CRC Cards For Object Oriented Programming Project 2024

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| Class Name: PartScale |  |
| **Responsibilities:**   * Represents the salary scale for part-time employees, often based on hourly or shift rates. * Provides methods for calculating pay based on the hours worked or shifts completed. | **Collaborations:**   * **SalaryScale**: Retrieves salary rules for part-time employees, handling hourly pay calculations. |

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| Clas Name: DBController |  |
| **Responsibilities:**   * Handles all database interactions such as querying, inserting, updating, and deleting records. * Ensures queries are executed successfully. * Performs validations and error handling when interacting with the database. * Executes custom queries for specific needs (e.g., fetching employee data or payroll history). | **Collaborations:** |

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| Clas Name: FullScale |  |
| **Responsibilities:**   * Represents the salary scale for full time employees including departments, job title and scale points. * Provides methods to access and sort the data | **Collaborations:**   * **SalaryScale**: Works with the SalaryScale class to retrieve salary rules specifically for full-time staff. |

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| Class Name: PasswordUtil |  |
| **Responsibilities:**   * Provides utility functions for secure password handling, including encryption and hashing. * Ensures passwords are securely stored and compared during login. | **Collaborations:** |

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| Class Name: PayrollSystem |  |
| **Responsibilities:**   * Manages the payroll system menu | **Collaborations:**   * **PayrollSystemMenu** Provides PayrollSystem user command-line interface to perform operations |

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| Class Name: PayrollSystemMenu |  |
| **Responsibilities:**   * Manages the user interface and navigation for interacting with the payroll system. * Displays menu options for users to access different payroll-related features like generating payslips, managing promotions, etc. * Accepts user input and processes payroll-related actions based on user choice. | **Collaborations:**   * **SalaryUpdate**: Ensures salaries are up to date * **DBController**: Makes calls back to database * **PasswordUtil**: Used for checking and hashing passwords * **TaxCalc:** used to calculate employees net pay after all deductions |

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| Class Name: SalaryScale |  |
| **Responsibilities:**   * Provides fields and a method template for it’s sub-classes. * Serves as a type-safe way of initialising either part-scale or full -scale | **Collaborations:**   * **FullTimeScale**: Provides salary scale data specific to full-time employees. * **PartScale**: Provides salary scale data specific to part-time employees. |

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| Class Name: SalaryUpdate |  |
| **Responsibilities:**   * Handles the updating of employee salary records in the database after a promotion, salary adjustment, or payroll processing. * Updates salary records based on user input (e.g., a salary raise or promotion). * Ensures salary changes are reflected in the system after calculations. | **Collaborations:**   * **DBController**: Updates the employee's salary data in the database. * **SalaryScale:** Defines a salaryScale to be used later * **PartScale:** Assigned if employee is partime staff * **FullScale:**  Assigned if employee is fulltime staff |

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| Class Name: TaxCalc |  |
| **Responsibilities:**   * Calculates the tax deductions (USC, PRSI, income tax) for each employee based on their salary and relevant tax bands. * Ensures correct tax rates are applied during payroll calculations. * Calculates tax-related deductions and adds them to the overall payroll processing. | **Collaborations:** |