UML Design:

A close up of a sign

Description automatically generated

Code Execution:

A close up of a blackboard

Description automatically generated

public class Employee

{

private string \_first = "First";

private string \_last = "Last";

private int \_employeeNum = 00000;

private double \_monthly = 0.00;

public string FirstName

{

get => \_first;

set

{

\_first = char.ToUpper(value[0]) + value.Substring(1);

}

}

public string LastName

{

get => \_last;

set

{

\_last = char.ToUpper(value[0]) + value.Substring(1);

}

}

public int EmployeeNumber

{

get => \_employeeNum;

set

{

if (value > 0 && value < 99999)

{

employeeNum = Convert.ToInt32(value.ToString("D5"));

}

else

{

Console.ForegroundColor = ConsoleColor.Red;

Console.WriteLine($"[-] Error. Employee {\_first}'s ID must be 5 digits.");

Console.ResetColor();

}

}

}

public double MonthlySalary

{

get => \_monthly;

set

{

if (value > 0)

{

\_monthly = value;

}

}

}

public Employee() { }

public Employee(string first, string last, int number, double monthly)

{

this.EmployeeNumber = number;

this.FirstName = first;

this.LastName = last;

this.MonthlySalary = monthly;

}

public double annualPay()

{

return \_monthly \* 12;

}

public void employeeInfo()

{

Console.ForegroundColor = ConsoleColor.Green;

Console.WriteLine("[+] Employee Information:");

Console.ResetColor();

Console.WriteLine($"--> First Name:\t\t{\_first}");

Console.WriteLine($"--> Last Name:\t\t{\_last}");

Console.WriteLine($"--> ID: \t\t#{\_employeeNum:D5}");

Console.WriteLine($"--> Monthly Salary: \t{\_monthly:C2}");

Console.WriteLine($"--> Annual Salary: \t{annualPay():C2}");

Console.WriteLine("------------------------------------");

}

}

class Driver

{

static void Main(string[] args)

{

Employee matt = new Employee();

Employee michael = new Employee("michael", "reeves", 12345, 6000);

matt.FirstName = "matt";

matt.LastName = "damon";

matt.EmployeeNumber = 1337;

matt.MonthlySalary = 4500.00;

matt.employeeInfo();

michael.employeeInfo();

}

}