Laboratory Activity 3: Inheritance, Encapsulation, and Abstraction

Kenn Jie Valleser CPE21S4 Laboratory Activity 3: Inheritance, Encapsulation, and Abstraction

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class Employee:
  def __init__(self, emp_id, emp_name, emp_address):
        self.emp_id = emp_id
        self.emp_name = emp_name
        self.emp_address = emp_address

  def get_emp_id(self):

        return self.emp_id

  def get_emp_name(self):

        return self.emp_name

  def get_emp_address(self):

        return self.emp_address



class Fulltime(Employee):
  def __init__(self, emp_id, emp_name, emp_address, allowance, rate):
     super().__init__(emp_id, emp_name, emp_address)
     self.allowance = allowance
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        self.rate = rate

    def calculate_allowance(self):
        return self.allowance * self.rate


class Parttime(Employee):
    def __init__(self, emp_id, emp_name, emp_address, rate):
        super().__init__(emp_id, emp_name, emp_address)
        self.rate = rate

    def calculate_rate(self):
        return self.rate


class Salary:
    def __init__(self, salary_id, salary, cut_off_date, days_of_work):
        self.salary_id = salary_id
        self.salary = salary
        self.cut_off_date = cut_off_date
        self.days_of_work = days_of_work

    def calculate_salary(self):
        return self.salary * self.days_of_work

    def get_cut_off_date(self):
        return self.cut_off_date

    def get_days_of_work(self):
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    return self.days_of_work



emp1 = Fulltime(2310792, "Kenn Jie", "Bohol", 1500, 25)
emp2 = Parttime(2310793, "Frost", "Magsaysay", 20)



salary1 = Salary(101, emp1.calculate_allowance(), "2024-10-30", 22)
salary2 = Salary(102, emp2.calculate_rate(), "2024-10-30", 20)
#testing the code
print("Employee 1")
print("Employee ID:", emp1.get_emp_id())
print("Name:", emp1.get_emp_name())
print("Address:", emp1.get_emp_address())
print("Allowance:" , emp1.calculate_allowance())



print("\nEmployee 2")
print("Employee ID:", emp2.get_emp_id())
print("Name:", emp2.get_emp_name())
print("Address:", emp2.get_emp_address())
print("Allowance:" , emp2.calculate_rate())
```