**Topic 4: Console App**

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**Content**

[**Console App: Inheritance**](https://dmacc.blackboard.com/webapps/assignment/uploadAssignment?content_id=_7286762_1&course_id=_102593_1&group_id=&mode=view)

Write Base class:

public class Student

{

private string \_firstName;

private string \_lastName;

private DateTime \_dateOfBirth;

private int \_studentID;

// Properties

// Constructors

public Student()

{

// TODO

}

public Student(string fName, string lName, DateTime DOB, int ID)

{

// TODO

}

// Add method

public override string ToString()

{

return base.ToString() + ": Name: " + \_firstName + " " + \_lastName + " ID: " + \_studentID;

}

Student Class

* + Properties
    - first name
    - last name
    - date of birth
    - id
  + Methods
    - ToString()
    - MakeNamePlate() - returns a string of the student's last name, first name and id.
    - CalculateAge()

Write a Derived class:

StudentWorker Class

* + Properties
    - hourly rate
    - hours worked
  + Methods
    - ToString()
    - MakeNamePlate() - returns a string of the students last name, first name, and rate of pay.
    - CalcuatePay()
  + Driver
    - Add tests to further test the classes (and review making objects!)
    - Here is a driver to help test. Make sure to add more tests to the Main method.

static void Main(string[] args)

{

string fname = "Ren", lname = "Stevens";

int id = 22;

DateTime dob = new DateTime(1984, 3, 20);

string fname2 = "Kim", lname2 = "Possible";

int id2 = 32;

DateTime dob2 = new DateTime(2002, 6, 7);

decimal pay = 10.15M;

double hours = 19;

Student ren = new Student(fname, lname, dob, id);

Console.WriteLine(ren.ToString());

Student kim = new StudentWorker(pay, hours, fname2, lname2, dob2, id2);

Console.WriteLine(kim.ToString());

}

Submit Student.cs, StudentWorker.cs and Program.cs.

This is 25 points.