specific tasks and company goals.

A structured objectives and appraisal system can help employees feel that their good work is recognised and that they are valued. It can also provide the opportunity to discuss any weaknesses or problems they may have, and to come up with solutions.

This project focuses on how to identify and set out objectives and appraise it, the different styles of appraisal you we use, and how to implement a system and carry out an appraisal interview.

In the thesis, how to achieve the process from employee setting an objective a line manager quarterly appraisal will be introduced. The online objectives and appraisal system completes user login, filling of forms, sending the form to the line manager and more.

1.3 The purpose/functions of Objective and Appraisal

An effective appraisal system will help a company to assess their staff against defined objectives, it gives company the chance to give constructive feedback and to praise staff for their good work, which in turn will make them feel valued. (Alison Lea-Wilson).

It also offers the opportunity to address any problems, discuss apparent weaknesses and find solutions e.g. additional training.

Finally, it will give company the chance to define medium- to long-term personal objectives for their employees. (Alison Lea-Wilson). To monitor and assess how employees are performing, it's useful to set out clear objectives, ideally with quantifiable performance targets. This will help and ensure an employee understands what his or her employer is expecting from them.

1.4 Why set objectives

Objectives are useful as they enable us to both focus on the tasks which need to be done and at the same time assess progress. The process of setting an objective should help clarify what needs to be done in order to complete the task.

For employees of the Firmnetwork Group of company the process of setting objectives should also help them step back from the small details within which they work on a daily basis and look at the wider picture. Well set objectives which are challenging but not too testing can be an excellent method of motivation. When the objective is met, an employee should feel a sense of achievement.

1.5 Structure of the Thesis

The front of objective and appraisal system Powerful and easy to operate are more important. Front as a direct interaction interface with employee, in considering the function, but also taking into account the simplicity and ease of operation to make sure the majority of employees do not understand computer can easily bring them to enjoy the convenience of objective settings.

This project will set the objective and appraised it four quarter in a year which will be divided in to January-March, April-June, July-September, October-December.

1.6 How to appraise the objectives of an employee

An employee need to return back the appraisal form that has been filled at the beginning of the quarter which will consist of **KPA, KPI** to the line manager that will appraise the employees. For example, line manager or the head of the department will give him or her score between Ten and Hundred for their level of competence in certain areas. This will include leadership skills, team working, initiative, flexibility.

KPA

Key Performance Areas, When the key results area is large it is broken into manageable areas for managing/ evaluation, these sub-sections of KRAs are called KPA

KPI

Key performance indicator is an industry jargon for a type of performance measurement, KPI are commonly used by an organization to evaluate its success or the success of a particular activity in which it is engaged. Sometimes success is defined in terms of making progress toward strategic goals, but often success is simply the repeated achievement of some level of operational goal (for example, zero defects, 10/10 customer satisfaction, etc.), (Zhao F. 2002).

Indicators identifiable as possible candidates for KPIs can be summarized into the following sub-categories:

- Quantitative indicators which can be presented as a number.
- Practical indicators that interface with existing company processes.
- Directional indicators specifying whether an organization is getting better or not.
- Actionable indicators are sufficiently in an organization's control to effect change.
- Financial indicators used in performance measurement and when looking at an operating index.

2 TECHNOLOGY PREVIEW

2.1 JAVA

Java is a programming language and computing platform, it is the underlying technology that powers state-of-the-art programs including utilities, games and business applications. There are a lot of applications and websites that won't work unless Java is installed. Java is simple object oriented and familiar, robust, fast and secure, architecture neutral and portable, high performance, interpreted, dynamic and reliable.

Java source code files are compiled into a format called bytecode (class file) that can run on any Java Virtual Machine (JVM) regardless of computer architecture. Is also a general purpose, concurrent, class-based, object-oriented programming language with a number of features that make the language well suited for use on the World Wide Web.

It is intended to let application developers "write once, run anywhere.", meaning that code that runs on windows does not need to be edited to run on a Mac. Java is currently one of the most popular programming languages in use, particularly for client-server web applications.

Java is an open source and free download software. Open source means code data have not been encrypted, in order to facilitate people use for the second developing. ([http://en.wikipedia.org/wiki/Java_\(programming_language\)](http://en.wikipedia.org/wiki/Java_(programming_language))).

2.2 TOMCAT

Tomcat is a Java Servlet container and web server from the Jakarta project of the Apache software foundation. A web server dishes out web pages in response to requests from a user sitting at a web browser. But web servers are not limited to serving up static HTML pages; they can also run programs in response to user requests and return the dynamic results to the users browser. Tomcat is very good at this because it provides both Java servlet and JavaServerPages (JSP) technologies (in addition to traditional static pages and external CGI programming). The result is that Tomcat is good choice for use as a web server for many applications; also if you want a free servlet and JSP engine, Tomcat can be used as either a standalone product with its own internal Web server or together with other Web servers, including Apache, Netscape Enterprise Server, Microsoft Internet Information Server (IIS), and Microsoft Personal Web Server.

Tomcat requires a Java Runtime Enterprise Environment that conforms to JRE 1.1 or later, it can be used standalone or used behind traditional web servers such as Apache httpd, with the traditional server serving static pages and Tomcat serving dynamic servlet and JSP requests. (http://en.wikipedia.org/wiki/Apache_Tomcat).

2.3 ORACLE

Oracle is a program that is running in the background, maintaining the data and figuring out where it should go on your hard drive. Oracle says it is the world's leading supplier of software for information management but it is best known for its sophisticated relational database products (notably Oracle9i), which are used in Fortune 1000 corporations and by many of the largest Web sites. Oracle's relational database was the world's first to support the Structured Query Language (SQL), now an industry standard. (<http://en.wikipedia.org/wiki/Oracle>)

Some databases have minimal feature sets and only store data, while others include programming languages, facilities and utilities to support enterprise-level applications like ERP and data warehousing. Oracle is the number one database and has the most advanced feature set.

In almost all relational databases, data is accessed through SQL, or Structured Query Language, and Oracle is no exception. SQL allows you to SELECT your data, INSERT new records, UPDATE existing records and DELETE records you want to get rid of. SQL can be embedded in other languages or you can run scripts of SQL directly against the database. In the Oracle world, there is no better way to access your data from inside a program. SQL can be natively embedded in PL/SQL programs. One of Oracle's tools to access the database and create programs which I will make use of in this project is:

SQL*Plus has a command line interface. With it, you can access the database and write stored procedures, you can run SQL commands to retrieve data and you can run scripts of either SQL, PL/SQL or built-in SQL*Plus commands, or a mixture of those three things. (http://en.wikipedia.org/wiki/Oracle_Database).

2.4 SQL*Plus Database

SQL is Structured Query Language and it is the easy database language to store data. Also SQL language can update and access the data. In the application, people get a variety of information through the SQL language. For example, employee information, managers information, objectives information in objectives and appraisal system. (Roshak Nataalka, 2005).

SQL commands are commands that aren't actually a part of the SQL standard but are supported by the tools that support SQL. For example, SQL*Plus has been around a long time and many tools that allow scripting also allow SQL*Plus commands. When someone asks me about a SQL command, I first clarify if they mean a SQL keyword or a SQL*Plus (or some other tool) command.

Database system is mainly used for processing information. A good database system can efficiently and quickly process the data rather than data.

SQL*Plus (commonly known as sqlplus) is a command line SQL and PL/SQL language interface and reporting tool that ships with the Oracle database client and server software. It can be used interactively or driven from scripts. It is the simplest and the most basic Oracle utility, with a basic command-line interface, commonly used by users, administrators, and programmers.

It mainly uses in managing the information lists, and the information may be have many different sources, such as commercial transactions, customer requirements, or sales reports and so on. (http://en.wikipedia.org/wiki/SQL*Plus)

2.5 Architecture Structure of the System

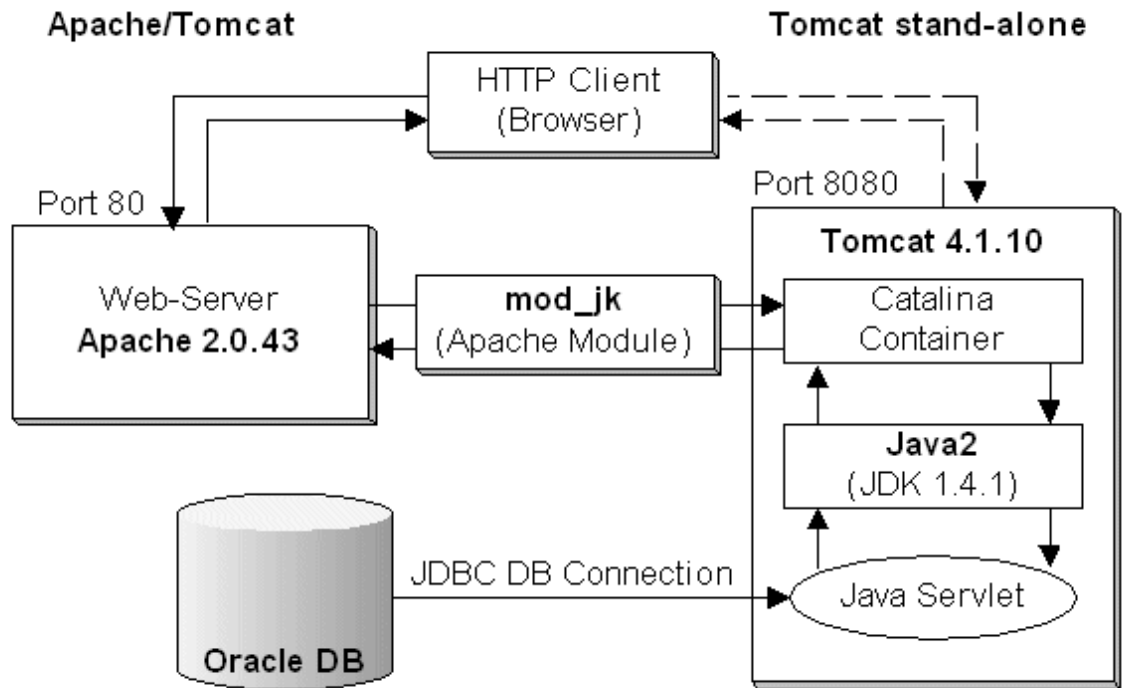


Fig .1 Architecture Structure of the System

(http://www.akadia.com/download/soug/tomcat/html/tomcat_apache.html)

3 REQUIREMENTS ANALYSIS

Requirements analysis process is an important stage in the system development. It determines the functions of the whole system integrity and stability. Software requirements analysis is an ongoing process of understanding and progressive refinement. Through requirements analysis, functions of the objective and appraisal system will be designed as below. (http://en.wikipedia.org/wiki/Requirements_analysis)

3.1 Requirements

The objective and appraisal system carries out many functions. The most important functions are to complete an objective form at the beginning of the quarter, submit the form for the line manager to review it. In addition, one more function of system also need to send an automatic mail to the line manager that one of the employee under him or her has submit his or her objective form for review.

Finally the system has administrator functions, which allows administrator operates and maintain back end database.

Overall according to the objective and appraisal system functional requirements, the system falls, into the front management application and back-stage management application. The front management application is the employee login to the system. The back-stage management application is admin manage the system. Administrator responsibilities are to create employee, create department and many more. The specific functions are described as below:

- Login and logout
- Create employee
- Create department
- Create mail
- Create quarter
- Create manager.
- Create appraise.

3.2 System Architect

In this chapter, high levels and detail levels designing are given.

3.2.1 High Levels for Six Modules

According to requirements gather, the objectives and appraisal system will be designed that consists of six basic modules. The diagram is as follow:

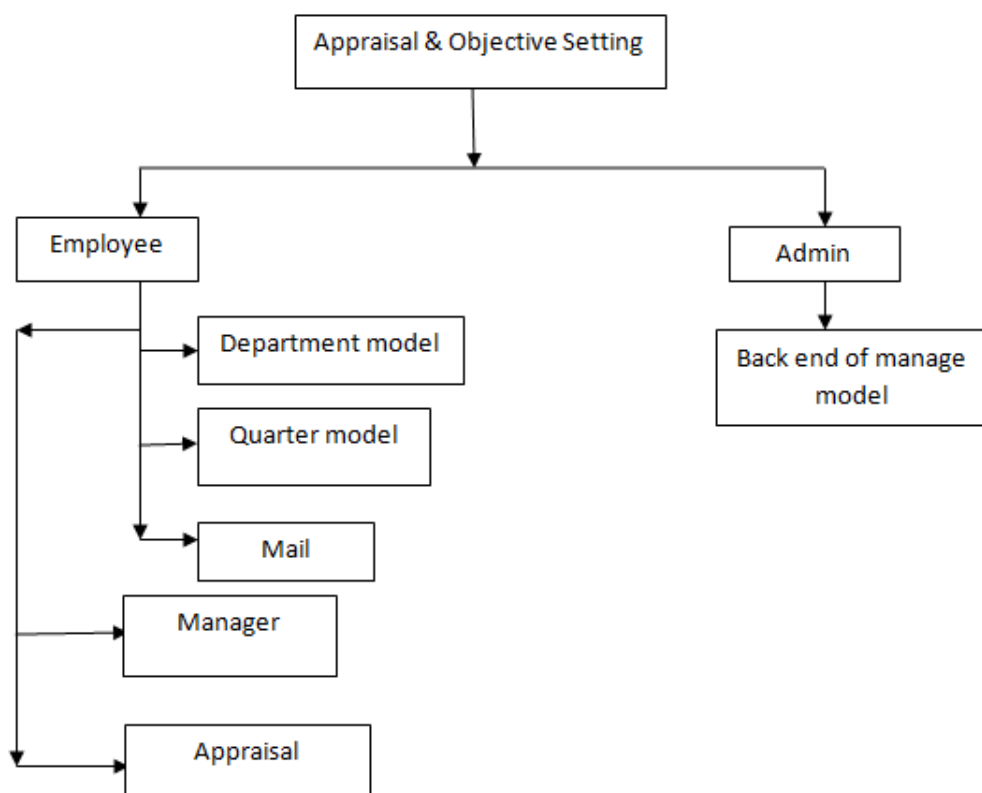


Fig.2 Six modules of the Objective and Appraisal setting

Employee Module

At first employee must login to the system. Employee can search and set his or her objective after validate identity. Employee can modify his or her own account information at any time. When employee login successful, one more function, when employee forget their password, they can click on “forget password” link to get back password. The

term 'employees' in this context includes all individuals working in the company or in any business, ie:

Individuals with no line-management responsibility, line managers, Member of the senior management team, e.g. members of the board of directors Involving staff in agreeing objectives can ensure. They are more motivated to meet them and can help identify better ways to carry out tasks.

Mail Module

An email will be send to the line manager automatically after an employee has set his/her objective and the line manager will review the objective and at the end of the quarter it will be appraise.

Quarter Module

This project will set the objective and appraised it three quarter in a year which will be divided in to January-March, April-June, July-September and October-December.

And the management should get it right from the start that an objective and appraisal system will work only if they plan and implement it properly. By consider the following points:

- By making sure that they know what an employee's job involves. Written job descriptions, conducting job evaluations, or analysing and grading jobs within the company, might be useful.
- Objective and appraisal system should keep simple as this will save time and money.
- Appraisal forms should be filled so that results are presented in writing in a standard format.
- All managers are committed to the system and are aware of the acceptable standards each employee will be expected to achieve.

Manager Module

Manager, line manager or the head of the department will give an employee under them a score between Ten and Hundred for their level of competence in certain areas. This will include leadership skills, team working, initiative, flexibility.

Appraise Module

At the end of the quarter the manager, line manager or the head of the department will appraise the employee under them with a score and return back the appraisal form that has been filled so that employee under them can login back and check his or her performance for the quarter.

Back End of Manage Module

Here is back end database of manage objective. When administrators input ID and password, the system verifies identity. The module functions are categories manage, add new objectives, modify and delete specific objective. Administrator press update button to update the objective.

3.2.2 Detail Levels Designing

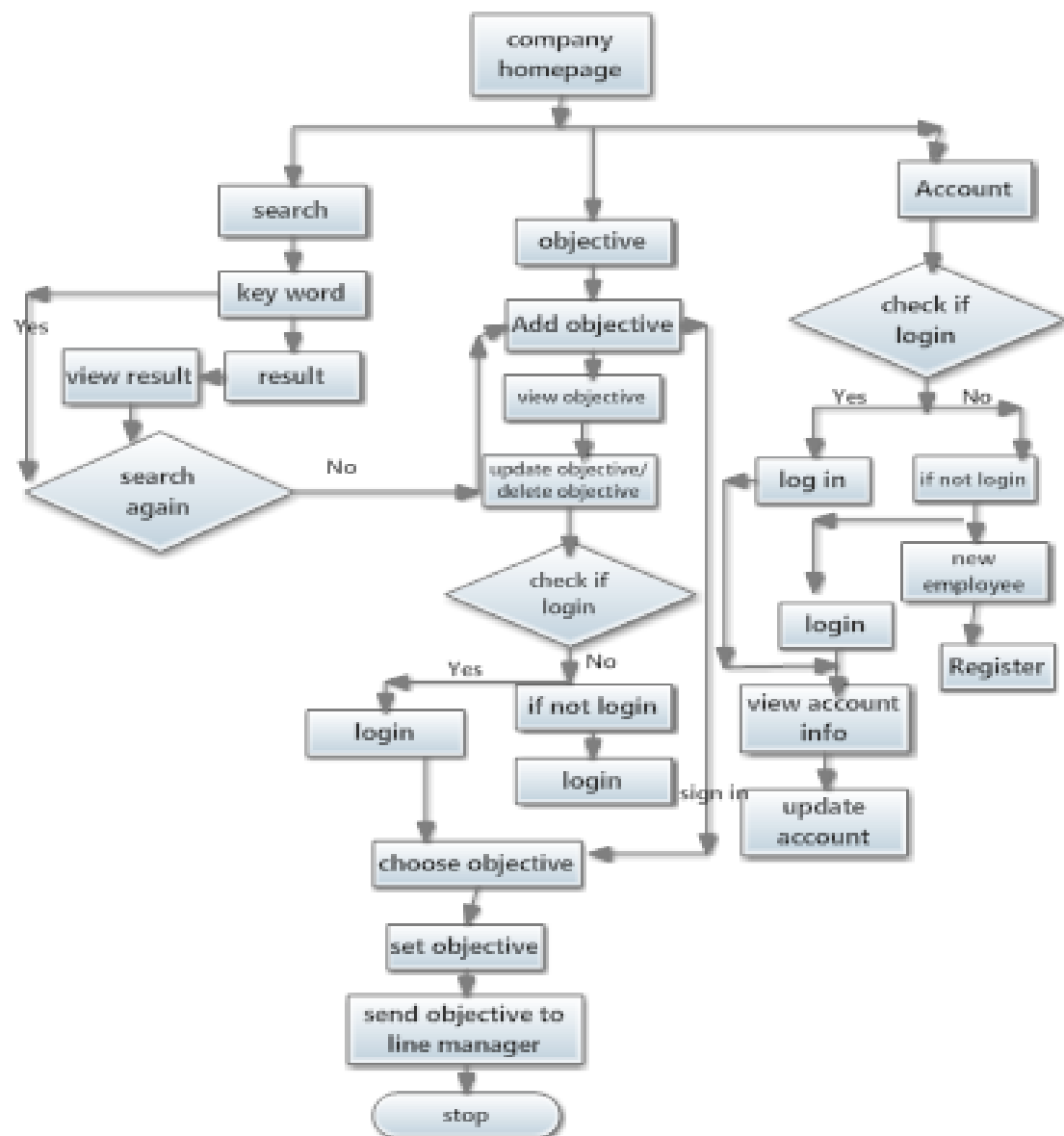


Fig.3 Process diagram of Objective search, account, setting.

Fig.3 diagram describes the whole process of employee searching and setting objective. There are main functions are employee login, register, search objective, setting objective and send to line manager.

1. Employee search or choose interesting objective and set it for the quarter.

2. Employee must login, only after employee logins to the system before he/she can set the objective.
3. Employee fills in the objective form and send it to the line manager for approve, after he/she have set the objective.

3.3 Employee Use Cases

3.3.1 Common Functions

Login

Every time employee login to the objective and appraise application, he/she must input both of the correct account ID and the password into the input-form. The application will get the input data and send to the System Server, and the server will communicate with the Database and check whether the account ID and password are matched. If it is correct, the application will display the login Window, and then switch to the home page Interface. Otherwise, the error-window will be instead. After that, the application will turn back to the login interface.

Logout

This functionality works when the user selects the “Logout” menu, the application will be closed and return back homepage.

3.3.2 Employee Functions

Use Case Diagram: Employee

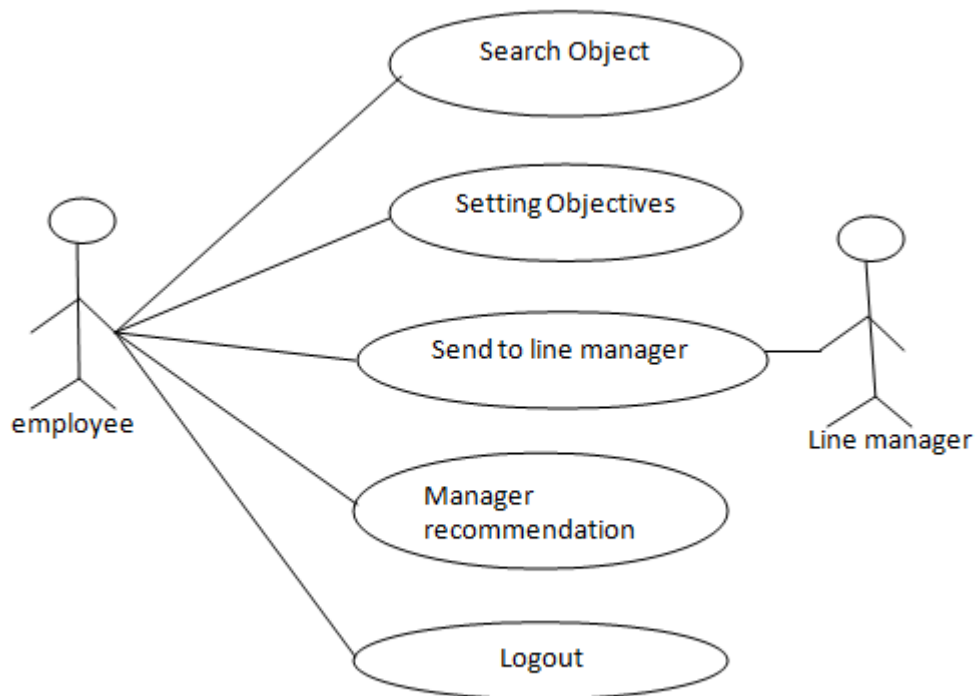


Fig.4 Employee Use Case Diagram

Register

Firstly, new employee needs to register to get one account ID. Information which should be included: employee name, password, email address, phone number and address information. After registration, employee will get an account ID and they can log-in with account ID and password. The application will insert all the information into the corresponding database tables.

Update account information

Only employee with ID can update his/her account information. After login successful, employee can change private information, like that address, password and so on. When they press submit button, the system will update and store the corresponding database.

3.3.3 Administration Function

Use Case Diagram: Administrator

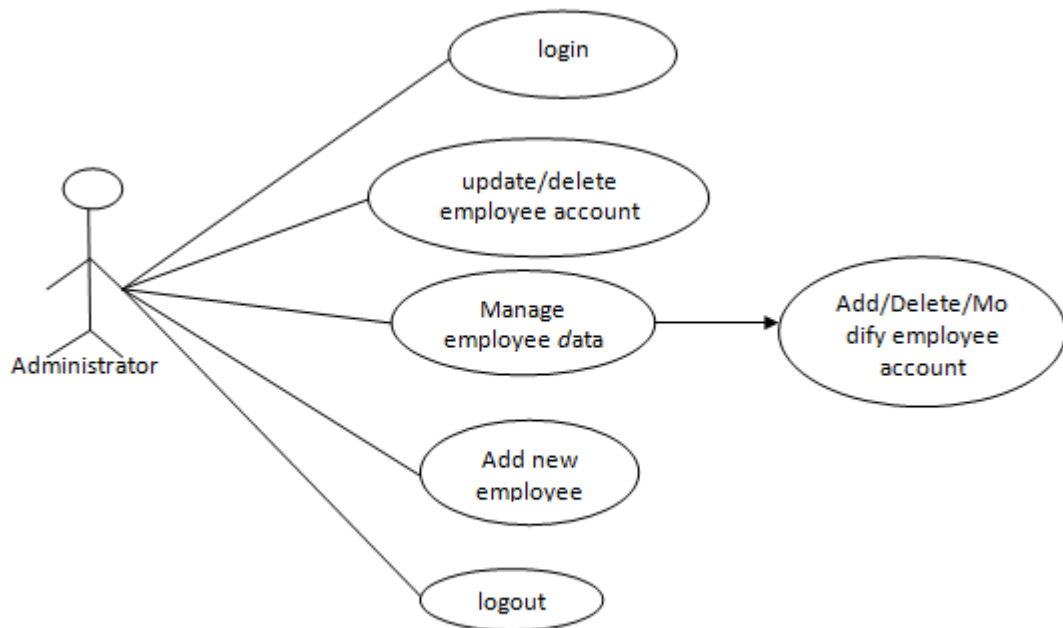


Fig.5 Administrator Use Case Diagram

Add/delete/modify/view accounts

On the account page of administration, the administrators can directly add or delete or modify of the employee's accounts. It includes employee's private information as his password, address and so on. Also administration can view all accounts list.

3.4 The Main of Sequence Diagrams

In this chapter, there are some more important of sequence diagrams. It includes employee part, and administration part.

3.4.1 Employee Sequence Diagrams

Sequence Diagram: login

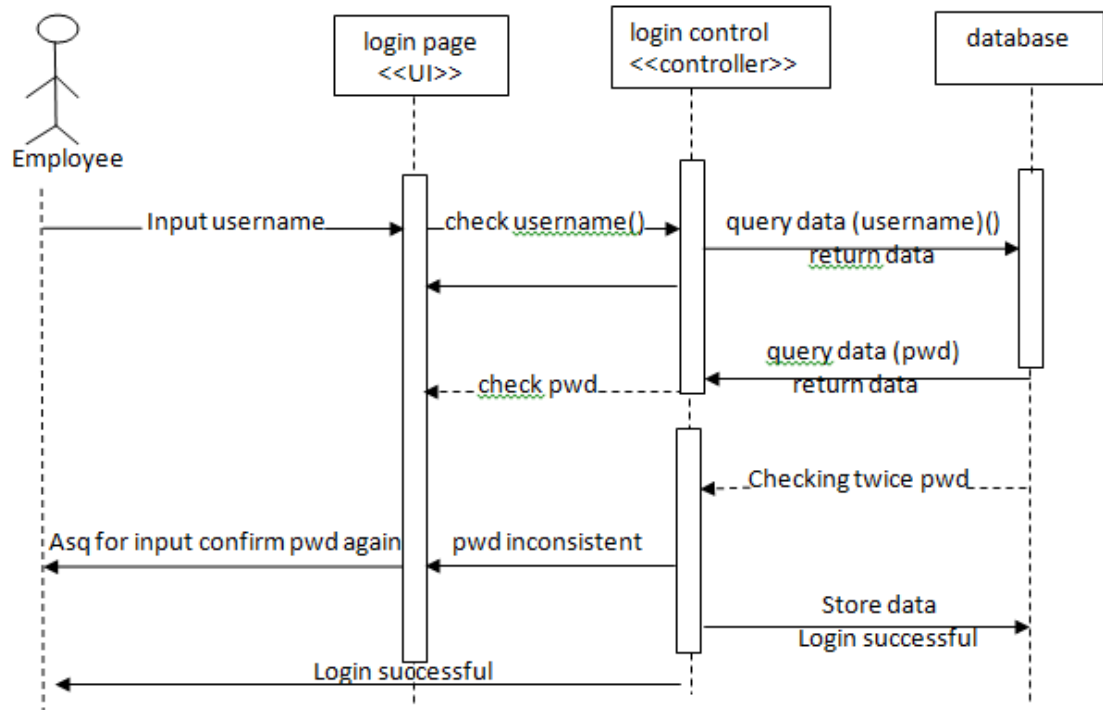


Fig.6 Employee Register Sequence Diagram

Fig.6 is drawn to describe the employee registers for new account on the company website. The new employee enters the website, and selects the “register” top menu. He /she inputs username, the application will check whether the username is valid or not, for instance the duplication username. If there is the same username, the application asks employee to inputs new username again. When username is passed, employee continues to fill in password. The application checks passwords twice from database. If passwords are inconsistent twice, the application asks for customer inputs confirm password again. Since the passwords are matched, customer will be allowed to fill in the rest of form as phone, address and email. The employee finishes the register form and submits it. The application will validates the entered data, then send to the system server to store employee information in account ID.

3.4.2 Objective setting sequence Diagram

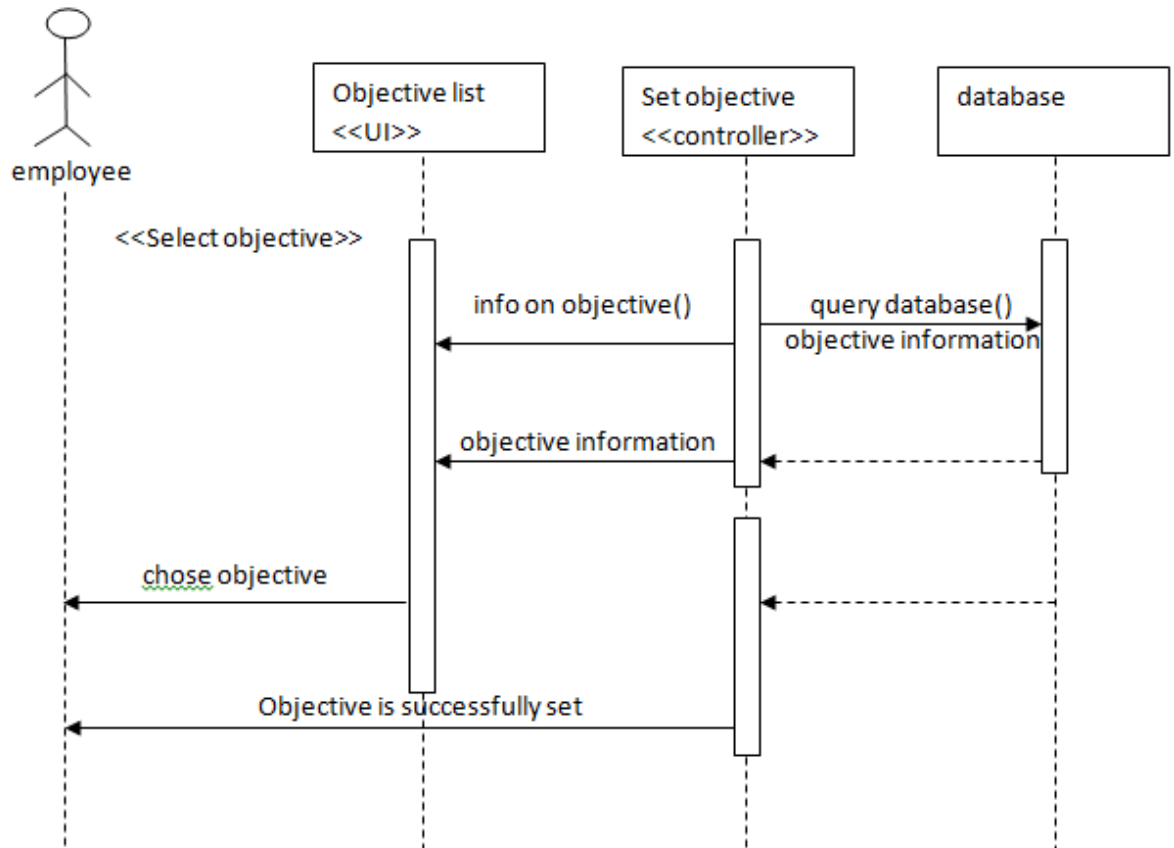


Fig.7 Objective setting sequence Diagram

Fig.7 is drawn to describe the flow of employee setting an objective. The employee must login successfully on the objective and appraisal page. The application will retrieve all his/her information from the database to show it to employee. Also an employee can search for the objective or choose his/her area of interest and set it for the quarter and a mail will send to the line manager to review it.

3.4.3 Administrator Sequence Diagram

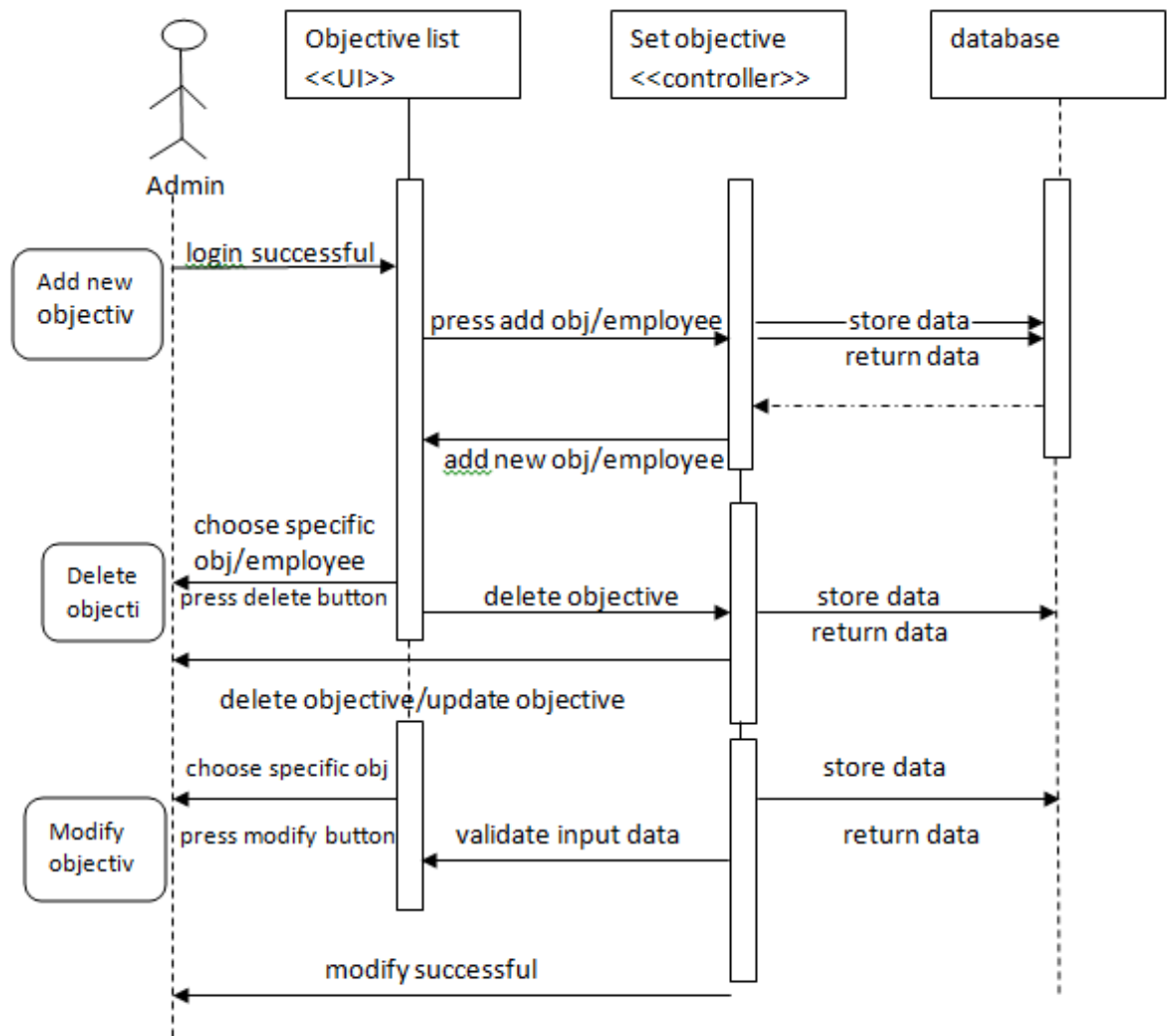


Fig.8 Administrator Sequence Diagram

Fig.8 is drawn to describe the flow of how administrator handling the employee information and objectives. The administrator must be login successfully to handle employee data. He/she can browse all employee' objective. The administrator chooses employee, the application will display the objective. The administrator can also add new objective and the application can store the objective in database. Administrator can also add new employee, he/she fills in the form about the new employee and submits it. The application will validate the entered data and send to the system server. If the administrator chooses specific account will be deleted, then presses "delete" button. The application will destroy account from database and update database. The website auto switches to account list. If administrator chooses specific account, and he/she wants to

modify account information, then he/she presses “edit” button. The application will display account information from database. Then administrator changes some information and presses “submit” button. The application sends data to the system server and stores again. Also, it shows modify successful message on account detail page.

Setting clear and achievable objectives is a key start to any successful organization Without clear objectives, the team or organization's success becomes unfocused. (Latham & Locke 1981) The acronym SMART is best used when setting objectives and also asking the key question on evidence of a successful outcome.

All objectives should be designed to meet SMART Standard criteria saya by (Swezey W. Robert, Meltzer Zach and Salas Jimmy, 1994).

Specific

Objectives should be clear and definite about what is required. Standards are useful here in defining exactly what should be required in order to perform a certain function effectively.

Measurable

It must be possible to measure performance of an objective, Standards can help here in designing objectives that can be measured in accordance with agreed criteria.

Achievable

Objectives can be stretching or challenging, but they must be designed in order to be achievable and within the control of the job holder, otherwise you are setting people up for failure which is demoralising.

Timed

As well as knowing WHAT you need to achieve, you need to know WHEN you are expected to deliver. Depending on the role, some objectives will be in the form of ongoing tasks central to your job throughout the year, others will be more time-limited, for example delivering a certain project by a specified date. (Locke A. Edwin 2001).

4 DESIGN DATABASE

Database plays an important role in the information management system. The structure of database will directly affect the efficiency of system and achievement of results. The good database structure design can improve the efficiency of the data storage, make sure data integrity and consistency. (http://en.wikipedia.org/wiki/Database_design)

4.1 Design ER Diagrams

According to the objectives and appraisal requirements analysis, there are ER (entity-relationship) data models. As follows:

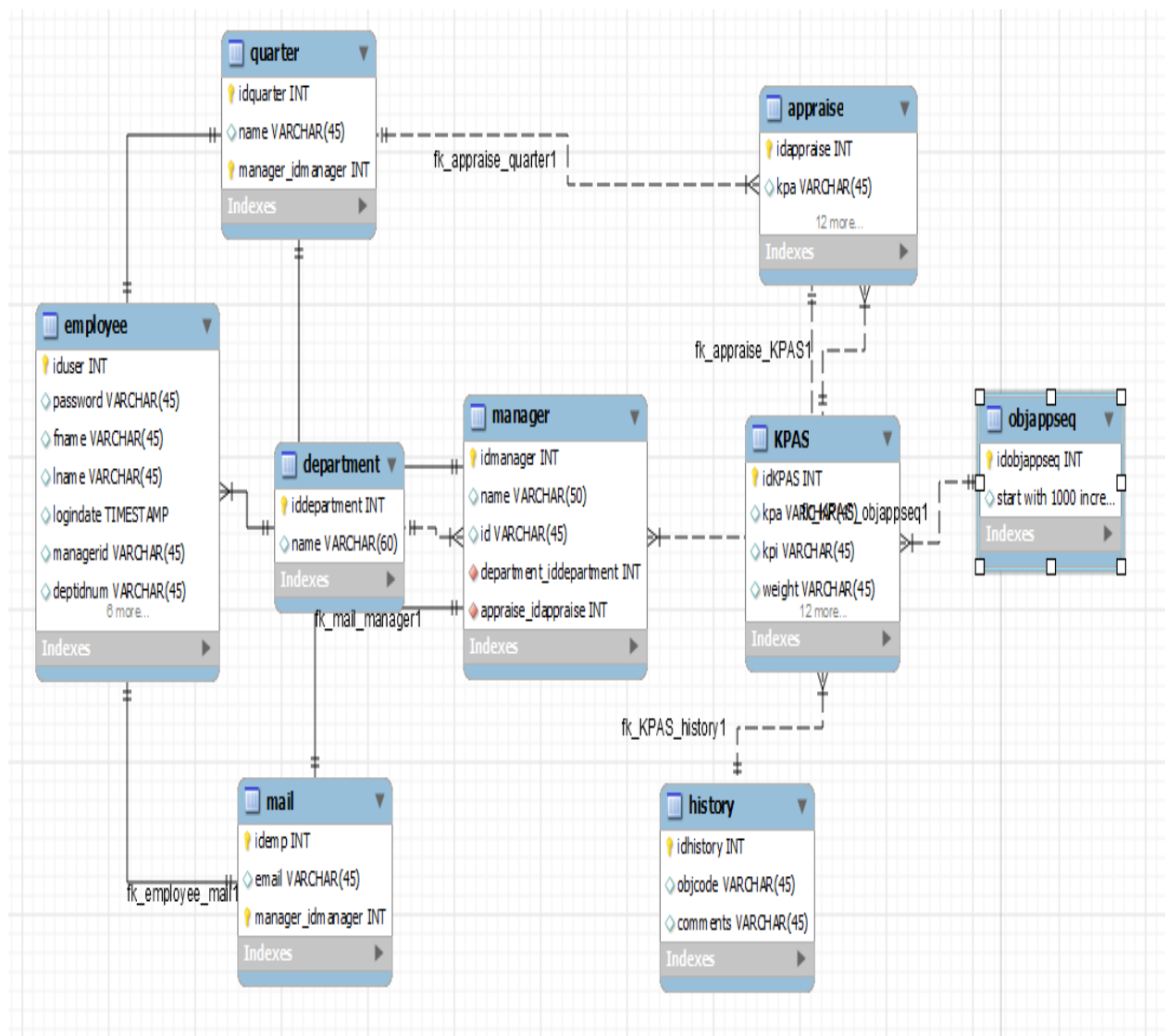


Fig.9 System ER diagram

Fig. 9 is drawn to describe the objective and appraisal system ER diagram. There are seven entities, it includes employee entity, quarter entity, department entity, mail entity, manager entity, appraise entity, kpas entity. The property of an entity is the attribute. Each entity has some attributes. The primary key attribute is underlined.

In employee entity, there are eleven attributes. They are userID, fname, lname, username, password, logindate, managerID, departmentnum, usertype, address, phone and email.

In quarter entity, there are three attributes. They are quarterID, name and managerID.

In department entity, there are two attributes. There are departmentID, name.

In mail entity, there are three attributes. There are employeeid, email, managerid.

In manager entity, there are three attributes. There are managerid, name, and department id.

In appraise entity, there are twelve attributes. There are appraiseid, kpa, kpi, weight, type, empid, depid, mangerid, userid, apprasal date, quarter id.

In kpas entity, there are thirteen attributes. There are kpasid, kpa, kpi, wight, type, empid, depid, managerid, userid, objdate, comments, quarter, and kpascode, done

Base on analysis before, here are the relationships between entities, as follow:

One employee can has many objectives (1: n);

One quarter can has many employee objectives (1: n);

One department can has many employees (1: n);

One employee will have one mail (1:1);

One manager will have one department (1:1);

One employee can has multiple appraiser (1: n);

4.2 Design Database Tables

According to the entities set and relationship of requirements analysis, objectives and appraisal database designs ten tables. There are employee table, department table, manager table, mail table, quarter table, kpas table, appraise table, history table, noofpage table, sequence objappseq start with 1000 increment by 1. As follow:

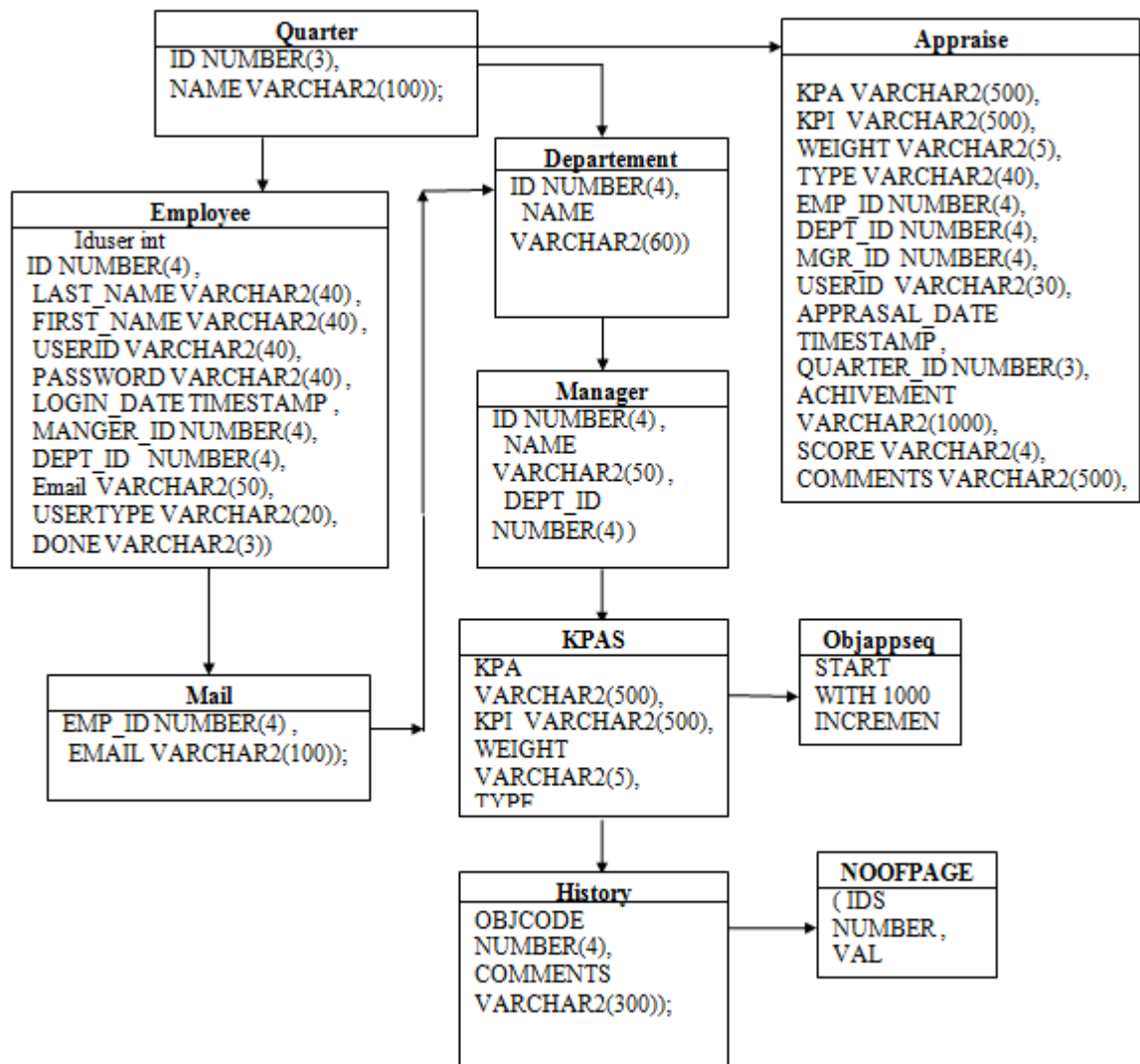


Fig.10 Database Tables Diagram

5 IMPLEMENTATION

5.1 Development Environment

In the thesis report, the window as an operating system, apache-tomcat as the web server, SQL*Plus as a database, JAVA as a language. Because they are free or open source software, a stable and free application system can be established.

The apache-tomcat server, SQL*Plus, and JAVA comprehensive programming. The installation is easy.

Download address for apache-tomcat:

<http://tomcat.apache.org/download-60.cgi>

Also, java is a programming language use and compile in Netbeans, the installation is easy.

Download address are:

<http://netbeans.org/downloads/>

<http://java.com/en/download/index.jsp>

And oracle is a tool. Oracle installation includes the SQL* plus, download address is:

<http://www.oracle.com/technetwork/database/enterprise-edition/downloads/index.html>

5.2 Algorithms and Interfaces

5.2.1 Login Application

In the system, there is login interfaces: employee login interface (as shown in Fig. 11) According to the input username to find whether the username has been existed, and whether password is corresponding.

The interface is shown below:

Username:	<input type="text"/>
Password:	<input type="password"/>
	<input type="button" value="Login"/> <input type="button" value="Reset"/>

Fig.11 Login Interface

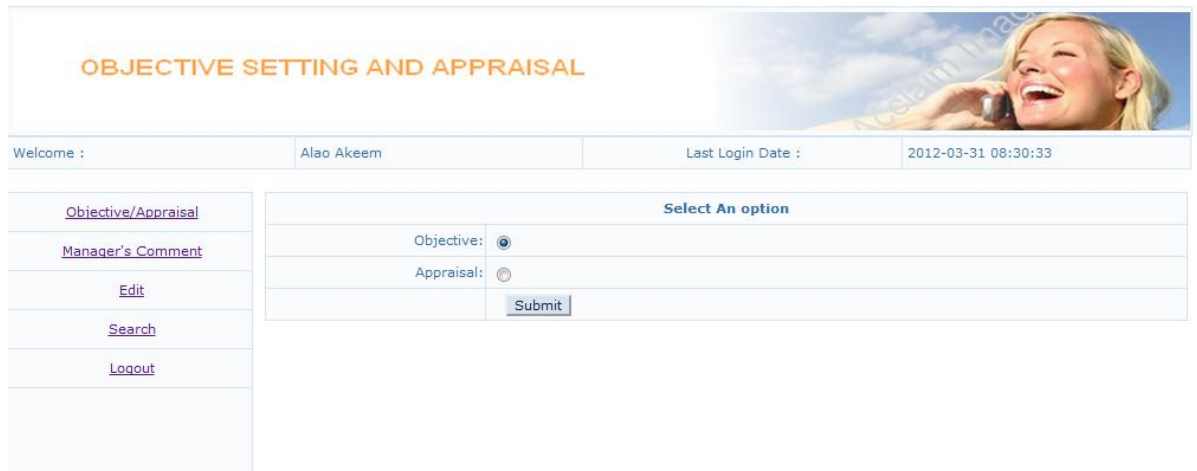
When user login successful, the page will be switched to different interfaces. One is employee interface and other is administrator homepage interface. However, if user login unsuccessfully, the page will open the homepage of the objective and appraisal setting and a user can select what he/she want to do. And a user can select an option of objective and appraisal. Below is the user Interface on were to select an objective setting:

OBJECTIVE SETTING AND APPRAISAL									
Welcome :	Alao Akeem	Last Login Date :	2012-03-31 08:30:33						
<table border="1" style="width: 100%;"> <tr> <td style="text-align: center;">Objective/Appraisal</td> </tr> <tr> <td style="text-align: center;">Manager's Comment</td> </tr> <tr> <td style="text-align: center;">Edit</td> </tr> <tr> <td style="text-align: center;">Search</td> </tr> <tr> <td style="text-align: center;">Logout</td> </tr> <tr> <td style="height: 100px;"></td> </tr> </table>				Objective/Appraisal	Manager's Comment	Edit	Search	Logout	
Objective/Appraisal									
Manager's Comment									
Edit									
Search									
Logout									

Fig.12 Objective and Appraisal setting Interface

5.2.2 Objective and Appraisal setting option Interface

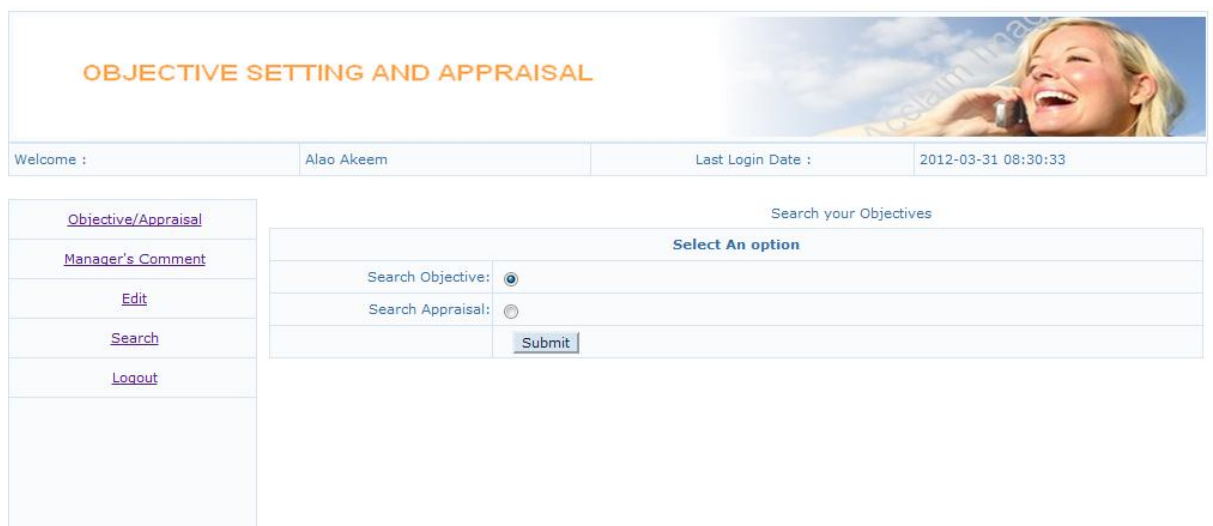
And if a user select the objective and appraisal the select option will be shown, submit button will be press and the application will give them to set their objective.



The screenshot displays the 'OBJECTIVE SETTING AND APPRAISAL' interface. At the top, there is a header with the title and a background image of a smiling woman. Below the header, a navigation bar shows the user's name 'Alao Akeem' and the last login date '2012-03-31 08:30:33'. On the left side, there is a vertical menu with links for 'Objective/Appraisal', 'Manager's Comment', 'Edit', 'Search', and 'Logout'. The main content area is titled 'Select An option' and contains two radio button options: 'Objective:' (which is selected) and 'Appraisal:'. A 'Submit' button is located at the bottom right of this section.

Fig.13 Objective and Appraisal setting option Interface

And if a user want to search for the objectives he/she can do so. Below is the search option for the objectives Interface:



The screenshot displays the 'OBJECTIVE SETTING AND APPRAISAL' interface with a search option. The header and navigation bar are identical to the previous screenshot. The main content area is titled 'Search your Objectives' and contains two radio button options: 'Search Objective:' (which is selected) and 'Search Appraisal:'. A 'Submit' button is located at the bottom right of this section.

Fig.14 Search Objective Interface

And a user can pick the type of the search he/she want and after searching the objective can be set. Below is the search type for the objective Interface:

OBJECTIVE SETTING AND APPRAISAL			
Welcome :	Alao Akeem	Last Login Date :	2012-03-31 08:30:33
Objective/Appraisal	Search your Objectives		
Manager's Comment	Search Type :	Please pick a serch type ▾	
Edit	Search String:	<input type="text"/> e.g 2009 0r Third quarter	
Search	<input type="button" value="Search"/>		
Logout			

Fig.15 Pick a search type Interface

An employee also have the privilege of editing his/her objective if there is a mistake, below is the edit option for the objective Interface:

OBJECTIVE SETTING AND APPRAISAL			
Welcome :	Alao Akeem	Last Login Date :	2012-03-31 08:30:33
Objective/Appraisal	Select An option		
Manager's Comment	Edit an Objective:	<input checked="" type="radio"/>	
Edit	Edit an Appraisal:	<input type="radio"/>	
Search	<input type="button" value="Submit"/>		
Logout			

Fig.16 Select an Edit option Interface

5.2.3 Setting Objective Interface

And finally an employee can set his or her objective. Setting objective interface is shown below:

KPA	KPI	WEIGHT	TYPE	QUARTER
<input type="checkbox"/> Training	All workforce below middle management should receive a minimum of 5 days of training	10	People Development Kpa	Second quarter
<input type="checkbox"/> Improve my skills in Oracle	Need to pass my certification exams by end of the quarter	10	Values Kpa	Second quarter
<input type="checkbox"/> work place accidents	reduce workplace accidents by 10%	8	People Development Kpa	Second quarter

Fig.17 Setting Objective Interface

The code is showed below means objective setting information is called up from the database and an employee can set his or her KPA and KPI and the rest information and submit the form.

```
<!--
function loadform() {
    document.location="showobjective.jsp";
}
function MM_findObj(n, d) { //v4.01
var p,i,x; if(!d) d=document; if((p=n.indexOf("?"))>0&&parent.frames.length) {
d=parent.frames[n.substring(p+1)].document; n=n.substring(0,p);}
if(!(x=d[n])&&d.all) x=d.all[n]; for (i=0;!x&&i<d.forms.length;i++) x=d.forms[i][n];
for(i=0;!x&&d.layers&&i<d.layers.length;i++) x=MM_findObj(n,d.layers[i].document);
if(!x && d.getElementById) x=d.getElementById(n); return x;
}
function MM_validateForm() { //v4.0
var i,p,q,nm,test,num,min,max,errors="",args=MM_validateForm.arguments;
```




```

for (i=0; i<(args.length-2); i+=3) { test=args[i+2]; val=MM_findObj(args[i]);
if (val) { nm=val.name; if ((val=val.value)!="") {
if (test.indexOf('isEmail')!=-1) { p=val.indexOf('@');
if (p<1 || p==(val.length-1)) errors+="- "+nm+" must contain an e-mail address.\n";
} else if (test!='R') { num = parseFloat(val);
if (isNaN(val)) errors+="- "+nm+" must contain a number.\n";
if (test.indexOf('inRange') != -1) { p=test.indexOf(':');
min=test.substring(8,p); max=test.substring(p+1);
if (num<min || max<num) errors+="- "+nm+" must contain a number between '+min+' and '+max+'.\n";
} } } else if (test.charAt(0) == 'R') errors += "- "+nm+" is required.\n"; }
} if (errors) alert('The following error(s) occurred:\n'+errors);
document.MM_returnValue = (errors == "");
}
//-->

```

5.2.4 Supervisor comment on Objective Interface

An employee can also check his/her supervisor's comment, below is the supervisor comment Interface:



OBJECTIVE SETTING AND APPRAISAL

Welcome : Alao Akeem Last Login Date : 2012-03-31 10:06:38

[Objective/Appraisal](#) [Manager's Comment](#) [Edit](#) [Search](#) [Logout](#)

Check Supervisor's Comments on objectives

KPA	KPI	WEIGHT	QUARTER

Fig.18 Supervisor comment on Objective Interface

5.2.5 Administrator Add New Department Interface

When an administrator enter the login website, the system will distinguish them and allow them go to difference management options. In fig below administrator manager homepage, he/she can manage the entire employee in the system. An administrator click an employee menu, the employee information will be showed. An administrator can add, edit, and delete a department and employee record. Below is the Add new department Interface:

OBJECTIVE SETTING AND APPRAISAL	
Welcome :	Administrator Adebayo
Last Login Date :	2012-03-31 08:12:05

Staff	Department	Manager	Logout
Add New Department			
Department ID:		<input type="text"/>	
Department Name:		<input type="text"/>	
		<input type="button" value="Save"/> <input type="button" value="Return"/>	

Fig.19 Add New Department Interface

Administrator can also select on any employee record and edit it if their is a need to do so. Below is the edit staff record Interface:

OBJECTIVE SETTING AND APPRAISAL	
Welcome :	Administrator Adebayo
Last Login Date :	2012-03-31 08:50:01

Staff	Department	Manager	Logout
Edit Staff Record			
Staff ID:	4196	Password:	****
Last Name:	Onukwu	Confirm password:	<input type="text"/>
First Name:	Nyemike	Supervisor:	Segun Ajibade
UserName:	nyemeike	Department:	Research and Development
Staff position:	Staff	Email:	null
		<input type="button" value="Save"/> <input type="button" value="Return"/>	

Fig.20 Edit staff record Interface

5.2.6 Edit Manager Record Interface

Administrator also have privilege on the manager record, below is the edit manager record Interface:

Fig.21 Edit Manager record Interface

An administrator can delete any department by click on that department and select delete. Below is the delete department Interface:

Fig.22 Delete Department Interface

The code is showed below means department list information is called up from the database and an administrator can delete any department.

```

<%
String jdbcname = "jdbc/orcl";
Connection conn = ds.getConnection();
if (Shows != null) {
for(int counter = 0; counter < Shows.length; counter++)
{
String cmd = "delete from department where id = "+Shows[counter]+"";
rs=stmt.executeQuery(cmd) ;
if (rs.next()) {
out.println("<script>alert('The selected Department(s) has been deleted');          window.location =
'listdepartment.jsp'</script>");
}
}
}else {
out.println("<script>alert('You need to select a Department(s) to delete'); window.location = 'listdepart-
ment.jsp'</script>");
}
conn.close();
%>

```

5.2.7 Line Manager Privilege

During the appraisal, the line manager and employee discuss the extent to which the employee has fulfilled the set objectives. They check and assess the employee's overall performance and the implementation of concrete set objectives. Any further training requirements or an over fulfillment of the objectives are identified in the different areas. The appraisal document is completed when the line manager and employee agree on an valuation. As soon as the appraisal document is saved in the system as Completed or Approved, the employee's compensation can be adjusted automatically and the employee's qualifications profile can be updated. A line manager can select what to do like Appraisal. Such as:

OBJECTIVE SETTING AND APPRAISAL			
Welcome :	segun Ajibade	Last Login Date :	2020-01-05 09:00:00
Assess Objective/Appraisal	Select An option		
Objective/Appraisal	Assess an Objective: <input checked="" type="radio"/>		
Edit	Assess an Appraisal: <input type="radio"/>		
Search	<input type="button" value="Submit"/>		
Logout			

Fig.23 Line Manager Assess Objective Interface

Get appraisal a line manager can edit the appraisal. Below is the Approve editing/revoke editing appraisal Interface:

OBJECTIVE SETTING AND APPRAISAL			
Welcome :	segun Ajibade	Last Login Date :	2012-03-31 12:29:26
Assess Objective/Appraisal	<input type="button" value="Approve editing of appraisal"/>	<input type="button" value="Revoke editing of appraisal"/>	
Objective/Appraisal	USERNAME		
Edit	EMPLOYEE		
Search			
Logout			

Fig.24 Line Manager Editing of Appraisal Interface

The code is showed below means appraisal list information is called up from the database and line manager can appraise each employee under him/her.

```
<body>
<table width="300" height="24" border="0" align="center">
<tr>
<td class="labelcell style1">Edit your Appraisal </td>
```

```

</tr>
</table>
<%
String jdbcname = "jdbc/orcl";
String cmd7 = "select extract(month from sysdate) monthnum from dual";
rs = stmt.executeQuery(cmd7);
if (rs.next()) {
int months = rs.getInt("monthnum");
if (months == 1 || months == 2 || months == 3) {
quarter = "First quarter";
} if (months == 4 || months == 5 || months == 6) {
quarter = "Second quarter";
} if (months == 7 || months == 8 || months == 9){
quarter = "Third quarter";

} if (months == 10 || months == 11 || months == 12) {
quarter = "Fourth quarter";
}
String cmd = "select kpa ,kpi,weight,type ,quarter , APPRAISECODE from appraise where emp_id =
"+userid +"and quarter = "+quarter+" and extract(year from APPRASAL_DATE) = extract(year from
sysdate) order by APPRASAL_DATE desc";
rs = stmt.executeQuery(cmd);
ResultSetMetaData rsmd = rs.getMetaData();
int cols = rsmd.getColumnCount();
//out.println(quarter);
}
%>

```

A line manager can also add comment on the appraisal. Below is the Comment on the appraisal Interface:

Select An option	
Comment on an Objective:	<input checked="" type="radio"/>
Comment on an Appraisal:	<input type="radio"/>
<input type="button" value="Send"/>	

Fig.25 Line Manager Comment Interface

Managing the objective of the employee

Setting up an objectives and appraisal system

There are four key elements in a good objectives and appraisal system:

Set objectives – Company will decide what they want for the employees and agree these objectives with them. And there will be timescales for achieving them.

Manage objectives – The Company will provide the tools for the employees, resources and training they need to perform well. Regularly monitor performance against agreed objectives and take steps to help an employee improve if they think they aren't performing as required.

Carry out the appraisal - review and assessment of employees, discuss those assessments with them and agree on future objectives.

Provide rewards/remedies - awards and promotion are also considered based on the appraisal and we also decide how to tackle poor performance.

Pay reviews and awards

Individuals can then receive an additional increase on top of this according to criteria agreed before the start of the year (at their last appraisal) based on performance, achievement of targets, job-grade advancement, qualifications attained, training aims achieved, and any other performance levers that it is sensible, fair and practicable to incentivise. (<http://www.businessballs.com/performanceappraisals.htm>)

6 CONCLUSION

During the guidance and supervision of my supervisor, after Five months of design and development, I finally completed the development through my graduation project system based on JAVA, TOMCAT and ORACLE and SQL Plus.

In design part, I mainly defined the database and initialized the data. Through supervisor helping and repeated modifying, let me have a good understand the database. When I finished the database, I compiled coding. In this process, some difficulties came up mostly about programming language and connecting with database. I found out relational information on internet and researched open source coding. The problems were solved after I had understood and I modified code in the manager system.

After carefully research this objective and appraiser setting system, I learned a good professional knowledge to integrated use. I got a deeper understanding from many of abstract and theoretical knowledge before. At the same time, I had known how to design and development the web application using the structured programming and models to achieve functions.

Finally, setting clear and achievable objectives is a key start to any successful company or organization without clear objectives, the company or organization's success becomes unfocused.

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APPENDICES

Appendix 1 SQLplus Statement

- EMPLOYEE TABLE
CREATE TABLE EMPLOYEE (
ID NUMBER(4) ,
LAST_NAME VARCHAR2(40) ,
FIRST_NAME VARCHAR2(40) ,
USERID VARCHAR2(40),
PASSWORD VARCHAR2(40) ,
LOGIN_DATE TIMESTAMP ,
MANGER_ID NUMBER(4),
DEPT_ID NUMBER(4),
Email VARCHAR2(50),
USERTYPE VARCHAR2(20),
DONE VARCHAR2(3));
- DEPARTMENT TABLE
CREATE TABLE DEPARTMENT (
ID NUMBER(4),
NAME VARCHAR2(60));
- MANAGER TABLE
CREATE TABLE MANAGER (
ID NUMBER(4) ,
NAME VARCHAR2(50) ,
DEPT_ID NUMBER(4)) ;
- MAIL TABLE
CREATE TABLE MAIL (
EMP_ID NUMBER(4) ,
EMAIL VARCHAR2(100));
- QUARTER TABLE
CREATE TABLE QUARTER (
ID NUMBER(3),

Appendix 2 SQLplus Statement

```
NAME VARCHAR2(100));
```

- KPAS TABLE
CREATE TABLE KPAS (
KPA VARCHAR2(500),
KPI VARCHAR2(500),
WEIGHT VARCHAR2(5),
TYPE VARCHAR2(40),
EMP_ID NUMBER(4),
DEPT_ID NUMBER(4),
MGR_ID NUMBER(4),
USERID VARCHAR2(30),
OBJ_DATE TIMESTAMP ,
COMMENTS VARCHAR2(500),
QUARTER VARCHAR2(30),
KPASCODE NUMBER ,
DONE VARCHAR2(3));

- APPRAISE TABLE
CREATE TABLE APPRAISE (
KPA VARCHAR2(500),
KPI VARCHAR2(500),
WEIGHT VARCHAR2(5),
TYPE VARCHAR2(40),
EMP_ID NUMBER(4),
DEPT_ID NUMBER(4),
MGR_ID NUMBER(4),
USERID VARCHAR2(30),
APPASAL_DATE TIMESTAMP ,
QUARTER_ID NUMBER(3),
ACHIVEMENT VARCHAR2(1000),
SCORE VARCHAR2(4),
COMMENTS VARCHAR2(500),
QUARTER VARCHAR2(30),

Appendix 3 SQLplus Statement

APPRAISECODE NUMBER,
DONE VARCHAR2(3)) ;

- SEQUENCE TABLE
CREATE SEQUENCE OBJAPPSEQ START WITH 1000 INCREMENT BY 1

- HISTORY TABLE
CREATE TABLE HISTORY (
OBJCODE NUMBER(4),
COMMENTS VARCHAR2(300));

- NOOFFPAGE TABLE
CREATE TABLE NOOFFPAGE (IDS NUMBER , VAL NUMBER) ;