

Hackathon Problem Statement: Employee Management System

Objective

Build an **Employee Management System** using OOP principles in Python. The system should support creating employee records, associating them with departments, computing average salaries, and saving/loading data to/from a JSON file.

Requirements

1. Class: Person

- Attributes: name, age, gender
- Method: get_details() – return string of details

2. Class: Employee (inherits from Person)

- Additional Attributes: emp_id, department, salary
- Methods:
 - get_details() – override and return all employee details
 - is_eligible_for_bonus() – return True if salary < 50000
- class method: from_string(cls, data_string)
Format: "John,35,Male,E101,HR,45000"
- static method: bonus_policy() – print bonus policy description

3. Class: Department

- Attributes: name, employees (list of Employee objects)
- Methods:
 - add_employee(employee)
 - get_average_salary()
 - get_all_employees()

4. Data Persistence

- Write a method to **save all employee data to a JSON file**
- Write a method to **load employee data to Department**

See sample usage for ideas