

INTRODUCTION

An employee performance appraisal, also known as a "performance review," is a process used by organizations to give employees feedback on their job performance and formally document that performance. Formalized performance evaluation permits an orderly and rational way of determining promotion, salary increase, transfers, training needs, potential retrenchment, retirement, reassignment, termination of appointment etc.

Generally, the aims of a performance evaluation and management systems are to: • Give feedback on performance to employees,

- Identify employee training needs.
- Document criteria used to allocate organizational rewards.
- Form a basis for personnel decisions: salary increases, promotions, disciplinary actions, etc.
- Provide the opportunity for organizational diagnosis and development.
- Facilitate communication between employee and administration.
- Validate selection techniques and human resource policies to meet Federal Equal Employment Opportunity requirements.

PROBLEM STATEMENT

Managing Human Resources in today's dynamic environment is becoming more and more complex as well as important. People are now being recognized as a valuable resource in an organization. More now than ever, the inability of organizations to implement an effective performance appraisal strategy has hindered them from achieving competitive advantage. Objectivity and fairness are hindered, as many times, appraisal processes are not systematic and regular and are often affected by personal influences occasioned by organizations preoccupation. This hinders the overall performance of individuals; hence a 360 degrees' appraisal system should be put in place whereby everybody is involved in the appraisal process and the average are also considered. Organizations should start giving more importance to evaluation of their employees and accept that training needs can only be identified from performance appraisal outcomes.

SOLUTION

With the right kind of performance evaluation system, industrial needs can be fulfilled, and staff appraisal carried out in organizations for administration, informative and motivational purposes. Formalized performance evaluation permits an orderly and rational way of determining promotion, salary increase, transfers, training needs, potentials, retrenchment, reassignment, termination of appointment, etc.

The Employee Performance Evaluation System is a simple project that can help a certain company evaluate the performance of their employees based on their task accomplishments. This system has 3 types of users which are the Admin, Employee, and Evaluator. The Admin Side is the system user that in-charge of managing the important data of the system such as the department, designation, employee list, and list of evaluators. The admin has access to all the data stored and the database. The Employee side is the system users that can only access the tasks where they are assigned and submit their progress. The submitted progress of the employee in each task will be the reference of the evaluators on how they will rate the employees. The Evaluator side is the system user side that evaluates the performance of the employees' every task. They will evaluate the employees by their efficiency, timeliness, quality, and employees' accuracy to accomplish a certain task.

This Performance Appraisal System will serve to be a more strategic approach to integrating HR activities and business policies and may be seen as a generic term covering a variety of activities through which organizations seek to assess employees and develop their competence, enhance performance, and distribute rewards. Thus, both practice and research can be made to move away from a narrow focus on psychometric and evaluation issues to developmental performance appraisal, which may be defined as any effort concerned with enriching attitudes, experiences and skills that improves the effectiveness of employees. Individual contribution and performance is tracked against organizational goals and individual opportunities and strength is assessed for future improvements. Only when individuals are continuously appraised and evaluated can organizational performance and its resultant efficiency and effectiveness be achieved.

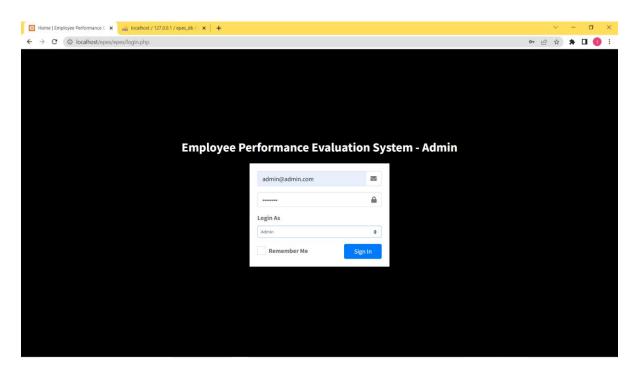
TOOLS USED

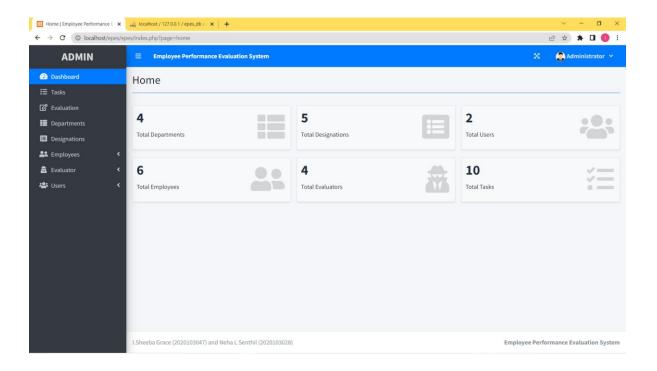
- For front-end design: -
 - > HTML
 - > CSS
 - JavaScript(jQuery/Ajax)
 - **Bootstrap**
- For backend design: -
 - > PHP
 - ➤ MySQLi

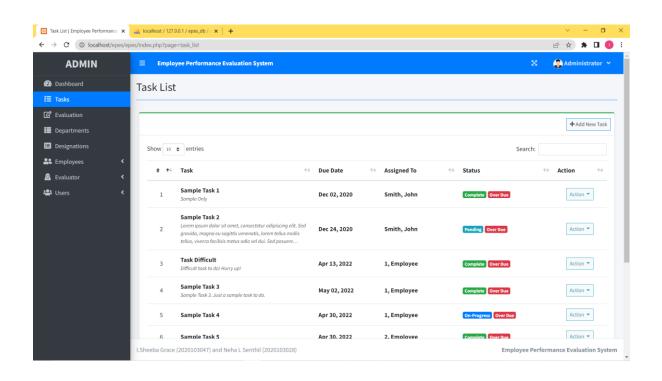
Working:

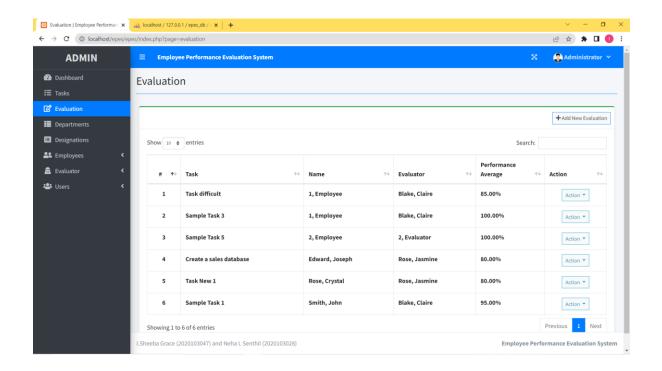
Administrator Login:

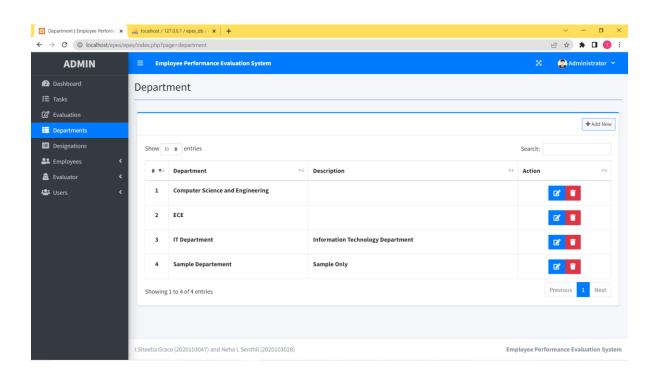
The administrator can add employees, evaluators, departments, designations, and assign tasks and evaluators to employees.

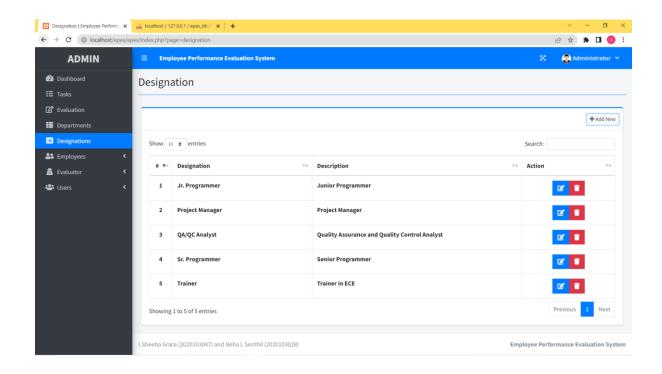


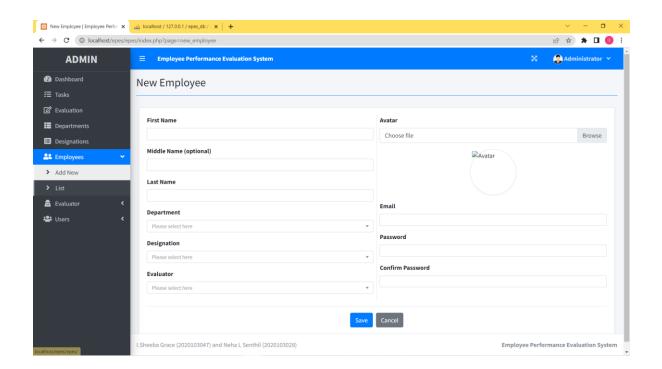


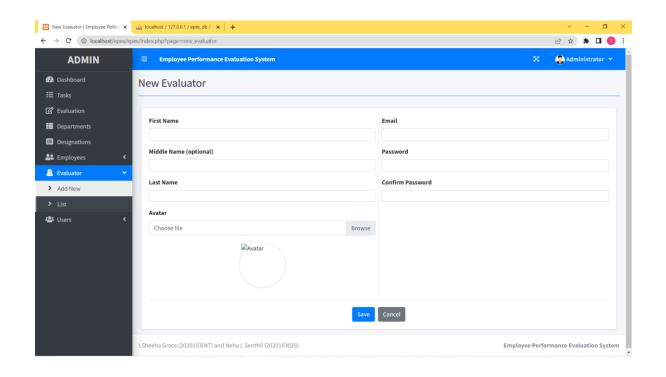


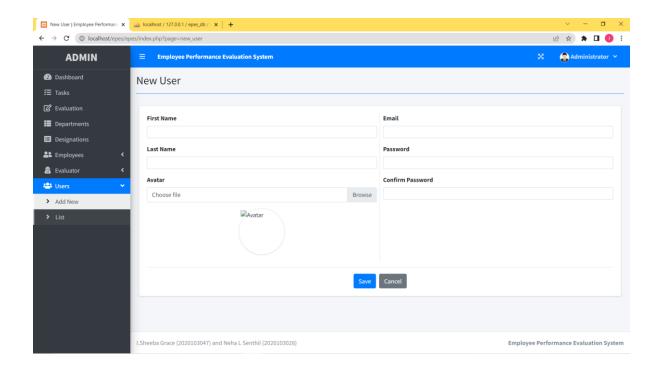






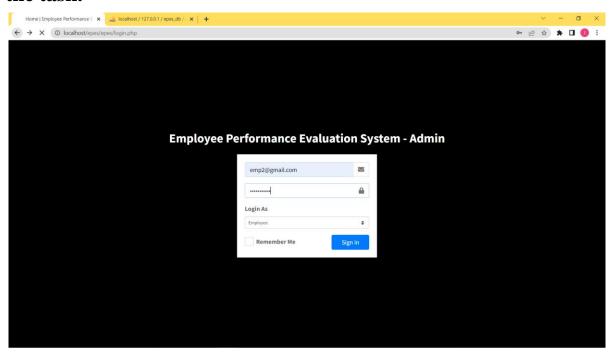


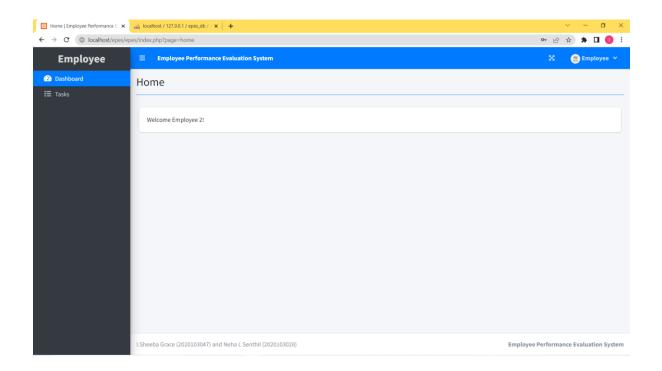


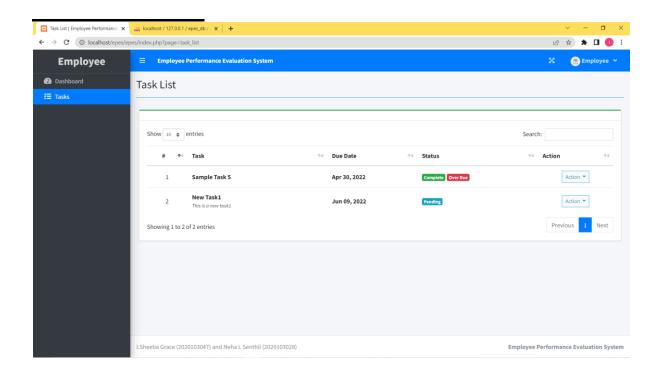


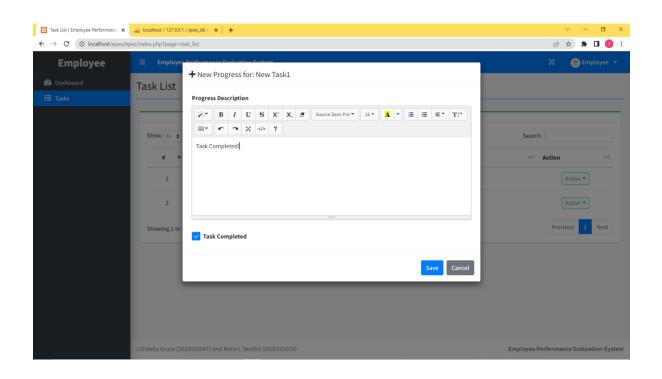
Employee Login:

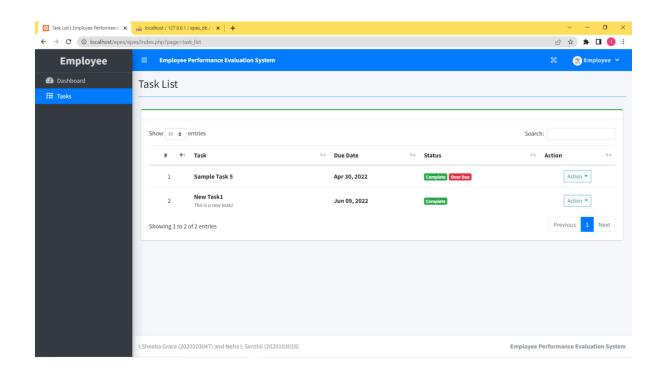
The employee can view tasks assigned to him and can update his progress. He can also update his status to complete if he finishes the task.





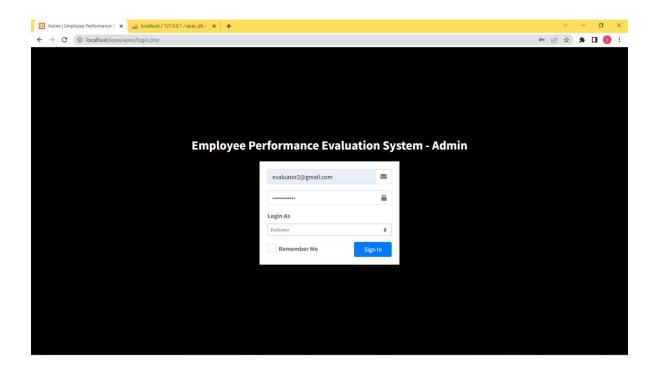


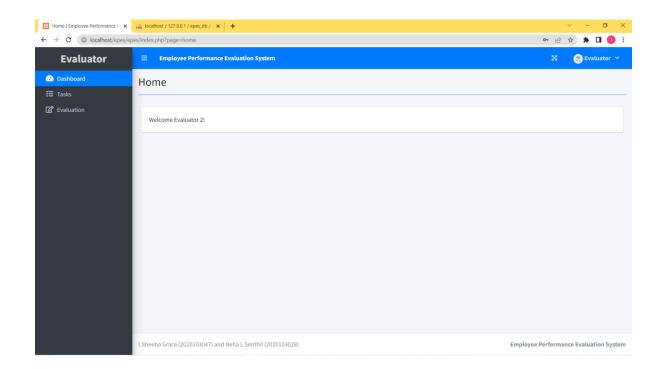


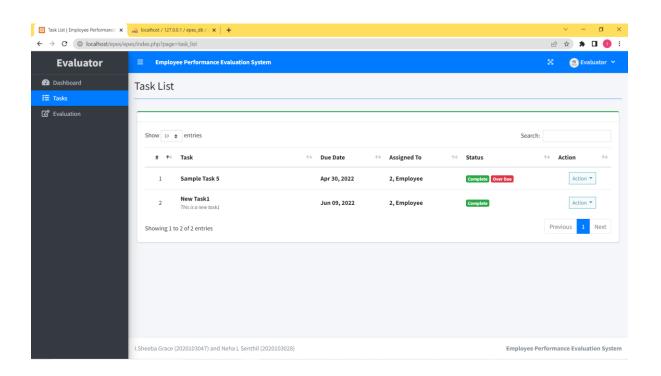


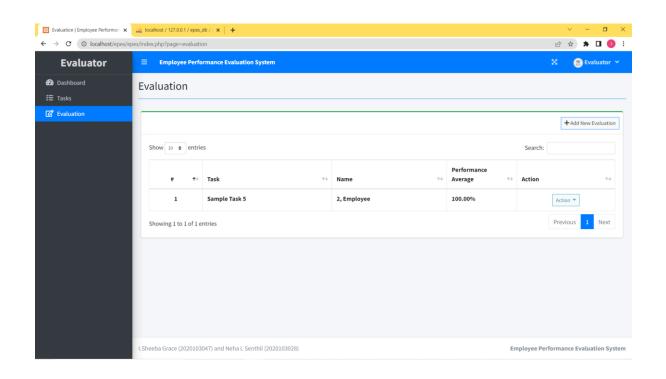
Evaluator Login:

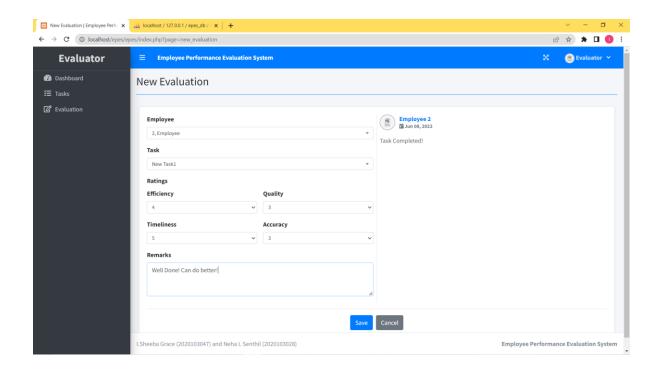
The evaluator can evaluate an employee by viewing the employee's task based on efficiency, quality, timeliness and accuracy by grading on a scale of 5. The overall performance average of the employee is then calculated and displayed in percentage by taking the average of the gradings.

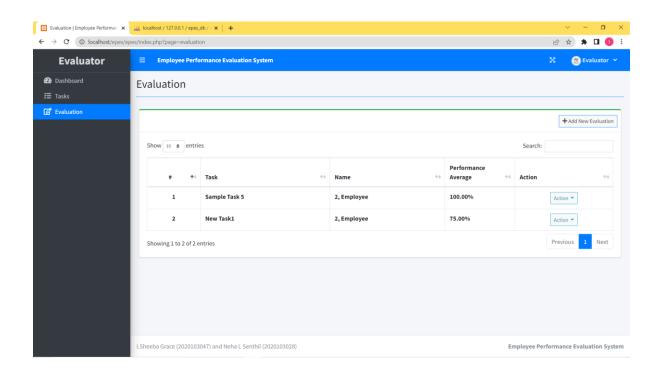


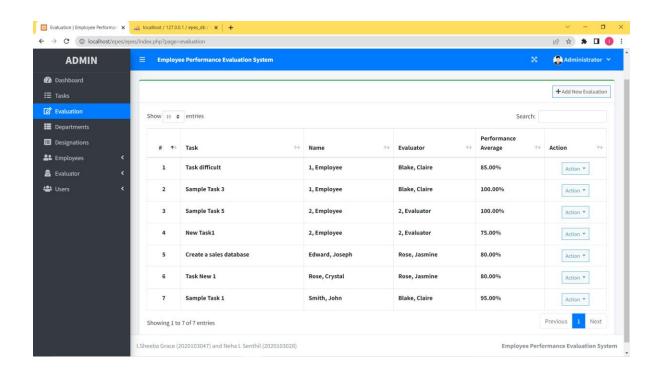












Database Features:

- Incorporation of
 - > Primary Keys, Foreign Keys and Integrity Constraints, and Triggers:

```
CREATE TABLE 'department list' (
  'id' int(30) NOT NULL PRIMARY KEY AUTO INCREMENT,
  'department' varchar(200) NOT NULL,
'description' varchar(1000) NOT NULL
);
CREATE TABLE 'designation list' (
  'id' int(30) NOT NULL PRIMARY KEY AUTO INCREMENT,
  'designation' varchar(200) NOT NULL,
  'description' varchar(1000) NOT NULL
);
CREATE TABLE 'employee list' (
 'employee_id' int(30) NOT NULL PRIMARY KEY AUTO_INCREMENT,
 `firstname` varchar(200) NOT NULL,
 `middlename` varchar(200) NOT NULL,
 `lastname` varchar(200) NOT NULL,
 'email' varchar(200) NOT NULL,
 `phone_no` varchar(20) DEFAULT '',
 'password' text NOT NULL,
 `department id` int(30) NOT NULL,
 'designation id' int(30) NOT NULL,
 `salary` int(10) NOT NULL,
 'avatar' text DEFAULT NULL,
  'date created' datetime NOT NULL DEFAULT current timestamp(),
 FOREIGN KEY ('department_id') REFERENCES 'department_list'('id'),
 FOREIGN KEY ('designation id') REFERENCES 'designation list'('id')
) ENGINE=INNODB;
```

```
CREATE TABLE 'evaluator list' (
  'evaluator id' int(30) NOT NULL PRIMARY KEY AUTO INCREMENT,
  `firstname` varchar(200) NOT NULL,
  'middlename' varchar(200) NOT NULL,
  `lastname` varchar(200) NOT NULL,
  'email' varchar(200) NOT NULL,
  `phone_no` varchar(30) NOT NULL,
  'password' text NOT NULL,
  'avatar' text DEFAULT NULL,
  'date created' datetime NOT NULL DEFAULT current timestamp()
) ENGINE=INNODB;
CREATE TABLE 'system_settings' (
  'id' int(30) NOT NULL PRIMARY KEY AUTO INCREMENT,
  'name' text NOT NULL,
  'email' varchar(200) NOT NULL,
  `contact` varchar(20) NOT NULL,
  'address' text NOT NULL,
  'cover img' text DEFAULT NULL
) ENGINE=INNODB;
CREATE TABLE 'task list' (
 `task_id` int(30) NOT NULL PRIMARY KEY AUTO_INCREMENT,
 'task' varchar(200) NOT NULL,
 'description' text NOT NULL,
 'employee_id' int(30) NOT NULL,
 `due_date` date NOT NULL,
 `status` int(1) NOT NULL DEFAULT 0 COMMENT '0=pending, 1=in-progress,2=Completed after Deadline,3=Completed',
  'date_created' datetime NOT NULL DEFAULT current_timestamp(),
 FOREIGN KEY ('employee_id') REFERENCES 'employee_list'('employee_id'),
 CONSTRAINT `check_status` CHECK (`status`>=0 && `status`<=3)</pre>
) ENGINE=INNODB;
```

```
CREATE TABLE 'ratings' (
  'id' int(30) NOT NULL PRIMARY KEY AUTO INCREMENT,
  'employee id' int(30) NOT NULL,
  `task id` int(30) NOT NULL,
  'evaluator_id' int(30) NOT NULL,
  `efficiency` int(11) DEFAULT NULL,
  `timeliness` int(11) DEFAULT NULL,
  'quality' int(11) DEFAULT NULL,
  `accuracy` int(11) DEFAULT NULL,
  'remarks' text DEFAULT NULL,
  `average` int(11),
  'date_created' datetime NOT NULL DEFAULT current_timestamp(),
  FOREIGN KEY ('employee id') REFERENCES 'employee list'('employee id'),
  FOREIGN KEY ('evaluator_id') REFERENCES 'evaluator_list'('evaluator_id'),
  FOREIGN KEY ('task_id') REFERENCES 'task_list'('task_id')
) ENGINE=INNODB;
CREATE TABLE 'users' (
  'id' int(30) NOT NULL PRIMARY KEY AUTO INCREMENT,
  'firstname' varchar(200) NOT NULL,
  `lastname` varchar(200) NOT NULL,
  'email' varchar(200) NOT NULL,
  'password' text NOT NULL,
  'avatar' text DEFAULT NULL,
  'date_created' datetime NOT NULL DEFAULT current_timestamp()
) ENGINE=INNODB;
```

```
CREATE TABLE 'task_progress' (
  'id' int(30) NOT NULL PRIMARY KEY AUTO INCREMENT,
  'task id' int(30) NOT NULL,
  'progress' text NOT NULL,
  'is_complete' tinyint(1) NOT NULL DEFAULT 0 COMMENT '0=no,1=Yes',
  'date_created' datetime NOT NULL DEFAULT current_timestamp(),
  FOREIGN KEY ('task id') REFERENCES 'task list' ('task id') ON DELETE CASCADE,
  CONSTRAINT 'validate_is_comp' CHECK ('is_complete'>=0 && 'is_complete'<=1)
) ENGINE=InnoDB;
   Triggers:
 CREATE TRIGGER 'process_ins' AFTER INSERT ON 'task_progress' FOR EACH ROW
 BEGIN
     SET @CHECK_DUE_DATE=(SELECT 'due_date' from 'task_list' where 'task_id'=NEW.'task_id');
     IF NEW. is complete = 0 THEN
         UPDATE `task_list` SET `status`=1 WHERE `task_id`=NEW.`task_id`;
     ELSE
         IF NOW()>@CHECK_DUE_DATE THEN
            UPDATE 'task list' SET 'status' = 2 WHERE 'task id' = NEW. 'task id';
         ELSE
            UPDATE 'task list' SET 'status'=3 WHERE 'task id'=NEW.'task id';
         END IF;
     END IF;
 END //
 DELIMITER //
```

On insertion of records into the task_process table, the task being worked on is set to 1 (signifying in progress) if not complete yet. If is_complete has been set to 1, then the due_date is compared to current date and depending on if it is greater than the due_date or not, status is set to 2 or 3 respectively.

```
CREATE TRIGGER `process_del` AFTER DELETE ON `task_progress` FOR EACH ROW

BEGIN

SET @any_left=(SELECT count(*) from `task_list` where `task_id`=OLD.`task_id`);

IF @any_left = 0 THEN

UPDATE `task_list` SET `status`=0 WHERE `task_id`=OLD.`task_id`;

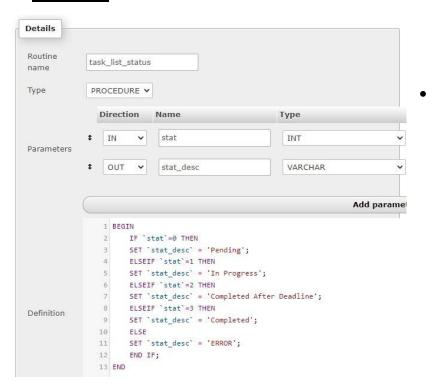
END IF;

END //
```

After deletion of records it checks if all progress has been deleted. If it has, then status is set back to 0 (pending) and task is set to not completed

On updation of records in the task_process table, the task being worked on is set to 1 (signifying in progress) if not complete yet. If is_complete has been set to 1, then the due_date is compared to current date and depending on if it is greater than the due_date or not, status is set to 2 or 3 respectively.

> Procedure:



Procedure checks status and outputs a description of the status based on the value

• Examples of Some Complex SQL Queries

Complex query for selecting distinct employees to add to evaluation:

\$employees = \$conn->query("SELECT DISTINCT concat(e.lastname,', ',e.firstname,' ',e.middlename) as name FROM task_list t,employee_list e where e.employee_id=t.employee_id and t.task_id in (select distinct task_id from task_list where status=3 or status=4) and task_id not in (select distinct task_id from ratings) order by concat(lastname,',',firstname,'',middlename) asc");

Complex query in which \$where is predefined in php to select tasks assigned to the employee currently logged in:

\$qry = \$conn->query("SELECT t.*,concat(e.lastname,',',e.firstname,'',e.middlename) as name FROM task_list t inner join employee_list e on e.employee_id = t.employee_id \$where order by unix_timestamp(t.date_created) asc");

FINAL OUTPUT

A user-friendly interface which improves the performance of the company by increasing employee engagement and providing opportunities for improvement and evaluation of goals.

SCOPE

- The general objective of this system is to design and implement an employee performance evaluation and management system for companies to evaluate their employees effectively and affordably.
- It is useful in Human Resource Departments in Organizations.

Provides Performance Feedback

Performance appraisal helps managers in providing feedback about performance to its employees. Feedback enables employees to avoid their mistakes and improve their productivity. Employees are interested in knowing the result of their performance. They feel satisfied and happy by knowing it. It motivates them to perform better in the future to get better pay. Through performance appraisal, managers can evaluate the employee's performance and deliver their feedback to them accordingly.

Decides Employee's Compensation

Providing the right remuneration to employees is important for every organization. It should be paid fairly to all of them according to their efforts, performance, and skills. Performance appraisal makes it easy to measure the performance of employees and award them accordingly. Employees performing well are awarded better incentives and increments in their pay.

Validation of Selection Process

Performance appraisal enables the validation of the selection process. Selecting a proper selection channel is a must for recruiting better human resources. Recruitment and selection require lots of organization time, effort, and money.

Validation of a selection procedure helps in finding out its positive and negative aspects and thereby helps the company in selecting a suitable tool for selection. Different tools like application blanks, psychological tests, interviews, etc. used in the selection process help in measuring the candidate's performance and selecting the right candidate.

Identify Employees' Training Needs

Training and development programmes help in improving the productivity of manpower. It should be provided by the organization to its employees from time to time to improve their skills and confidence level.

Performance appraisal helps supervisors in detecting the decencies in the performance of employees due to a lack of skills and knowledge. These problems can easily be overcome by providing proper training and education to them. Through performance, appraisal companies can design better training programs for their employees.

Motivates Employees

Performance appraisal helps in motivating employees toward their targeted roles and objectives. Employers can evaluate the efficiency of their workers through this. It can be ensured whether they are working efficiently or not towards the achievement of organization objectives. When employees know that their result will be checked it will motivate them to perform well.

Helps In Promotion and Demotion

Giving promotion and demotion to employees is an important decision to be taken by managers. Performance appraisal helps them in taking these decisions fairly and properly without bias. Through performance appraisal, they can measure the performance of all and are able to judge easily who is performing well and who is not. Employees performing their task efficiently are promoted to higher posts whereas if they are found inefficient, they are demoted to lower posts.

Facilitates Communication

Performance appraisal facilitates the efficient flow of information within the organization between employers and employees. Employers can understand their subordinate's nature by measuring their output. They can find out their employee's strengths and weaknesses and suggest ways to overcome their deficiencies.

This develops better employer-employee relations which create better trust and confidence among them. Employers regularly communicate with their subordinates and provide them with feedback about their work. This way performance appraisal develops a better network for communication between the two which helps in clearing all doubts and queries.