NAME: NYIRANSENGIMANA JEANNETTE
REG NO: 221002495
GROUP 3 SUB-GROUP 8
CLASS NO: 17
PROJECT NAME: EMPLOYEE'S INFORMATION MANAGEMENT SYSTEM.

1.PLANNING

Employee's information management system is an application which was designed or which will be used for storing employee's information and to help employees for making attendance electronically. This system will help managers to manage employee's record and performing other tasks like attendance verification it will also help the employees to sign their attendance online without wasting their time on line etc.

The main objective of Employee's information management system is to help the company's managers to keep employee's information in an efficient way where the records can be accessed and manipulated easily.

The purpose of this application is to develop the computer-based application which is will reduce paper based system.

Problems that this system (employee's information management system has to solve).

According to my observation I found that many companies especially small companies use manual system (storing information in books and papers) for storing information due to that system they use they likely to face the problems such as:

- Poor data security: this happens due to various reasons such as fire outbreak, books can be stolen, papers can be thrown outside while they are cleaning, etc.
- Difficulty in retrieving and accessing employee's information.
- Difficult in generating reports.
- Time consuming.

Goals of employee's information management system

- Providing data security because data will be stored in databases.
- Making it easy to get information, manipulate them and report creation.
- Saving time for employees they waste while they are waiting others to finish signing attendance.
- To provide efficient and effective management.

2. Design

Functional requirements

- System must allow users (manager and employees) to login.
- Manager (admin) must be able to add new employee, able to update employee's information, and to delete information when it is required.
- Employees are able to make their attendance.
- Manager must be able to view and search for information.
- Manager must be able to create report.
- System must allow users to logout.

Technical requirements

- Accessibility: the system is easy to be accessed by the various kinds of users easily.
- Availability: this system works 24 hours work day and night it is available any time.

- Secured: this system is secured because it requires user's authentication there is no authorized users can use the system.
- Performance: the system work quickly it doesn't require long time to load the page and may not allow employees to view the privacy of information.
- Scalability: this system allows multiple employees to use the system at the same time.
- Serviceability: this system perform all the services which it was designed for
- User friendly: this system is easy and simple to use and understand for the users because it use simple English words and it has icons which guide leaders while they are using the system.

  How the system interact with the users

  In this system when a manager logged in as an admin with his/her user name and password the system validate if the credentials match if it doesn't match it require a user to enter a valid username and password if they match admin is able to add new employee, update, retrieve employee's information, delete and verify employee's attendance. And also when a user logged in as an employee also the system do verification If it became successful he/she can be able to make attendance.

3. Development

- Employee's information management system was developed in java and apache Netbeans for developing both back-end and front-end.
- We used MySQL as database management system and XAMMP server.
- We used MySQL –connector-java-5.1.15-bin.jar as a library for connecting java pages with database.
- We used JCalendar-1.4.jar and rs2xml.jar for allowing our application to accept dates and time format.
- It was developed by using computer and running in window operating system as a platform.
- Data are stored in data base which is called employeemgt my database has 3 tables (employee info, users table, and attendance table).
- It was developed in laptop which has window operating system.

  How we developed our projects

  First of all we installed java netbeans and JDK then we opened new projects we called it employee. We used jframe for interface and java swing.

4. Testing

- The testing was done by testing each unit of the system (unit testing) to ensure that it is working according to the user's needs for example databases, login pages.
- We also conducted integration testing we combined all features and parts of the system to ensure that the system is free of errors when the parts of the system are combined together then when we found errors in the system we fixed those errors directly .
- We also made a system testing with a whole system to ensure that the functional requirements of the system are meets.
- We also done alpha and beta testing our team sat together and we used the system as if we are the users whose the system was developed for them in order to check its working and performance.
- We also validated and verified our system by entering both valid and invalid input in order to verify if the system is working according to the plan.

5.Deployment

Employee's information management system was uploaded on Github account so the users can be able to access it. Link: https://github.com/jeannette-l/employeeproject.git.

And also we will upload it on a webserver in order to help the users to use the system online.

Installation.

- To install the system what you have to do is to download JDK, WAMMP/XAMMP, and apache netbeans.
- Download the projects where it is saved on Github account.

Then after open the project employee in java netbeans then you can run it on your computer offline.

Maintenance

After deploying our project we will have a talk with the users frequently by asking them how the system is working and if there are errors and fault in a system if they found the problem we will handle/fix them.

We will always conduct a research to monitor if the system has errors or bugs then we can fix them at an earlier stage.