

# PERFORMANCE MANAGEMENT SYSTEM



PROJECT WORK DONE AT

TRIGYN TECHNOLOGIES,  
BANGALORE

P-602

PROJECT REPORT

*Submitted in partial fulfillment of the  
Requirements for the award of the degree of  
M.Sc Applied Science (Computer Technology)  
Of Bharathiar University, Coimbatore.*

*Submitted By*

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**KUMARAGURU COLLEGE OF TECHNOLOGY**  
Coimbatore – 641 006.  
May 2001.

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# CERTIFICATE

CERTIFICATE

This is to certify that the project work entitled  
**“PERFORMANCE MANAGEMENT SYSTEM”**

Done by

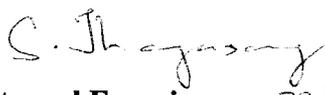
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**(REG. NO. 9937Q0008)**

Submitted in partial fulfillment of the requirements for the award of the degree of  
**M.Sc Applied Science (Computer Technology) of Bharathiar University.**

  
**Professor and Head** 23/4/20

  
**Internal Guide** 23/4/20

Submitted to University Examination held on -----

  
**Internal Examiner** 27/4/20

  
**External Examiner** 27/4/20

5<sup>th</sup> March 2001

To

*The Head of Department,  
Dept. of Computer Science and Engineering,  
Kumaraguru College of Technology,  
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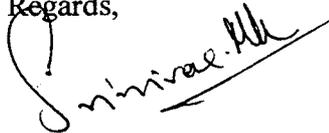
**TRIGYN**  
technologies

Subject: "Project completion Certificate"

This is to certify that Mr. P.Prabhu Reg. No. 9937Q0008, <sup>4<sup>th</sup></sup> Semester M.Sc. (C.T), Kumaraguru College of Technology, Coimbatore has satisfactorily carried out the project work titled "Performance Management System(PMS)" in our organization.

The dissertation entitled "Performance Management System (PMS)" can be submitted in partial fulfillment of the requirements for the award of the Degree of Master of Science in Applied Sciences (Computer Technology) of Bharathiar University, Coimbatore for the academic year 2000 -2001.

Regards,



Srinivas M.K  
Program Manager  
(External guide)

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# DECLARATION

*DECLARATION*

I hereby declare that the project entitled

**“PERFORMANCE MANAGEMENT SYSTEM”**

Submitted to **Bharathiar University** as the project work of **M.Sc Applied Science Computer Technology** Degree, is a record of original work done by me under the supervision and guidance of Mr. K.Srinidhi Project Leader Trigyn Technologies Bangalore and Mr.S.Thangasamy,B.E.,(Hons),PhD., **Head of the Department of Computer Science and Engineering, Kumaraguru College of Technology, Coimbatore** and this project work has not found the basis for the award of any Degree/Diploma/ Associate ship/Fellowship or similar title to any candidate of any university.



Place: *COIMBATORE*

Signature of the student

Date: *23-4-01*

Countersigned by



**(Internal Guide)**

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## ACKNOWLEDGEMENT

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I am thankful to all the people in Trigyn Technologies, Bangalore who gave me ideas in developing this project, guided me through out the project and put it to successful completion.

Its my great privilege and pleasure of mine to express my deep sense of gratitude to esteemed **Dr. K.K.Padmanaban B.Sc., (Engg), M.Tech., Ph.D.,** Principal, K.C.T allowing me to take on this project.

I express my deep sense of gratitude to for guiding me with his valuable and timely support and extended me through out the project, with his valuable guidance comments and through out my M.Sc Computer Technology course.

I reciprocate the kindness shown to me by my friends and family members, staff members of my department of Computer Science.

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# SYNOPSIS

## **SYNOPSIS**

PMS (Performance Management System) is an Intranet application developed for the HR department of Trigyn Technologies, Bangalore to evaluate performance of the employees. This application provides functionality for setting the objectives and competency levels of employees. Based on the set objectives and competencies, evaluation is made by the superior. This evaluation is done on quarterly, half-yearly and at the end of project bases. Once the project is over, overall evaluation is made and a development plan is drawn for each employee. Based on the final evaluation, annual appraisal and development plan performance of each employee is calculated.

This system was developed using J2EE technologies like jsp, Servlets.

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# INTRODUCTION

# 1. INTRODUCTION

## 1.1 Project Overview

PMS (Performance Management System) is an intranet application developed for the HR department to evaluate performance of the employees. This application provides functionalities for setting the objectives and competency levels of employees. Based on the set objectives and competencies, evaluation is made by the superior. This evaluation is done on quarterly, half-yearly and at the end of project bases. Once the project is over, overall evaluation is made and a development plan is drawn for each employee. Based on the final evaluation, development plan, annual appraisal performance of each employee is calculated.

This is an interactive application to calculate the performance of an employee to the maximum scale, from the available input parameters. Final performance rating is analyzed based on the reports produced after evaluation. The above flow is continued for each and every project. PMS is flexible to evaluate the performance of any organization structure that has superior subordinate relationships. PMS is developed using Java Technology. It is portable across various platforms and is easily scalable.

## 1.2 Organization profile

Trigyn Technologies is a global information technology solutions and services company specializing in the Telecom, eBusiness and Finance areas. They have over 700 software professionals on board at locations in India, the US, Europe and the Far East. They have development centers in New Jersey, Bangalore, and two centers in Mumbai.

Trigyn Technologies is listed on the NSE, BSE and Ahmedabad Stock Exchange, and is headed by Suresh Rajpal, President and Chief Executive Officer, who is acknowledged as a leader in the IT field. They offer breakthrough products and innovative services and solutions that enable and drive customer-centric convergence in enterprises.

### a. Convergent Commerce - Their core value propositions

Delivery of projects and services that enable and drive Convergent Commerce

Addressing the challenges of Financial services, Telecom industries and IT departments of enterprises by leveraging and applying them: Domain expertise  
Functional know-how

Their knowledge of specific technologies Building up a significant and skilled resource base to respond to the shortage of IT resources.

### b. Breakthrough products. Innovative services.

Their products and solutions include Apollo - a convergent billing system; eVector - a mobile enablement product; SavvyFusion - Trigyn's eCRM product; Akcelo - a component-based tool to accelerate eBusiness application development; Web solutions that include developing and optimizing Internet

strategy, developing infrastructure architecture, net branding, information and interface design, content management and graphic design; Professional services; I-Trade, I-Futures and the Global Financial Trading Suite.

c. Growing list of satisfied clients

Their client list reads like the “who’s who” of today’s industrial world. It includes companies like Hewlett Packard, Y-Axis, TWI Interactive, Charles Stanley, Nokia, Vodafone, Talkcast, Credit Suisse First Boston, Solomon Smith Barney, HSBC, Systemax... and many more.

***For more information about Trigyn Technologies, visit at:***

***<http://www.trigyn.com>***

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# SYSTEM STUDY AND ANALYSIS

## **2. SYSTEM STUDY AND ANALYSIS**

### **2.1 Existing system – limitations.**

The current system is a manual system. When a project is initiated, a project team is formed. The details of the team are entered in a form manually. Once the team is formed for a project, the project is divided into modules and the modules are assigned to the subordinates based on the know knowledge about them by their superior. After the end of the project, superior evaluates the subordinates based on their achievement of assigned goal.

The performance of the subordinates is evaluated to the knowledge of their superiors. The evaluated results are entered in a form manually and given to the HR department. HR department analyze the final evaluation made by the superiors and credit is given to the employees based on their performance.

Limitations in the existing system are

- a. Performance evaluation is not perfect
- b. Manual impact on the evaluation is more.
- c. History is not maintained in the current system, etc.

### **2.2 Proposed system**

The proposed system is an automated system with additional functionalities. When a project is initiated, a project team is formed, the details of the project team is recorded in a database to maintain the history. In the new system project is divided in to terms, for each term objectives are set by the

superior to each of his/her subordinates. If the subordinates agree with the objectives set to him/her the superior do evaluation at the end of each term. These evaluations are recorded in the database for each term. After the subordinates agree with the evaluation made by his/her superior for all the terms, final evaluation is made on each employee and these details are also recorded.

Final evaluation is followed by annual appraisal and construction of development plan. The details of development plan are maintained in the database for future evaluations. HR finally views the development plan, annual appraisal results and overall performance rating for each employee, to evaluate the exact performance rating of the employees. Assigning of sub goals to the subordinates and evaluating the performance of them based on thier achievement of the goals will make the performance evaluation perfect.

The advantages of the proposed PMS (Performance Management System) are

- a. Evaluation is perfect due to evaluation of sub goals.
- b. Proposed system can be much faster than the existing system.
- b. History is maintained for each and every employee for future evaluation, etc.

## **2.3 Requirements on new system.**

### **2.3.1 Scope:**

Since this is an online project the availability is high and wide range of coverage is possible and it is also user friendly.



## **2.3.2 Functional Requirements:**

### **2.3.2.1 Introduction:**

Initially the user is allowed to register themselves with the user id and the password if he is a registered user, else the user has to register him by filling the registration form. Once the registration is completed he is allowed to perform the required operations in the site. Modifications are done on the administration record based on the operations. The Administrator has his own internal operations in the system.

### **2.3.2.2 List of Inputs:**

There are three ways in which input is given to this system.

1. Administrator
2. Manager
3. User

#### **1. Administrator:**

He gives the inputs like

- To add or modifying the master tables.
- Assigning username and password.

#### **2. Manager:**

The manger gives the following inputs

- Set objectives and give his remarks
- Assign radding for each of his subordinates after analyzing

### **3. User:**

The user can give the following inputs

- He can give input to agree or disagree to the objective set and evaluation made by his superior.
- User name
- Password

### **2.3.2.3 Information Processing Required:**

Once the user logs in he is identified as a viewer or supervisor if the user is a supervisor he is allowed to set the objectives, competencies and projects for the employees working under him. If the user is a viewer he is allowed to view his objectives, competencies and projects set by his supervisor or head. Then he is allowed to agree or disagree the jobs goals assigned to him. Once the user agrees the statements by his head he is allowed to do the project and his performance is evaluated based on achievement of his goal. If the user disagrees he is assigned with different goals by his supervisor and the whole process continues.

### **2.3.3 Performance Requirements:**

#### **2.3.3.1 Security:**

Authorization and authentication of the user is done with the help of security measures available in jrun and Microsoft SQL server through login account. This login then has to be mapped to

SQL Server user account used to control activities performed in the database. Administration process is hidden from the user, and authorized administrator is allowed to access.

### **2.3.3.2 Hardware Limitations:**

To enhance the performance of the project the hardware requirement should not be less than

**Pentium III 800 MHz**

Intel 810 Chip set Mother Board.

128 MB SDRAM and 10 GB Hard Disk

Standard CD ROM and Floppy Drives.

### **2.3.3.3 External Interface Requirements:**

JDBC and Java Driver.

### **2.3.3.4 Hardware and Software interface with other systems**

A simple intranet connection provides interfaces with other systems using Windows NT platforms.

## **2.4 User characteristics.**

The user of PMS (Performance Management System) should have the basic knowledge about the computers. Users should know about the limitations of using the system. There are three types of users

### **1. Admin**

Admin can give the following inputs

- a. Inputs that is necessary to add and modify details in the database tables is given by the admin.

- b. He can give input to agree to performance rating and competencies rating.
- c. Inputs to produce various reports like HR report, event report, etc.

## **2. Managers**

Managers can give following list of reports

- a. He/She can set the objectives and competencies for their subordinates.
- b. Managers can evaluate the objectives and competencies by giving the rating to their achievements.
- c. He can give inputs for annual appraisal, construction of development plan.

## **3. Subordinates**

The subordinates can agree or disagree to the objectives and competencies set by his/her subordinates

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# PROGRAMMING ENVIRONMENT

### **3. PROGRAMMING ENVIRONMENT.**

#### **3.1 Hardware configuration.**

The module that is been allocated for my project needs hardware

Specifications that are as listed below:

Processor	:	Pentium III
Clock Speed	:	@500 MHz
Main Memory	:	128 MB
Cache	:	512 KB
Hard Disk	:	8.3 GB
Floppy Disk Drive	:	1.44 MB
CD-ROM Drive	:	32x-Creative
Display Type	:	SVGA Color Monitor.
Mouse	:	Microsoft Mouse.
Keyboard	:	104 Standard
Printer	:	Sharp Desk jet

#### **3.2 Description of software and tools used**

##### **3.2.1 Description of software**

Platform : Windows NT

Application Server : Jrun

Database : MS SQL-Server

Technologies Used : HTML, JSP, Servlets, Java and Graphics

Windows NT:

Windows NT is a network operating system with multi user, multitasking, multithreading operating system. It is secured enough to operate. The performance of Windows NT Workstation 4.0 makes it an ideal choice for today's businesses and organizations. The advanced security features of Windows NT Workstation 4.0 can be used in a variety of network environments.

Jrun:

It is helpful in securely designing and implementing any Web application, regardless of the platform. Allaire's JRun 3.0 boasts support for today's hottest server-side Java technologies such as EJB 1.1 and JMS 1.0, as well as easy installation and true clustering support in the Enterprise Edition. Moreover, although its tight integration with JRun Studio 3.0 prevents similar integration with other development environments.

MS-SQL-Server:

PMS (Performance Management System) uses Microsoft SQL-Server as a back end. This is relational database management system that helps to process the data without any redundancy. Version 7.0 was also constructed to provide more flexibility and

power, while at the same time retaining the ease of use that makes SQL Server a hit in shops that aren't blessed with strong DBA support.

#### HTML:

Hyper Text Markup Language is used to design static web pages. It follows a standard of SGML (Standard General Markup Language). Web pages that are developed using this language can be transferred across the net. HTML is understandable by all the existing browsers.

#### JSP:

Java Server Pages is used to develop dynamic web pages. These pages are used when the design of a web page is more than the functionalities it provide.

JavaServer Pages (JSP) technology allows web developers and designers to rapidly develop and easily maintain, information-rich, dynamic web pages that leverage existing business systems. As part of the Java family, JSP technology enables rapid development of web-based applications that are platform independent. Java Server Pages technology separates the user interface from content generation enabling designers to change the overall page layout without altering the underlying dynamic content.

Java Server Pages technology is an extension of the Java Servlet technology. Servlets are platform-independent, 100% pure Java server-side modules that fit seamlessly into a web server framework and can be used to extend the capabilities of a web server with minimal overhead, maintenance, and support. Unlike other scripting languages, servlets involve no platform-specific consideration or modifications; they are Java application components that are downloaded, on demand, to the part of the system that needs them. Together, JSP technology and servlets provide an attractive alternative to other types of dynamic web scripting/programming that offers platform independence, enhanced performance, separation of logic from display, ease of administration, extensibility into the enterprise and most importantly, ease of use.

### Servlets:

PMS (Performance Management System) also uses servlets to do back end process. Since the servlets are much useful in processing the information at the backend they are used in between the JSP and the database.

Java Servlet technology provides web developers with a simple, consistent mechanism for extending the functionality of a web server and for accessing existing business systems. A servlet can almost be thought of as an applet that runs on the server side --

without a face. Java servlets have made many web applications possible.

Servlets are the Java platform technology of choice for extending and enhancing web servers. Servlets provide a component-based, platform-independent method for building web-based applications, without the performance limitations of CGI programs. And unlike proprietary server extension mechanisms (such as the Netscape Server API or Apache modules), servlets are server- and platform-independent. This leaves you free to select a "best of breed" strategy for your servers, platforms, and tools.

Java:

Java is used in PMS. Since the codes written using java is portable across the platforms. Networking functionalities of java are more reliable and efficient to use.

### **3.2.2 Tools used:**

Edit Plus:

Edit Plus is a multi language editor which provides the program codes to be edited easily and efficiently. It avoid the use of multiple application to be opened at a time.

### Enterprise Manager:

Enterprise Manager for SQL-Server 7.0 is a front-end tool for editing the database and to write backend queries. It helps in visualizing the content of the database in a user-friendly mode.

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# SYSTEM DESIGN & DEVELOPMENT

## 4. SYSTEM DESIGN & DEVELOPMENT.

### 4.1 Input Design:

Input design is a part of overall system design that requires very careful attention and is the most expensive phase. It is point of most contact for the users with the computer system and so itself it is prone to error. If data going into the system is incorrect then processing and output will magnify these errors.

**Objective** during input design is as follows:

- Produce cost effective method input.
- High-level accuracy.
- Free of ambiguity.

Several **stages** of the input design are:

- Data Recording.
- Data verification.
- Transmitting data to the system.
- Data correction.

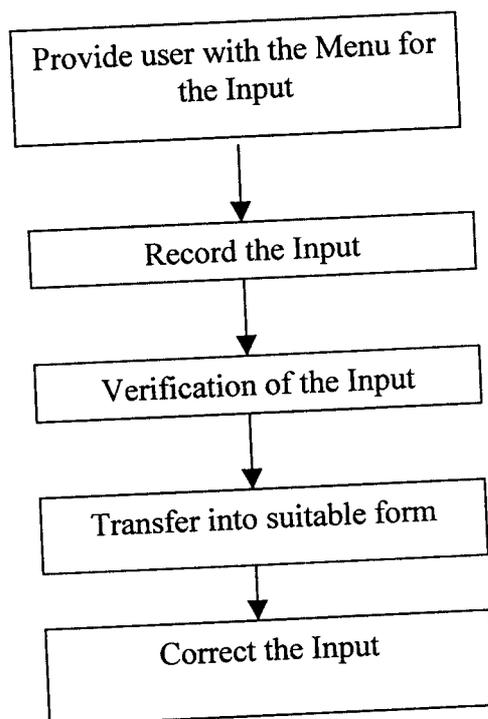
The input design involves converting originated inputs into a **system-based** format. The **aim** of input design is to make the **data entry easier, logical error free**. It helps to filter errors in the input data that otherwise entered into the database might have brought in a lot of inconsistency.

It involves procedures for capturing data, verifying it and then passing them on to the further processing. After choosing the input medium, attention is

given to the careful design of input stages for error handling and validation procedures. During application development, care has been taken to make the system extremely **user-friendly** and organize our screens such that the possibilities of making errors are minimized.

List of possible values, list box, check box, radio buttons etc. are all provided for selecting the inputs. This makes the system less prone to errors as the input texts are to be selected rather than to be type in by the users. Maximum care has been taken to ensure that users type in only minimum data into the system, and get more benefit out of that.

### **Diagram Representing The Input Design**



PMS (Performance Management System) accepts input in three ways

1. Admin
2. Managers

### 3. Subordinates

#### **Admin:**

The following are the inputs given by the administrator.

- a. Entering the data to be added in to the master table.
- b. Selecting the options to produce HR report, Event report, etc.
- c. Agreeing to the evaluation made on objectives and competencies.

#### **Managers:**

The following are the inputs given by the manager.

- a. Setting the objectives and competencies for their subordinates.
- b. Selecting the rating for their subordinates based upon their performance as either (EE+, EE, ME, BE, BE-) for objectives and levels 1-5 for competencies.
- c. He / she gives remarks during evaluation of objective setting and competency setting. Summary of discussion about his/her subordinates are also given during evaluation of objective settings.
- d. Selecting employees under them for annual appraisal and to construct development plan.

#### **Subordinates:**

The following are the inputs given by the subordinates.

- a. Agreeing or disagreeing to the objectives and competencies set by his/her manager and evaluation made on them.
- b. They are allowed to give remarks about the evaluation made by his/her manager

## 4.2 Output Design

An **inevitable activity** in the system design is the proper design of input and output in a form acceptable to the user. Outputs from the system are required primarily to communicate the result of processing to users. Outputs also provide a permanent copy of the results for later consultation. An intelligible output design will improve system relationships with the user and help in the **decision-making process**.

The various types of inputs required by most systems are:

### ❖ **External Outputs:**

Destination is outside the system and requires special attention. The external output from the PMS is vital because decision on an employee is made using this output only. These external outputs are the final output at the end of a chain process.

In PMS External outputs are given in the form of reports. There are three types of reports based on who is going to use these reports.

#### **1. Overall evaluation report**

There are two overall reports produced in this system in a printable format these reports are produced to evaluate the overall performance of employees.

These reports are finally directed to HR in other branches

##### a. Objectives report

This is a final evaluation report on set objectives for an employee in a particular project.

b. Competencies report

This is a final evaluation report on competencies for an employee in a particular project.

**2. Term wise report**

These reports are produced in the middle of the project for the manager to evaluate the proceedings of his/her subordinates. Term wise report is also produced for both objectives and competencies.

**3. Admin report:**

Admin is responsible for producing three reports; these reports consist of personal details of the employees

a. HR report

This report consists of the personal details of the employees, his history from the date of join.

b. Relative Ranking report

Relative ranking of all the employees based on their annual appraisal is produced.

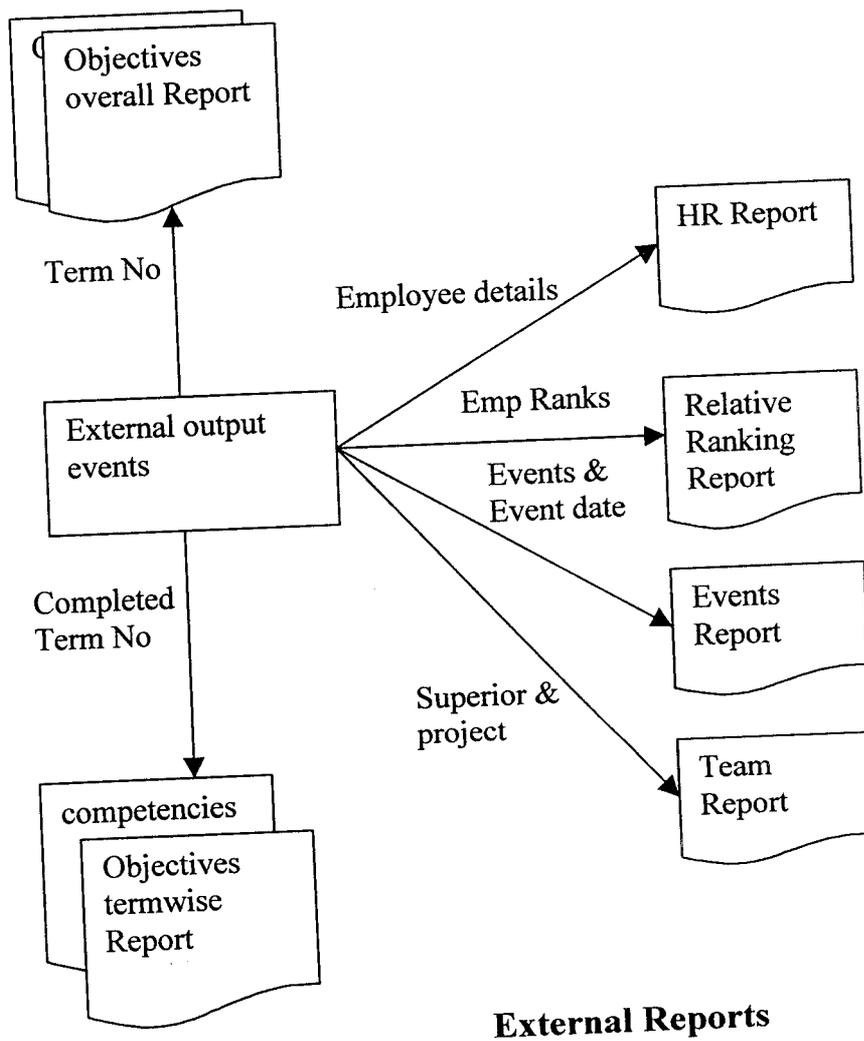
c. Events Report

Events occurred on a particular employee when he is in a particular project is tracked based on the date. Some of the events reports are

Joining event reports, resignation event report, confirmation event report,  
etc.

d. Team Report

During the project initiation a project team is formed. The details of project team with the relationship between the superior and the subordinates are listed using this report.



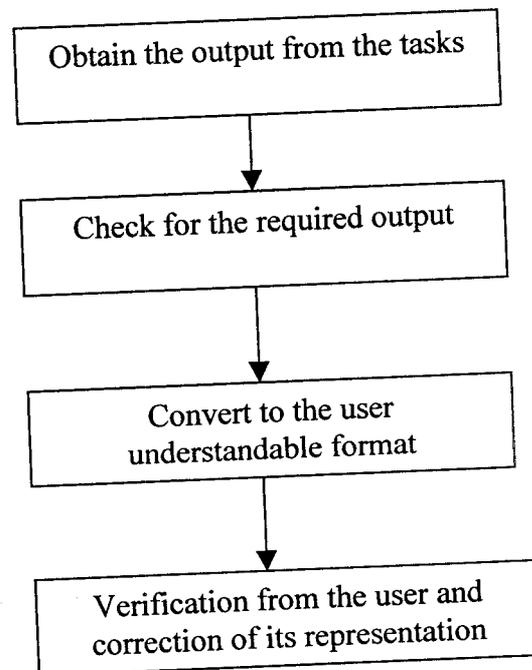
❖ **Internal Outputs:**

Destination is within the system and requires careful design. Here the output of one module of a process can be the input to other.

In PMS the output various modules is given as a input to the other modules. Set objectives are given as an input for evaluation; evaluated results are moved to annual appraisal, etc.

The approach to output design is very dependent on the type of output and the nature of data. Special attention has to be made to data editing. The choice Of output medium is also an important task.

**Diagram Representing The Output Design**



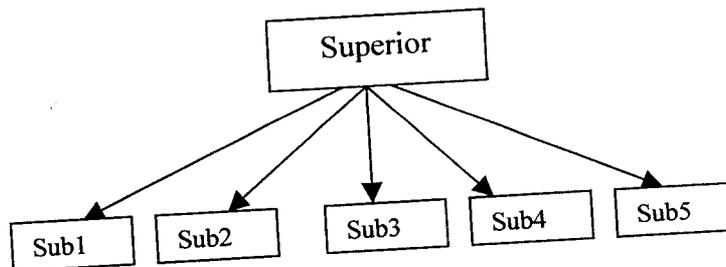
### 4.3 Process Design

Process design is an important design in the design phase. The entire process to be done is to be divided in such a way that it should be completed within the stipulated time given by the user. The response time of each and every process is to be clearly evaluated to match the requirements of customer. Based on the analysis of the existing system the entire system is divided in to following modules

- a. Project initiation
- b. Objective setting and evaluation
- c. Competency setting and evaluation
- d. Annual appraisal
- e. Construction of Development plan

#### **Project initiation:**

- a. Project is initiated by forming a project team.
- b. Building the relationship between the superiors and subordinates forms project team.



**Project Team Structure**

- c. Project end date and the evaluation period for this project is fixed.

## **Objective setting and evaluation:**

The of objective setting is divided into six separate processes

### a. Objective setting

The manager sets four objectives for the subordinates.

### b. Objective modification

The manager can modify the set objectives.

### c. Initial agree by the subordinates

The subordinates can either agree or disagree with the objectives set by his/her superior by giving yes / no.

### d. Objective evaluation

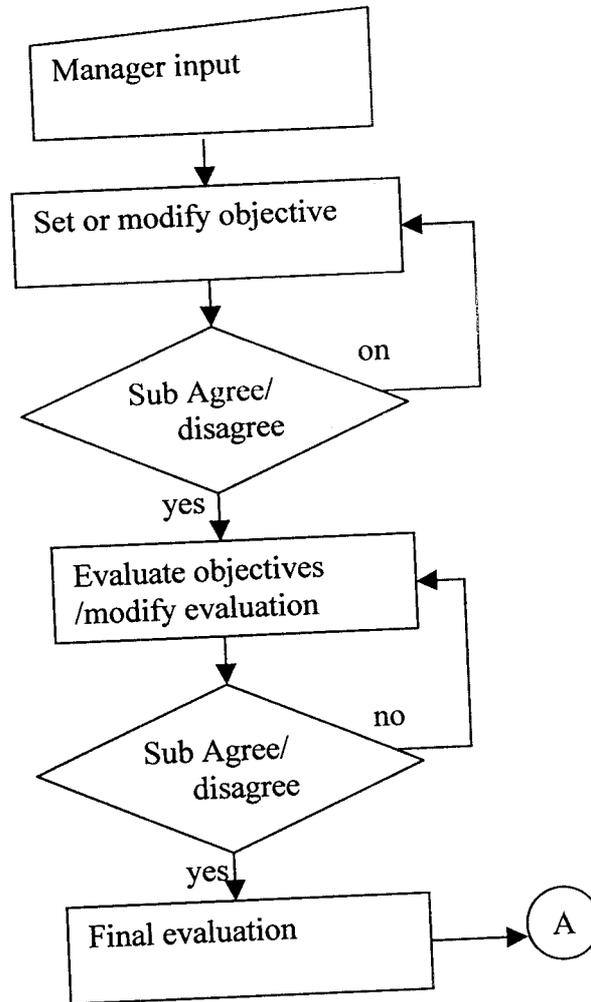
Once the subordinate agrees with the objectives. Evaluation is made for that term by giving the manager remarks for each objective. After manager remarks, evaluation rank is given to each objectives by the manager based on their achievement of goal by his subordinates. The evaluation rank is given either as Extraordinary (EE+), Exceeds Expectancy (EE), Meets Expectancy (ME), Below Expectancy (BE) and Much Below Expectancy (BE-). The manager gives Summary of discussion and overall ranking for that particular term.

### e. Modification of evaluation

Manager can modify the evaluation made by him/her.

f. Final agrees by the subordinates.

The subordinates are given the option to agree or to disagree to the objectives evaluation made by his/her superior. He/she is also allowed to give his/her own remarks on the evaluation made by his superior.



**Control Flow during objective setting**

## **Competency setting and evaluation:**

The of competency setting is divided into five separate processes

a. Competency setting

The manager sets the competencies for the subordinates. This includes giving the strengths and areas to develop for that employee.

b. Initial agree by the subordinates

The subordinates can either agree or disagree with the competencies set by his/her superior

c. Competency evaluation

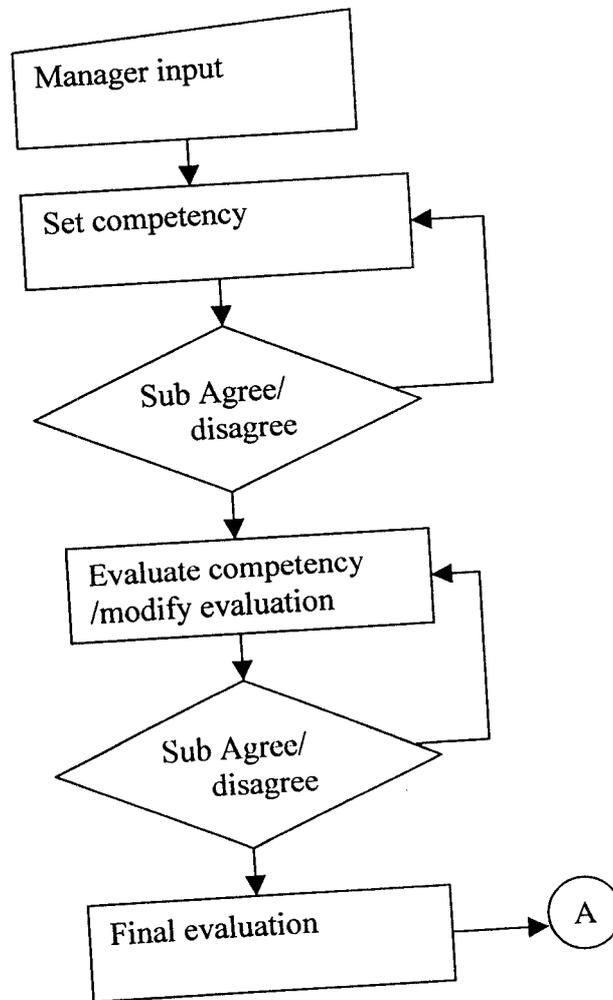
Once the subordinate agrees with the competencies, evaluation is made on him for that term by setting the competency levels. There are five competency levels 1-5 based on the performance achieved by the subordinates. The manager also gives his remarks for the evaluation.

e. Modification of evaluation

Manager can modify the evaluation made by him/her.

f. Final agrees by the subordinates.

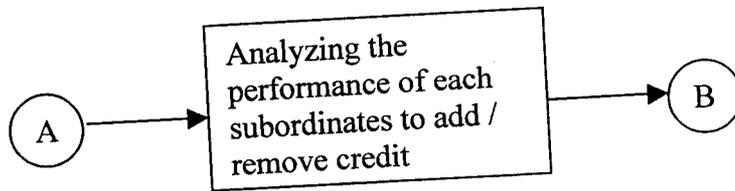
The subordinates are given the option to agree or to disagree to the competencies evaluation made by his/her superior. He/she is also allowed to give remarks based on the evaluation made by their superior.



### Control Flow during competency setting

#### Annual appraisal:

Annual appraisal is made for each employee after the final evaluation on him or her. Annual appraisal is done by taking the overall rating/ ranking of performance of the subordinates for each term and analyzing them. If the analyzing results in improvement of performance of subordinate, proper credit is given to him/her.



## Annual Appraisal after final evaluation

### Construction of development plan:

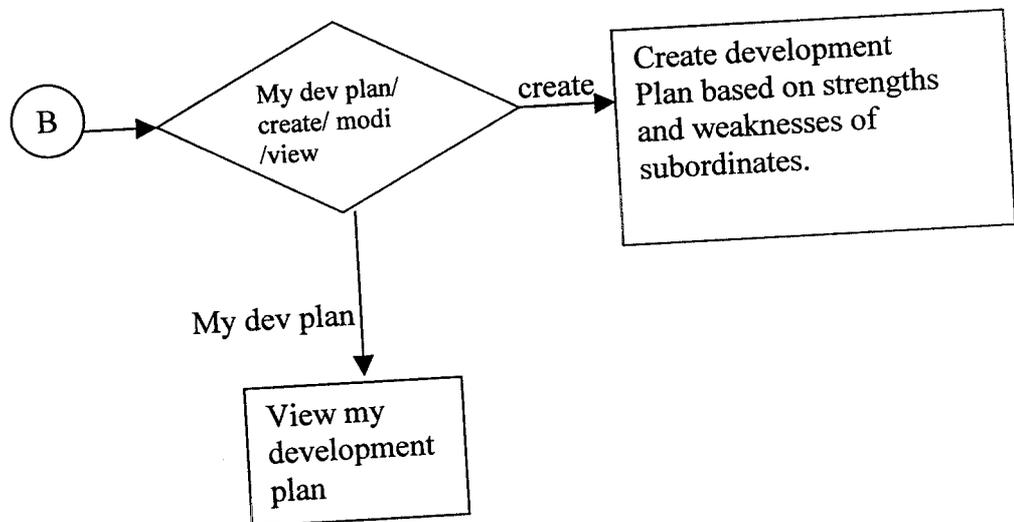
Development plan is divided into two parts

a. My development plan

An employee can view his own development plan set by his/her superior.

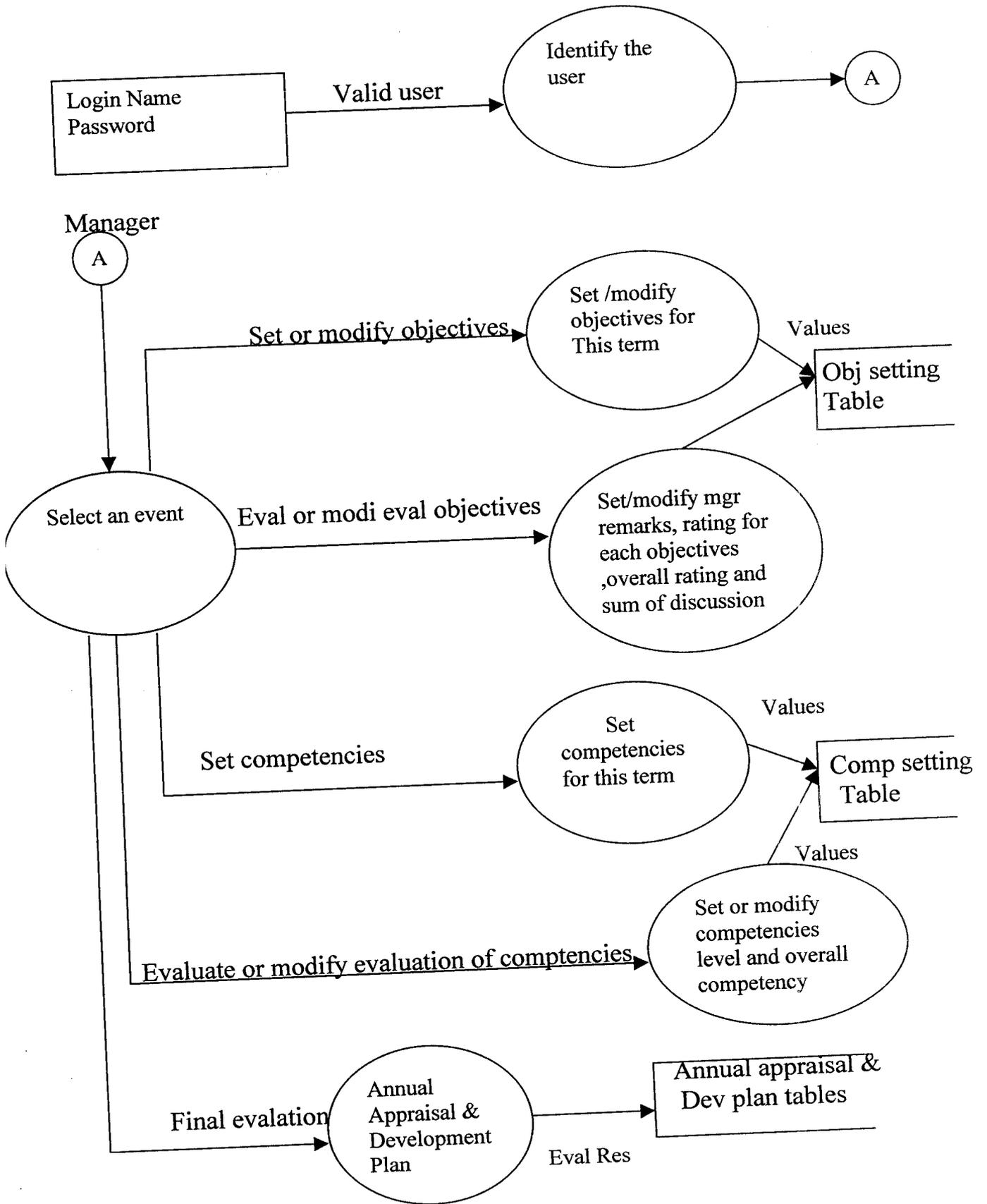
b. Create or view or modify development plan

The superiors create, view or modify the development plan for his subordinates. Analyzing the performance rating of the subordinates creates development plan. During the analyses of development plan strengths and weaknesses of the subordinates are drawn to specify the areas they improved, areas they still have to improve, etc.

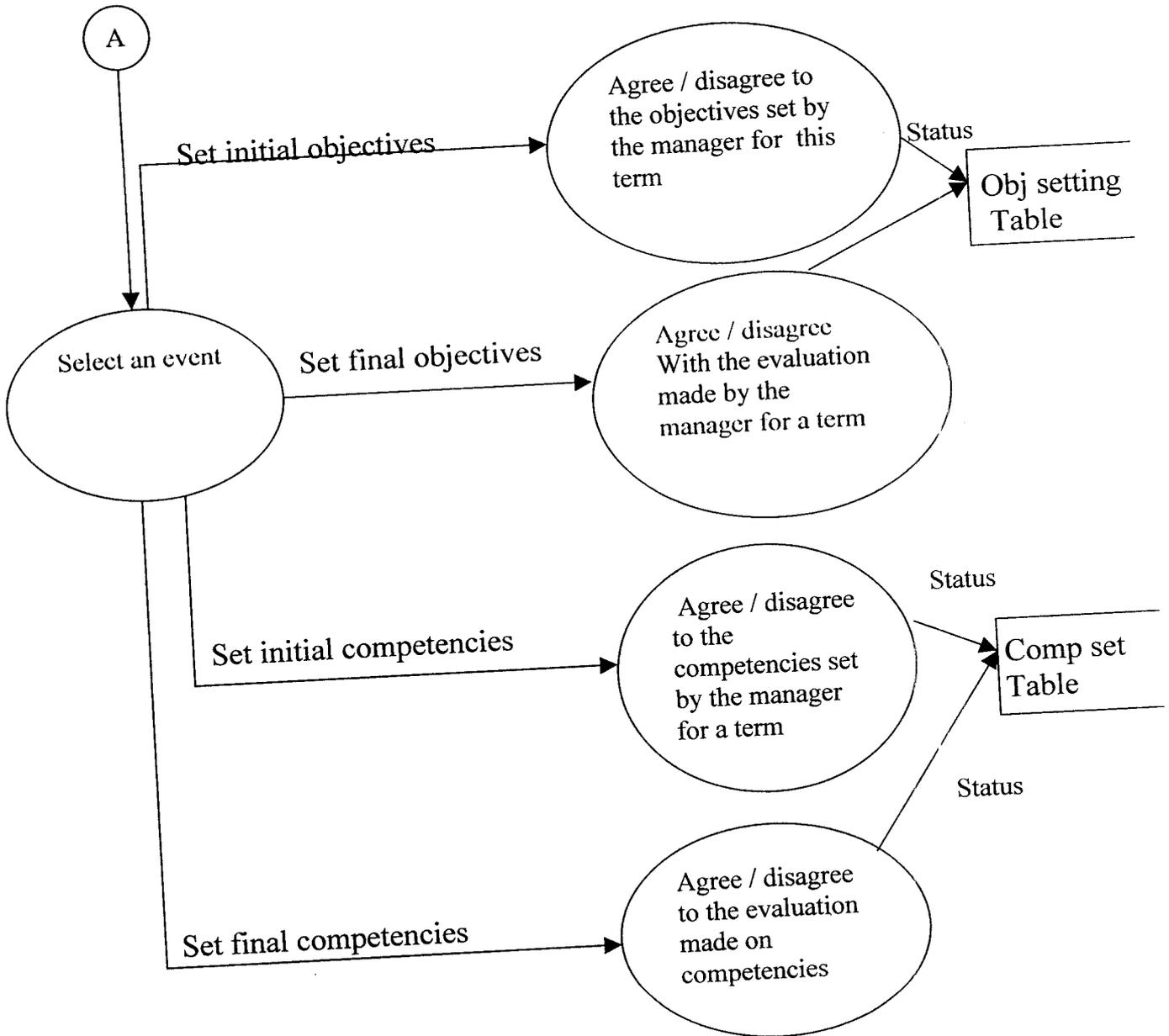


### Development plan process

## Data Flow Diagram



Subordinates



### 4.3 Database Design

Data in the PMS are normalized and stored in the tables of Microsoft SQL Server. Relations between the tables are drawn to maximize the data retrieval speed. The design of tables is as follows:

Table Name: Annual\_Appraisal

Description: This table contains the overall rating for an employee

Table Structure:

Column Name	Type	Length	Constraint
APP_KEY	Int	4	Not Null
EVENT_ID	Varchar	10	Not Null
EMP_CODE	Int	4	Not Null
APPRAISAL_DATE	Datetime	8	Not Null
OVR_PERF_EVAL_RATING	Varchar	5	Null
OVR_PERF_COMP_RATING	Varchar	5	Null
EMP_COMMENTS	Varchar	500	Null
REVIEWER_COMMENTS	Varchar	500	Null
MANAGER_CODE	Int	4	Null
APPRAISAL_HR_OK	Varchar	5	Null

Table Name: Billing Details

Description: Achievements details for billing is stored in this table

Table Structure:

Column Name	Type	Length	Constraint
PROJ_CODE	Varchar	25	Not Null
MILESTONE_CODE	Int	4	Not Null
TOTAL_CONTRACT	Int	4	Not Null
AMOUNT_MILESTONE	Datetime	8	Not Null
DATE_COMP_MILESTONE	Int	4	Not Null

Table Name: Competency\_Code\_Master

Description: Competency codes and levels are maintained in this table

Table Structure:

Column Name	Type	Length	Constraint
EMP_GRADE	Int	4	Not Null
EMP_ROLE	Int	4	Not Null
COMPETENCY_CODE	Int	4	Not Null
EXPECTED_LEVEL	Int	4	Not Null

Table Name: Competency Master

Description: This table maintains competency code and competency name.

Table Structure:

Column Name	Type	Length	Constraint
COMPETENCY_CODE	Int	4	Not Null
COMPETENCY_NAME	Varchar	100	Not Null

Table Name: Competency\_Setting

Description: Competency details and status of the evaluation is stored in this table

Table Structure:

Column Name	Type	Length	Constraint
COMP_KEY	Int	4	Not Null
EMP_CODE	Int	4	Not Null
PROJ_CODE	Varchar	50	Not Null
SUPERIOR_CODE	Int	4	Not Null
DATE_OF_SET	Datetime	8	Not Null
DATE_OF_EVAL	Datetime	8	Null
EVAL_AGREE	Int	4	Null
INIT_AGREE	Int	4	Null
DATE_OF_DISAGREE	Datetime	8	Null

SOD_STRENGTH	Varchar	500	Null
SOD_AREAS_TO_DEVELOP	Varchar	500	Null
OVERALL_RESULT	Varchar	5	Null
TERM_HR_OK	Int	4	Null
TERM_HR_OK	Varchar	500	Null
HR_PRJ_COMP_OK	Int	4	Null
SUPERIOR_OK	Int	4	Null
PROJ_TERM_COUNT	Int	4	Null

Table Name: Dept\_Master

Description: This table maintains the department code and name of the department.

Table Structure:

Column Name	Type	Length	Constraint
DEPT_CODE	Varchar	50	Not Null
DEPT_NAME	varchar	50	Not Null

Table Name: Desg\_Master

Description: This table stores the designation code and name.

Table Structure:

Column Name	Type	Length	Constraint
DESG_CODE	Int	4	Not Null
DESG_NAME	varchar	50	Not Null

Table Name: Det\_Competency

Description: This table is used to maintain the history of competency settings.

Table Structure:

Column Name	Type	Length	Constraint
COMP_KEY	Int	4	Not Null
COMP_CODE	Int	4	Not Null
LVL_SET_BY_HEAD	Int	4	Not Null
EMP_REMARKS	Varchar	500	Null
MANAGER_REMARKS	Varchar	500	Null

Table Name: Detailed\_Annual\_Appraisal

Description: Details

Table Structure:

Column Name	Type	Length	Constraint
APP_KEY	Int	4	Not Null
EVENT_ID	Varchar	10	Not Null
EMP_CODE	Int	4	Not Null
APPRAISAL_DATE	Datetime	8	Not Null
OVR_PERF_EVAL_RATING	Varchar	5	Null
OVR_PERF_COMP_RATING	Varchar	5	Null
EMP_COMMENTS	Varchar	500	Null
REVIEWER_COMMENTS	Varchar	500	Null
MANAGER_CODE	Int	4	Null
APPRAISAL HR OK	Varchar	5	Null

Table Name: Emp\_Dev\_Plan

Description: Details about the development process of an employee is stored in this table.

Table Structure:

Column Name	Type	Length	Constraint
EMP_CODE	Int	4	Not Null
MANAGER_CODE	Int	4	Null
AREA_TO_BUILD1	Varchar	500	Null
PLAN_TO_CAPITALISE1	Varchar	500	Null
SUPPORT_RQD_STRENGTH1	Varchar	500	Null
AREA_TO_BUILD2	Varchar	500	Null
PLAN_TO_CAPITALISE2	Varchar	500	Null
SUPPORT_RQD_STRENGTH2	Varchar	500	Null
AREA_TO_BUILD3	Varchar	500	Null
PLAN_TO_CAPITALISE3	Varchar	500	Null
SUPPORT_RQD_STRENGTH3	Varchar	500	Null
AREA_TO_DEVELOP1	Varchar	500	Null
PLAN_TO_IMPROVE1	Varchar	500	Null
SUPPORT_RQD_DEVELOP1	Varchar	500	Null
MENTOR_DEVELOP1	Varchar	500	Null
RESULTS_EXPD_DEV1	Varchar	500	Null
AREA_TO_DEVELOP2	Varchar	500	Null
PLAN_TO_IMPROVE2	Varchar	500	Null
SUPPORT_RQD_DEVELOP2	Varchar	500	Null
MENTOR_DEVELOP2	Varchar	500	Null
RESULTS_EXPD_DEV2	Varchar	500	Null
AREA_TO_DEVELOP3	Varchar	500	Null
PLAN_TO_IMPROVE3	Varchar	500	Null
SUPPORT_RQD_DEVELOP3	Varchar	500	Null
MENTOR_DEVELOP3	Varchar	500	Null
RESULTS_EXPD_DEV3	Varchar	500	Null
CAREER_OPTION1	Varchar	500	Null
PLAN_TO_REALIZE1	Varchar	500	Null
SUPPORT_RQD_ASPIRATIONS1	Varchar	500	Null
TIME_FRAME1	Varchar	500	Null
REVIEWER1	Varchar	500	Null
CAREER_OPTION2	Varchar	500	Null
PLAN_TO_REALIZE2	Varchar	500	Null
SUPPORT_RQD_ASPIRATIONS2	Varchar	500	Null
TIME_FRAME2	Varchar	500	Null
REVIEWER2	Varchar	500	Null
COMMITMENT1	Varchar	500	Null

COMMITMENT2	Varchar	500	Null
COMMITMENT3	Varchar	500	Null
DATE_OF_FILLING	DateTime	8	Not Null
EMP_OK	Int	4	Null

Table Name: Emp\_Event\_Action

Description: Various events and their date of occurrence is maintained to have a history.

Table Structure:

Column Name	Type	Length	Constraint
EVENT_ID	Varchar	10	Not Null
EMP_CODE	Int	4	Not Null
EMP_RESIGN_REASON	Varchar	100	Not Null
EMP_LAST_WORKING_DATE	Datetime	8	Null
EMP_PROMOTION_FROM_GRD	Varchar	50	Null
EMP_PROMOTION_TO_GRD	Varchar	50	Null
STOCKS_JOIN	Int	4	Null
NUM_ADDL_STOCKS	Int	4	Null
EMP_CTC	Int	4	Null
EVENT_DATE	Datetime	8	Not Null
RELATIVE_RANKING	Int	4	Null
EMP_STATUS	Varchar	5	Null
DEPUT_LOCATION	Int	4	Null
EMP_DESIGNATION	Int	4	Null

Table Name: Emp\_Master

Description: All the Personal and additional details of the employees are maintained in this table.

Table Structure:

Column Name	Type	Length	Constraint
EMP_CODE	Int	4	Not Null
COMPANY_CODE	Int	4	Not Null
EMP_GRADE	Int	4	Not Null
EMP_NAME	Varchar	50	Not Null
EMP_BU	Varchar	50	Null
EMP_EMAIL	Varchar	50	Null
EMP_JOIN_DATE	Datetime	8	Null
RELEVANT_EXP	Int	4	Null
CURRENT_EXP	Int	4	Null
EMP_PHONE_NO1	Varchar	50	Null
EMP_PHONE_NO2	Varchar	50	Null
EMP_DOB	DateTime	8	Not Null
EMP_PF_NUMBER	Varchar	50	Null
EMP_IT_NUMBER	Varchar	50	Null
EMP_BANK_ACCOUNT	Varchar	50	Null
PAYMENT_BY	Varchar	50	Null
BOND_EXPIRY_DATE	Datetime	8	Null
SETTLEMENT_DONE	Int	4	
EMP_PERMANENT_ADDR	Varchar	50	
EMP_PRESENT_ADDR	Varchar	50	
EMP_LOCATION	Int	4	
PROJ_ADMIN	Int	4	

Table Name: Emp\_Skills

Description: This table maintains the skill set of the employee for analyzing.

Table Structure:

Column Name	Type	Length	Constraint
EMP_CODE	Int	4	Not Null
QUALIFICATION1	Varchar	20	Null
YOP_Q1	Int	4	Null
QUALIFICATION2	Varchar	20	Null
YOP_Q2	Int	4	Null
QUALIFICATION3	Varchar	20	Null
YOP_Q3	Int	4	Null
OTHER_SKILLS	Varchar	100	Null

Table Name: Grade\_Master

Description: Grades available in the company and their descriptions are stored.

Table Structure:

Column Name	Type	Length	Constraint
EMP_GRADE	Int	4	Not Null
EMP_ROLE	Int	4	Not Null
GRADE DES	Varchar	16	Not Null

Table Name: Location\_Master

Description: Location details of all the employees is loaded in to this table.

Table Structure:

Column Name	Type	Length	Constraint
LOCATION_CODE	Int	4	Not Null
LOCATION_NAME	varchar	50	Not Null

Table Name: Proj\_Team

Description: The relationship between the superior and subordinates is established with the help of this table.

Table Structure:

Column Name	Type	Length	Constraint
EMP_CODE	Int	4	Not Null
PROJ_CODE	Varchar	25	Not Null
ROLE_CODE	Int	4	Not Null
EMP_SUPERIOR_CODE	Int	4	Null
OBJ_SET_STATUS	Int	4	Not Null
COMP_SET_STATUS	Int	4	Not Null
REVIEWER_CODE	Int	4	Not Null
EVAL_OBJ_SET_STATUS	Int	4	Not Null
EVAL_COMP_SET_STATUS	Int	4	Not Null
RESOURCE_COUNT	Int	4	Null

Table Name: Objective\_Setting

Description: Objectives to be set by the superior and remarks given by the superior and subordinate is stored in this table.

Table Structure:

Column Name	Type	Length	Constraint
EMP_CODE	Int	4	Not Null
PROJ_CODE	Varchar	25	Not Null
SUPERIOR_CODE	Int	4	Not Null
DATE_OF_SET	Datetime	8	Not Null
DATE_OF_EVAL	Datetime	8	Null
INIT_AGREE	Int	4	Not Null
DATE_OF_DISAGREE	Datetime	8	Null
DELIVERABLE1	Text	16	Null
M_OF_P1	Text	16	Null
DELIVERABLE2	Text	16	Null
M_OF_P2	Text	16	Null
DELIVERABLE3	Text	16	Null
M_OF_P3	Text	16	Null
DELIVERABLE4	Text	16	Null
M_OF_P4	Text	16	Null
EVAL_AGREE	Int	4	Null
EMP_REMARK1	Varchar	500	Null
EMP_REMARK2	Varchar	500	Null
EMP_REMARK3	Varchar	500	Null
EMP_REMARK4	Varchar	500	Null
MGR_REMARK1	Varchar	500	Null
MGR_REMARK2	Varchar	500	Null
MGR_REMARK3	Varchar	500	Null
MGR_REMARK4	Varchar	500	Null
RATING1	Varchar	3	Null
RATING2	Varchar	3	Null
RATING3	Varchar	3	Null
RATING4	Varchar	3	Null
OVERALL_RATING	Varchar	5	Null
SUMM_OF DISS	Varchar	500	Null
HR_PRJ_OBJ_OK	Int	4	Null
PROJ TERM COUNT	Int	4	Null

Table Name: Proj\_Master

Description: This table contains the details of various projects running in a concern.

Table Structure:

Column Name	Type	Length	Constraint
PROJ_CODE	Varchar	25	Not Null
PROJ_NAME	Varchar	50	Not Null
PROJ_MANAGER_CODE	Int	4	Not Null
PROJ_REVIEWER_CODE	Int	4	Not Null
PROJ_START_DATE	Datetime	8	Not Null
PROJ_END_DATE	Datetime	8	Not Null
PROJ_NO_RESOURCES	Int	4	Not Null
BILLABLE	Int	4	Not Null
CLIENT_NAME	Varchar	75	Not Null
CLIENT_ADDR1	Varchar	100	Null
CLIENT_ADDR2	Varchar	100	Null
CLIENT_PHONE1	Varchar	50	Null
CLIENT_PHONE2	Varchar	50	Null
CLIENT_FAX	Varchar	50	Null
CLIENT_CONTACT_PERSON	Varchar	50	Null
CLIENT_EMAIL_ID	Varchar	50	Null
ENV_FRONT_END	Varchar	50	Null
ENV_BACK_END	varchar	50	Null
ENV_OS	Varchar	50	Null
LAST_EVAL_DATE	Datetime	8	Null
EVAL_TERM	Int	4	Not Null

Table Name: Role\_Master

Description: Possible Roles are assigned to Role codes with the help of this table.

Table Structure:

Column Name	Type	Length	Constraint
ROLE_CODE	Int	4	Not Null
ROLE_DESC	Varcha r	50	Not Null

---

# SYSTEM IMPLEMENTATION & TESTING

## **5. System Implementation & Testing**

### **5.1 System Implementation**

A crucial phase in the system development is the successful implementation of the new system. Implementation is the process of converting a new system design into an operational one. This involves creating computer compatible files to store the data, converting the data flow diagrams into coding and documentation.

Implementation is the stage of the project when the theoretical design is turned into a working system. At this stage the main workload, the upheaval and the major impact on the existing practice shifts to the user department. If the implementation stage is not carefully planned and controlled, it can cause chaos. Thus it can be considered to be most crucial stage in achieving a new successful system and in giving the users confidence that the new system will work and be effective. Implementation involves careful planning, investigation of the current system and its constraints on implementation, design of the methods to achieve the changeover, training of staff in the changeover procedures and evaluation of changeover methods. The first task is implementation planning, i.e., deciding on the methods and time scale to be adopted.

Once the planning has been completed, the major effort in computer department is to ensure that the programs in the system are working properly. At the same time the user department must concentrate on training user staff. When the staff has been trained, a full system test can be carried out, involving both the computer and clerical procedures. Education involves creating the right

atmosphere and motivating the user. Staff education section should encourage participation from all sides.

The PMS (performance Management System) analysis and design is converted into implementation with the help of language coding conventions Like java, jsp, Servlets etc. The depth of implementation is found out with the help of output from the implemented software. The main source for testing its accuracy is with the help of testing methodologies. This implementation is followed by maintenance.

## **5.2 System Testing**

Software testing is a critical element of software quality assurance and represents the ultimate review of specification, design and coding. Testing is a process of executing a program with the intent of finding an error.

PMS (Performance Management System) is tested thoroughly by

- a. Unit testing
- b. Integration testing
- c. Stress testing
- d. Validation testing

### **Unit testing:**

Each and every module implemented is thoroughly tested. In this testing each module of PMS( Performance Management System) is tested completely for interface, local data structures, boundary conditions, independent paths, error handling paths.

The following things are also tested

1. Improper or inconsistent typing

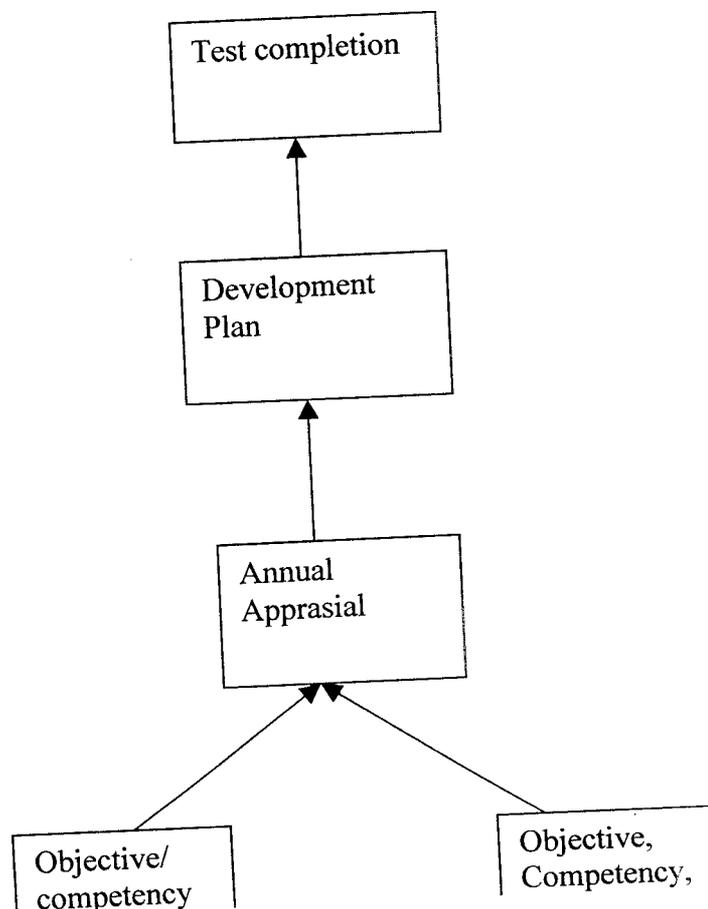
2. Erroneous initialization or default values
3. Incorrect variable names
4. Inconsistent data type
5. Underflow, overflow, and addressing exceptions.

The null pointer exception and number format exceptions are encountered and they are corrected.

### **Integration Testing:**

PMS (Performance Management System) is subjected to integration testing. Each and every module of PMS after unit testing is integrated and tested for correctness. Integrating step by step each modules and then testing does integration testing. Here In PMS bottom up integration is followed.

#### **Integration testing for PMS**



function for navigation through the system is also done under the suggestion of the few people.

During integration session tracking problem was encountered and tracking through interfaces of each module rectifies the problem.

### **Stress testing:**

PMS is tested with stress data the result of the test is good. The results from the test case match the requirement given by the customer. The stress test is conducted with different test cases to evaluate the performance of the system.

### **Validation testing:**

Validation succeeds when software functions in a manner that can be reasonably expected by the customer. Validation for PMS is achieved through a series of black box tests that demonstrate conformity with requirements.

## **5.3 Refinements Made On Feedback:**

The feedback from the operators of the system and all visitors of the PMS (Performance Management System) is of great importance since it is they who ultimately going to use the system. This particular system site that has been developed has a large user base that are well educated and are capable of recommending valuable suggestions. A positive approach was made to all the suggestions made by the technical and non-technical reviews of our project. All the valid suggestions were taken into account and solutions were made found for them. The reasons for discarding the other recommendations were properly examined. Some of the recommendations, which were catered, are examined below.

Some of the feedback is about the look and feel of the system. Look and feel of the system is changed soon after suggestion is given. Additional helper

---

## CONCLUSION & SCOPE FOR FUTURE DEVELOPMENT

## **VI. Conclusion**

The Performance Management System (PMS) is successfully designed and developed at Trigyn Technologies, Bangalore. The system has been automated the evaluation of the employees by HR department. This software developed for particular need of the company is found to work effectively and efficiently.

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## BIBLIOGRAPHY

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# APPENDICES

**APPENDIX A**

**SCREENS**



- Masters
- Performance Rating
- Competency Rating
- Annual Appraisal
- Reports
- Home
- Log out

### EMPLOYEE INFORMATION

Employee Code*	<input type="text"/>	Employee Name*	<input type="text"/>
Join Date*	<input type="text" value="mm"/> <input type="text" value="dd"/> <input type="text" value="yyyy"/>	Grade*	<input type="text" value="1"/>
Date of Birth*	<input type="text" value="mm"/> <input type="text" value="dd"/> <input type="text" value="yyyy"/>	Department*	<input type="text" value="aaaa"/>
Company Code	<input type="text"/>	Location*	<input type="text" value="Bangalore"/>
Proj. Admin*	<input type="text" value="No"/>	Settlement Done	<input type="text" value="No"/>
Bound Expiry Date*	<input type="text" value="Apr"/> <input type="text" value="1"/> <input type="text" value="2000"/>	E-mail*	<input type="text" value="@trigyn.com"/>
Permanent Address	<input type="text"/>	Present Address	<input type="text"/>
Phone Number	<input type="text"/>	Addl. Phone	<input type="text"/>
Qualification1	<input type="text"/>	YOP1	<input type="text"/>
Qualification2	<input type="text"/>	YOP2	<input type="text"/>
Qualification3	<input type="text"/>	YOP3	<input type="text"/>



- Masters
- Performance Rating
- Competency Rating
- Annual Appraisal
- Reports
- [Home](#)
- [Log out](#)

### GRADE MASTER

Select the Grade which has to be modified in the Grade Master :

Type a Grade No. to be added to the Grade Master :

Select a Title to this Grade :

Type a Description to this Grade :

#### Choose the competencies to this grade :

- |   |  |   |
|---|--|---|
| <input type="checkbox"/> Ability to brief Creative team                 | <input type="checkbox"/> Accountability              | <input type="checkbox"/> Adaptability                           |
| <input type="checkbox"/> Analytical Skills                              | <input type="checkbox"/> Audio Skills                | <input type="checkbox"/> Awareness of Promotional Methodologies |
| <input type="checkbox"/> Browsing Skills                                | <input type="checkbox"/> Business Understanding      | <input type="checkbox"/> Cascading Style Sheets                 |
| <input type="checkbox"/> Coaching                                       | <input type="checkbox"/> Coding/Unit Testing         | <input type="checkbox"/> Color Understanding                    |
| <input type="checkbox"/> Communication Skills                           | <input type="checkbox"/> Conceptualization           | <input type="checkbox"/> Copywriting                            |
| <input type="checkbox"/> Creativity                                     | <input type="checkbox"/> Cross Browser Compatibility | <input type="checkbox"/> Customer Orientation                   |
| <input type="checkbox"/> Decision Making                                | <input type="checkbox"/> Delegation                  | <input type="checkbox"/> Documentation                          |
| <input type="checkbox"/> Domain Expertise                               | <input type="checkbox"/> Editing                     | <input type="checkbox"/> Effective Communication                |
| <input type="checkbox"/> Graphic Designing                              | <input type="checkbox"/> Handling Feedback           | <input type="checkbox"/> HTML Programming                       |
| <input type="checkbox"/> Image creation & Editing/ Animation/ Photoshop | <input type="checkbox"/> Image Optimization          | <input type="checkbox"/> Influence                              |
| <input type="checkbox"/> Initiative                                     | <input type="checkbox"/> Integrating with ASP/ JSP   | <input type="checkbox"/> Internet Savvy                         |



Masters

Performance Rating

Competency Rating

Annual Appraisal

Reports

[Home](#)

[Log out](#)

## ROLE MASTER

**Please select the Roles which you want to modify in the Roles Master**

- |  |   |   |
|--|---|---|
| <input type="radio"/> Admin Manager                      | <input type="radio"/> amit kathuria           | <input type="radio"/> Analyst Programmer                  |
| <input type="radio"/> another test                       | <input type="radio"/> Associate-Accounts Tech | <input type="radio"/> Brand Lead                          |
| <input type="radio"/> Brand Manager                      | <input type="radio"/> Brand Researcher test   | <input type="radio"/> Brand SpecialistChg                 |
| <input type="radio"/> Brand Strategist                   | <input type="radio"/> Brand Strategist        | <input type="radio"/> BU Head Tech.                       |
| <input type="radio"/> CEO                                | <input type="radio"/> Chief Financial Officer | <input type="radio"/> Consultant                          |
| <input type="radio"/> Content Co-ordinator1              | <input type="radio"/> Content Editor          | <input type="radio"/> Content Writer                      |
| <input type="radio"/> Copy writer                        | <input type="radio"/> Copy writer             | <input type="radio"/> Creative content writer             |
| <input type="radio"/> Creative Head                      | <input type="radio"/> Design Engineer         | <input type="radio"/> Domain Analyst                      |
| <input type="radio"/> Editor Test                        | <input type="radio"/> Eng Test                | <input type="radio"/> Engineer                            |
| <input type="radio"/> Executive - Staffing               | <input type="radio"/> Executive Assistant     | <input type="radio"/> Executive Assistant                 |
| <input type="radio"/> Finance Controller                 | <input type="radio"/> GM-Sales                | <input type="radio"/> Graphic Designer testing            |
| <input type="radio"/> HR Manager                         | <input type="radio"/> HTML Coordinator        | <input type="radio"/> HTML Programmer                     |
| <input type="radio"/> Lead-Content management            | <input type="radio"/> Lead-Content Manager    | <input type="radio"/> Lead-Content Manager                |
| <input type="radio"/> Manager Finance                    | <input type="radio"/> modified role           | <input type="radio"/> Network Administrator               |
| <input type="radio"/> new role                           | <input type="radio"/> New Role                | <input type="radio"/> new role1                           |
| <input type="radio"/> New Role123                        | <input type="radio"/> new test                | <input type="radio"/> new test123                         |
| <input type="radio"/> New1234                            | <input type="radio"/> null test11             | <input type="radio"/> null123                             |
| <input type="radio"/> People Development Specialist engg | <input type="radio"/> Practice Manager        | <input type="radio"/> Project Administration Co-ordinator |
| <input type="radio"/> Project Co-ordinator               | <input type="radio"/> Project Consultant      | <input type="radio"/> Project Leader                      |
| <input type="radio"/> Project Manager                    | <input type="radio"/> Resource Executive      | <input type="radio"/> Resource Manager                    |
| <input type="radio"/> Resource Manager                   | <input type="radio"/> Senior Design Engineer  | <input type="radio"/> Software Engineer                   |



**PMS**

Project Initiation

Project Modification

Objectives

Competency

Annual Appraisal

Employee Development plan

Print

Reports

Modify Password

Sign Out

**Home**

**Log out**

**Performance Management System**

Dear Srinidhi.K,

Welcome to the Employee Home Page

The objectives and competencies of the following have to be set:

**Objectives:**

Resource Name	Project
Vanishree RV	test
Vanishree RV	do it
Vanishree RV	test faiz
Vanishree RV	intranet

**Competencies:**

Resource Name	Project
Vanishree RV	test
Vanishree RV	do it
Vanishree RV	test faiz
Suneeth.Rao	EVALTEST
avinash.kv	EVALTEST
Vanishree RV	intranet



**PMS**

- Project Initiation
- Project Modification
- Objectives
- Competency
- Annual Appraisal
- Employee Development plan
- Print
- Reports
- Modify Password
- Sign Out

**Home**

**Log out**

**Project Initiation**

Project Code\*  Project Name\*

Start Date\*    End Date\*

Project Appraisal Term\*

Client's Name\*  Contact Person

Phone 1  Phone 2

E-mail Address  Fax

Address 1\*  Address 2

Is the project billable?\*

*\* Mandatory Fields*



- PMS**
- Project Initiation
- Project Modification
- Objectives
- Competency
- Annual Appraisal
- Employee Development plan
- Print
- Reports
- Modify Password
- Sign Out
- Home**
- Log out**

### Project Modification

Project Name: do it

Project Owner: Display name here.

**Delete the project**

**Modify Project Details**

Change the Organization Structure:

**Replace**      **Add**      **Release**

Reporting Officer	Resource	Role
---	Srinidhi.K	Project Manager
Srinidhi.K	Vanishree RV	Software Engineer



**PMS**

Project Initiation

Project Modification

Objectives

Competency

Annual Appraisal

Employee Development plan

Print

Reports

Modify Password

Sign Out

**Home**

**Log out**

**Modify team member's evaluation**

Select a team member

**Submit**



- PMS**
- Project Initiation
- Project Modification
- Objectives
- Competency
- Annual Appraisal
- Employee Development plan
- Print
- Reports
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- Sign Out
- Home**
- Log out**

### Objective Setting and Evaluation

Name : Srinidhi.K  
Business Unit : EBU  
Project Name : demo\_pms  
Project Term : 1  
Objective 1  
Objective 2  
Objective 3  
Objective 4

**Objective 1**

Deliverables	▲
null	▼
Measures of performance	▲
null	▼
Employee remarks	▲
To be filled later	▼



- PMS**
- Project Initiation
- Project Modification
- Objectives
- Competency
- Annual Appraisal
- Employee Development plan
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- Log out**

### Annual Appraisal

Select an employee to perform annual appraisal

No annual appraisals are due

Select an employee to view previous appraisals



**PMS**

Project Initiation

Project Modification

Objectives

Competency

Annual Appraisal

Employee Development plan

Print

Reports

Modify Password

Sign Out

**Home**

**Log out**

### View Employee Annual Appraisal

Employee Name Ananda K S

Employee No 171155

Appraisal done on (yyyy/mm/dd) 2000-02-03

Summary of Performance Evaluation

Summary of Competency Evaluation

Employee Comments no comments

Reviewer Comments no comments

**Back**



Masters

Performance Rating

Competency Rating

Annual Appraisal

Reports

Home

Log out

### REPORTS

<input type="checkbox"/> Employee Number	306
<input type="checkbox"/> Employee Name	ABCDEFGH
<input type="checkbox"/> Date of Joining	> Mon Jan DD 1 mm 1998
<input type="checkbox"/> Qualification	ME
<input type="checkbox"/> Year of Passing	1950
<input type="checkbox"/> Years of Experience	1
<input type="checkbox"/> Department	Activites
<input type="checkbox"/> Grade	> 1
<input type="checkbox"/> Salary	> 0
<input type="checkbox"/> Date of Birth	> Mon Jan DD 1 mm 1950
<input type="checkbox"/> Location	Bangalore
<input type="checkbox"/> Designation	Admin Manager
<input type="checkbox"/> Last Appraisal Date	> Mon Jan DD 1 mm 1998
<input type="checkbox"/> Last Promotion Date	> Mon Jan DD 1 mm 1998

**Report**

Today's Date(dd/mm/yy): 01.Apr.01  
Report for **Employee Id = 307**  
**Employee Name = 'Prabhu'**

**Employee Qualification = 'ME'**  
**Employee Grade >9**

**No records found**

Note: Printing in Landscape mode is recommended



Masters

Performance Rating

Competency Rating

Annual Appraisal

Reports

Home

Log out

### EVENT REPORTS

Select the event for which you desire to have a report

Joining

Select an employee/all employees for which you desire to have a report for a particular event

avinash kv

From Jan 4 2000 To Jan 5 2001

OK

Selected Event : Joining

Employee Code	Employee Name	Employee CTC	Date Of Joining	Location	Designation
171170	avinash.kv	123456	2000-12-19	Bangalore	Software Engineer

Note: Printing in Landscape mode is recommended

Print Report

Go Back

**Objective Setting and Evaluation**

Name **Vanishree RV** Superior Name **Srinidhi.K** Project **demo\_pms**  
 Business Unit **EBU** Date of Set **03/28/2001** Term **2**

Please indicate not more than 4 objectives against which performance on the project/assignment will be measured.

Serial No	Deliverables	Measure of Performance	Actual result		Overall Rating EE+/EE/ME/BE/BE-
			Employee's Remarks	Manager's Remarks	
1	Deliverables	Measures of performance			
2	Deliverables	Measures of performance			
3	Deliverables	Measures of performance			
4	Deliverables	Measures of performance			
Summary of Discussion		null			
EE=Exceeds expectations ME=Meets Expectations BE=Below Expectations					

## Reports

Project Name : test faiz

Employee Name : Vanishree RV

Term : 1

Competency Name	Expected Level	Level Set	Employee Remarks	Manager Remarks
-----------------	----------------	-----------	------------------	-----------------

### Summary Of Discussions

Strengths	Areas To Develop	Manager Recommendations
null	null	null

Print Report

Go Back

**Note:** Printing in Landscape mode is recommended

## Relative Ranking Report

Selected Year :2000

Total Count:3

Relative Ranking	Number of Results	Percentage
1	1	33
3	2	66

## **APPENDIX B**

# **Software Requirements Specification**

## **B. System Requirement Specification**

### **1. Introduction:**

#### **1.1 Purpose:**

The main purpose of the SRS is to specify the requirements and functions of the proposed system. It is provided to the client to whom the project is to be developed. It meets the mutual agreement between the user and the developer.

#### **1.2 Scope:**

Since this is an online project the availability is high and wide range of coverage is possible and it is also user friendly.

#### **1.3 Abbreviation**

1. JSP- Java Server Pages.
2. RMI-Remote Method Invocation.
3. HTTP-Hyper Text Transfer Protocol.
4. HTML-Hyper Text Markup Language.
5. DSN- Data Source Name.
6. PMS-Performance Management System

#### **1.4 Overview:**

Overview of this SRS is to define the requirements of the PMA (Performance Management System). This SRS includes the software and tools required to develop PMS. The functionality need to be developed based on the

request of the users. It also includes constraints in the development of this system. Clear analysis of the performance of the system based on the requirement of the user is also gathered to achieve that performance in the new system.

## **2. General Description:**

### **2.1 Product Perspective:**

This application maintains the objectives and competency levels of the employees working in an organization. This is also developed to maintain the history of evaluation results of various levels of the employees. This system is different from other system in a way that it evaluates the employees. This system evaluates each sub goal achieved by the employee during his project.

### **2.2 Product Functions:**

It provides functions like project initiation, project modification, setting initial objectives, modifying initial objectives, setting up competencies, modifying competencies, viewing the objectives and competencies, annual appraisal and construction of development plan for each employees.

### **2.3 User Characteristics:**

Mostly the users of this system should have a basic knowledge about computers. They should be clear about the constraints of the system and efficiently they can use the system.

### **2.4 General Constraints:**

Time Constraint –To complete the project within April 15<sup>th</sup>.

### 3. Specific Requirements:

#### 3.1 Functional Requirements:

##### 3.1.1 Introduction:

The functional requirements of the system highlight the following areas **Input requirements**, that is both, the data being used in the system as well as the control options given to the user.

**Information processing requirements** which highlights all the computation that is done on the data.

##### 3.1.2 List of Inputs:

There are three ways in which input is given to this system.

i. Administrator

ii. Manager

iii. User

i. Administrator:

He gives the inputs

1. To add or modifying the master tables.

2. Assigning username and password.

ii. Manager

The manager gives the following inputs

1. Set objectives and give his remarks

2. Assign rating for each of his subordinates after analyzing

iii. User:

The user can give the following inputs

1. He can give input to agree or disagree to the objective set and evaluation made by his superior.
2. User name
3. Password

### **3.1.3 Information Processing Required:**

Once the user logs in, he is identified as a subordinate or supervisor. If the user is a supervisor, he is allowed to set the objectives, competencies and projects for the employees working under him. If the user is a subordinate he is allowed to view his objectives, competencies and projects set by his supervisor or head. Then he is allowed to agree or disagree the jobs goals assigned to him. Once the user agrees the statements by his head he is allowed to do the project and his performance is evaluated based on achievement of his goal. If the user disagrees his supervisor assigns him with different goals and the whole process continues.

## **3.2 Performance Requirements:**

### **3.2.1 Security:**

Authorization and authentication of the user is done with the help of security measures available in jrun and Microsoft SQL server through

login account. This login then has to be mapped to SQL Server user account used to control activities performed in the database. Administration process is hidden from the user, and authorized administrator is allowed to access.

### **3.2.2 Availability:**

This system availability is the probability that a program is operating to requirements at a given point of time and is given by

$$\text{Availability} = \text{MTTF} / (\text{MTTF} + \text{MTTR}) * 100\%$$

MTTF: Mean Time To Failure

MTTR: Mean Time To Repair

### **3.2.3 Capacity:**

Capacity scales up to 100 concurrent users and also depends on the server.

### **3.2.4 Response Time:**

Response time targeted is 8 to 15 seconds, it is based on the network traffic.

## **3.3 Design Constraints:**

### **3.3.1 Standards Compliance:**

Coding standards of sun java language is followed throughout the system. The Software design standards of IEEE are followed.

### **3.3.2 Hardware Limitations:**

To enhance the performance of the project the hardware requirement should not be less than

**Pentium III 800 MHz**

Intel 810 Chip set Mother Board.

128 MB SDRAM and 10 GB Hard Disk

Standard CD ROM and Floppy Drives.

### **3.3.3 External Interface Requirements:**

JDBC and Java Driver.

### **3.3.4 Hardware and Software interface with other systems**

A simple intranet connection provides interfaces with other systems using windows NT platforms.

## **3.4 Other Requirements:**

### **3.4.1 Operations required by the user:**

A simple registration with the user name and password after entering into the site.

radiation that is passed through various planes of the physical object , to calculate the rough two dimensional cross-sections of the interior of the object.

By using a series of such measurements at various heights the system is capable of generating a rough three-dimensional image of the object along with an approximation of its internal densities. Various operations like rotation and slicing can be performed on this reconstructed image.

The current project has focused on developing a general purpose system which can be extended to more specialised applications. One application currently being explored has been explained in “Future Developments” section.

## **1.2 ORGANIZATION PROFILE.:**

The Tata Institute of Fundamental Research is one of the country’s premier research institutes in the field of natural, mathematical and computer science. The Radio Astronomy Centre, Ooty, is a part of the National Centre for Radio Astrophysics – a centre of the School of Natural Sciences of the Tata Institute of Fundamental Research. TIFR is a part of the Department of Atomic Energy, Government of India.

The Radio Astronomy Centre is responsible for the Ooty Radio Telescope (ORT), an off-axis parabolic cylinder 530 m long and 30 m wide operating at a nominal frequency of 326.5 MHz with a maximum bandwidth of 15 MHz at the front-end. The unique feature of