# Course Based Learning

(Via Projects)

# Project is Based on the Language **Python EMPLOYEE PAYROLL MANAGEMENT SYSTEM**Submitted By

Aishwarya V M

2020051502

Under the Guidance of

Dr Vishwa Kiran S

Mr K B Hemanth Raj



# **Future Vision BIE**

Vision Beginners Intermediate Experts (BIE)

Kaveri Nagar, R T Nagar Post, Bengaluru – 560032

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### **ABSTRACT**

Employee payroll management system in python report includes a development presentation of an information system for managing the staff data within a small company or organization. The system as such as it has been developed is called Employee Management System.

This software mainly does not include GUI support and works on command line interface. Python language is used for developing the front end command line interface and MySQL is for back end database connectivity.

#### **INTRODUCTION**

The objective of "Employee payroll Management System" is designing a Scheduling System for a work centre. Scheduling is such a tool with which the process of intimating activities and notifications will be easy and even online in the organization where it is installed. But these task of scheduling the different activities if manually done whether they may be personal or official is time consuming and also may lead to confusion if not properly scheduled. Scheduling becomes such an easy task such that it reduces much time when compared to previous methods.

This enables for the employee to check the task that is assigned to them. The Supervisor is already having the account on the server and therefore will have login username and password. The Supervisor is allowed to delete employees, set schedule, mark attendance etc. The Employee will have to register in the database and once registered he/she would be logged in to the system through his/her employee id and password. The employee is allowed to update his/her details, view schedule set by the supervisor, view attendance etc.

#### **MOTIVATION**

Motivation behind developing this system is the rich features of python programming language and eagerness to explore programming language in different areas and also the drawbacks of existing system on the manual work carried out by the different department, where you have to do all jobs manually and do not allow the automation of system and transparency to all users of system. Disadvantage of existing system is that everything is on paper, like for fixing the schedule of the particular employee, to do so either that employee should be in contact or should be known by some other source resulting in the wastage of time. So, this whole task of scheduling the activities whether may be personal or official is very time consuming and may lead to confusion if not properly scheduled.

#### **EXISTING SYSTEM**

The existing system is based on the manual work carried out by the different department, where you have to do all jobs manually and do not allow the automation of system and transparency to all users of system. Disadvantage of existing system is that everything is on paper, like for fixing the schedule of the particular employee, to do so either that employee should be in contact or should be known by some other source resulting in the wastage of time. So, this whole task of scheduling the activities whether may be personal or official is very time consuming and may lead to confusion if not properly scheduled.

The system which was developed now, makes this process of scheduling much easier and computerized. By this system the manager or top level designated employee can fix the schedule of any employee working under him. Thus the top level management can easily fix the process of scheduling, and even can change the appointment which is reflected immediately to the related employee avoiding direct contact of the employee resulting in saving a lot of time and work overhead.

#### LIMITATIONS OF EXISTING SYSTEM

Since this project was developed in very short span of time and this is just to demonstrate the understanding of Python programming language learned during the Future Vision Bie online course has several limitations in this project and has scope to improve on these functionalities.

Following are system limitations and can be implemented to if scope of the project grows.

- There is no separate module for supervisor and employee.
- All the operations can be done by any of the employee if the login and password is known.
- There is no login information created for individual employee so that he/she can update only his/her information by using login credentials.
- Any employee can update the information of other employee if the employee knows employee id of the other employee.

Scope to improve the module as below.

- Implement separate module for supervisor and employee. Supervisor can add information of the new employee and provide the login credentials to newly added individual employee.
- This provides the security for the system so that employee cannot view or modify other employee information.

# SYSTEM REQUIREMENT SPECIFICATION

# **System Configuration:**

# **H/W System Configuration:**

System : Pentium Dual Core.

Hard Disk : 120 GB.

Monitor : 15" LED

Input Devices : Keyboard, Mouse

Ram : 1 GB

# **S/W System Configuration:**

Operating system : Windows 7.

Coding Language : Python

Database : MYSQL

#### PROPOSED METHODOLOGY

This system provides the command line interface to user to with a menu with below supported options.

- 1. GET EMPLOYEE DETAILS
- 2. ADD NEW EMPLOYEE
- 3. DELETE EMPLOYEE
- 4. UPDATE EMPLOYEE DETAILS
- 5. UPDATE EMPLOYEE ATTENDENCE
- 6. GENERATE EMPLOYEE PAYSLIP

**Get Employee Details:** This options seeks employee id to display employee information such as Emp Id, Emp Name, Address, Qualification and Salary.

**Add New Employee:** This option enables to add newly joined employee information to the system.

**Delete Employee:** When employee leaves the organization employee records can be deleted from the system by entering employee.

**Update Employee Details:** Whenever there is a change in the fields like address, phone number etc employee details can be updated by entering the employee id and details to be updated.

**Update Employee Attendance:** Every month end in order to generate the payslip employee attendance like number of days employee is absent to work should be updated to the system.

**Generate Employee Payslip:** Every month end based on the employee attendance we can generate the payslip for the month for an employee by entering the employee id whose payslip needs to be generated.

# **REFERENCES**

- Online training sessions and videos on python language by FUTURE VISION BIE Training Institute.
- Python Tutorails <a href="https://www.w3schools.com/python/">https://www.w3schools.com/python/</a>
- Python Tutorials <a href="https://docs.python.org/3/tutorial/">https://docs.python.org/3/tutorial/</a>