

Python Programming Course**Team: Mutimanwa, David, Keith, Stacy, Alan and Collin****Final Examination***[60 Marks]*

Design and develop fully functional web-based system for managing employee attendance and automating salary calculations using the Django framework. The system must accurately reflect salary deductions based on attendance records.

(A)**1. User Authentication & Authorization [5 Marks]**

Implement a secure login system with three distinct user roles:

- HR/Admin (Staff): Full access to all data (employees, attendance, salary reports).
- Managers: Can view and manage attendance for employees in their department; view departmental salary summaries.
- Employees (Users): Can only view their own attendance records, payslips, and personal details

Note: Dashboards and menus must dynamically change based on the logged-in user's role.

2. Attendance & Salary Calculation Mechanism [15 Marks]

- Attendance Tracking: HR/Admin and Managers can mark daily attendance for employees (Present, Absent, Half-Day, Leave).
 - Each attendance record must include: Employee, Date, Status.
- Automated Salary Calculation:
 - Develop a core function that calculates an employee's salary for a selected month.

Rule: If an employee's attendance is below 75% for the month, a 15% deduction must be applied to their base salary.
 - The system should generate a downloadable payslip for each employee at the end of the month, showing the calculation breakdown (Base Salary, Deductions, Net Salary).

3. Reporting & Management (HR/Admin Only) [10 Marks]

Develop dedicated report pages accessible only to HR/Admin:

- Attendance Report: A filterable list of all attendance records.
- Salary Report: A monthly report showing the calculated salary for each employee

Employee Self-Service: Employees must have a dashboard to view their own attendance history and download their past payslips.

(B)

The application user interface must be good visually appealing, simple, and easy use. [10 Marks]

(C)

Submission process : Create a GitHub account at <https://github.com/> if you don't already have one .

Upload your project to your repository and share the link with nalvareze311@gmail.com.

[5 Marks]

(D)

The project will be presented using a PowerPoint presentation after submission. [15 Marks]

Technologies to be used

Programming Language: Python

Web Framework: Django

Database: SQLite or MySQL

Notes: The project must be completed within 5 days.

Additional functionalities are encouraged [5 Marks]