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# CSYE 6200

## Concepts of Object Oriented Design

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# Payroll App

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# Payroll Application

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- Assignment (Due 11-27-2015)
  1. Design a payroll application with GUI
    - Input All Employee Hire data from CSV file
      - EmployeeID,FirstName,LastName,Address,Phone,
      - Salary/Wage
        - » Salary per year (for any exempt pay category) OR
        - » Wage (for any hourly category) OR
        - » Zero (for Volunteer)
      - Bonus (applies only to Salary exempt with bonus) what does it mean?
      - PayCategory (describes how pay is calculated)
      - Title
      - BonusPayoutDate (Only for Salary exempt with bonus)

# Payroll Application

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- Assignment (Due 11-27-2015)
  - Input All Employee Weekly timesheet data from GUI
    - Date
    - EmployeeID
    - Total Hours worked for the entire week
      - » A Single field is acceptable

# Payroll Application

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- Assignment (Due 11-27-2015)
  1. Display Employee Payroll and totals
    1. Show all employees paid
    2. Show Total Payroll Payout
    3. Show all Output for timeframe:
      1. November 1 – 30, 2015.
      2. Payday every week or every two weeks

# Payroll Application

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- Assignment (Due 11-27-2015)
  - Include the following employee types:
    - Use Factory Design Pattern
      1. Student (hourly Part-Time)
      2. Teacher (Salary)
      3. Staff (Hourly Full-Time)
      4. Executive (Salary with Bonus)
      5. Volunteer (pro bono, track hours, no wages)

# Payroll Application

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- Manage
  - Holiday pay
    1. No Work on Holiday on Thanksgiving Day
    2. All employees (EXCEPT Hourly Part-Time and Volunteer) get paid for holiday

# Payroll Application

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- Manage
  - Pay categories:
    - Salary (Exempt)
      1. Fixed pay regardless of hours worked
      2. Yearly salary/52 weeks
      3. No overtime)
    - Hourly Full-Time (Non-Exempt)
      1. Pay based on hourly wage and hours worked
      2. Eligible for Holiday pay
      3. Hourly Part-Time
        1. Same as hourly but NOT eligible for Holiday pay



# Payroll Application

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- Manage
  - Pay categories:
    - Salaried with Bonus (Exempt)
      1. Same as Salaried but with Bonus pay
        1. Fixed Bonus payout agreed upon hire
        2. Date of Bonus payout fixed upon hire
    - Volunteer Pro Bono
      - Same as hourly but NOT eligible for ANY pay
      - Record all hours worked
      - Pay will always be zero
      - NOT eligible for Holiday pay

# Payroll Application

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- Output:

1. Employees for Each Payroll Period

1. Date, Name, Employee ID, Pay Category, Salary/  
Wage, Hours, Bonuses, Total Gross Pay for period

2. Payroll Total for all Pay Periods

1. Date, Payroll Total, Employee Total
2. Example:

Date	Payroll Total	Employees paid
11-6-15	\$1,124,548	45

# Payroll Application

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- Extra Credit

1. Keep Individual Employee Records

1. Provide GUI to Display Individual Employee Record by Employee ID

1. Personal Info: Name, Address, Phone, etc.

2. Payroll Info

2. Provide Output to file

1. Payroll Info

2. Select Employee Info

3. Multiple File Formats

1. XML

2. JSON