**CMSC 203 Assignment 2 Design**

**Class**: CMSC 203 CRN 20932

**Program**: Assignment 2

**Instructor**: Ahmed Tarek

**Description**: This program will create a Patient Application that displays the Patient Information, Procedure Information, and calculates the total charges across 3 procedures. All of the displayed data will be initialized with sample data. This program will utilize 3 different classes and will also print student information at the end of the program.

**Due Date:** 9/25/24

**Integrity Pledge:** I pledge that I have completed the programming assignment independently. I have not copied the code from a student or any source.

**Student’s Name:** Abigail Dulay

**Part 1 - Pseudocode: Below is the Pseudocode for the Assignment 2 Program**

**Create the Patient Class**

1. First, create fields that will hold the patient’s first, middle, and last name, phone number, address, and emergency contact information.
2. Create a no-arg constructor within the Patient Class
3. Next, create two parameterized constructors. These parameterized constructors are also the mutators for each field in which their values are modified.

* One parameterized constructor will be used to initialize the patient’s first, middle, and last names.
* The other parameterized constructor will be used to initialize remaining patient attributes (such as address information and emergency contact information)

1. Now, create setters/accessors for each attribute, which will return the value for each attribute.
2. Next create the methods that will build the patient’s full name, address, and emergency contact information from the given sample data.
3. Create a toString method that will display all the patient information using the build methods created prior.

**Create the Procedure Class**

1. Create fields to hold the procedure name, date, practitioner, and cost.
2. Again, create a no-arg constructor within the Procedure Class.
3. Next, create two parameterized constructors, again also serving as mutators for each attribute by initializing and modifying values.

* One parameterized constructor will be used to initialize the procedure’s name and date.
* The other parameterized constructor will be used to initialize the procedure’s other attributes (such as practitioner name and charge)

1. Create setters for each field in the class.
2. Again, create a toString method that will display the procedure information.

**Create the PatientDriverApp Class**

1. First, create 4 instances of the prior classes. 1 instance of the Patient class and 3 instances of the Procedure class.
2. Create and call upon methods that will display the patient information, procedure information, and total cost.
3. At the end of the program, print the Student’s name, student M#, and the due date of the assignment.