**CMSC203 Assignment 2 Implementation (Documentation)**

Class: CMSC203 CRN 31480

 Program: Assignment # 2

Instructor: Ashique Tanveer

 Summary of Description: Display patient information

 Due Date: 03/1/2024

 Integrity Pledge: I pledge that I have completed the programming assignment independently.

 I have not copied the code from a student or any source.

**Part1: UML Diagram**

**Patient Class**

| **Attribute** | **Type** | **Visibility** |
| --- | --- | --- |
| firstName | String | private |
| middleName | String | private |
| lastName | String | private |
| streetAddress | String | private |
| city | String | private |
| state | String | private |
| ZIPCode | String | private |
| phoneNumber | String | private |
| emergencyContactName | String | private |
| emergencyContactPhone | String | private |

| **Method** | **Return Type** | **Visibility** |
| --- | --- | --- |
| Patient() | None | public |
| Patient(firstName, middleName, lastName) | None | public |
| Patient(all attributes) | None | public |
| get/set methods for each attribute | Varies | public |
| buildFullName() | String | public |
| buildAddress() | String | public |
| buildEmergencyContact() | String | public |
| toString() | String | public |

**Procedure Class**

| **Attribute** | **Type** | **Visibility** |
| --- | --- | --- |
| procedureName | String | private |
| procedureDate | String | private |
| practitionerName | String | private |
| procedureCharges | double | private |

| **Method** | **Return Type** | **Visibility** |
| --- | --- | --- |
| Procedure() | None | public |
| Procedure(procedureName, procedureDate) | None | public |
| Procedure(all attributes) | None | public |
| get/set methods for each attribute | Varies | public |
| toString() | String | public |

**PatientDriverApp Class**

| **Method** | **Parameter(s)** | **Return Type** | **Visibility** |
| --- | --- | --- | --- |
| displayPatient | Patient | void | public |
| displayProcedure | Procedure | void | public |
| calculateTotalCharges | Procedure, Procedure, Procedure | double | public |

**Part2: Comprehensive Test Plan**

A good test plan should be comprehensive. This means you should have a few test cases that test when the input is in and out of range, division by 0, incorrect Data type, etc. (Provide valid and invalid input)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Cases | Input | Expected Output | Actual Output | Did Test Pass? |
| Case 1 | Patient patient = **new** Patient("Jenny","Elaine","Santori","123 Main Street","MyTown","CA","01234","443-310-9100”)  Procedure procedure1 = **new** Procedure(“sds”);  Procedure procedure2 = **new** Procedure("Jenny Elaine", "09/05/08");  Procedure procedure3 = **new** Procedure("Jenny Elaine", "09/05/08", "Dr. Brother", 323); |  | Error | n |
| Case 2 | Patient patient = **new** Patient("Jenny","Elaine","Santori");  Procedure procedure1 = **new** Procedure();  Procedure procedure2 = **new** Procedure("Jenny Elaine", "09/05/08");  Procedure procedure3 = **new** Procedure("Jenny Elaine", "09/05/08", "Dr. Brother", 323); |  | Error  Jenny Elaine Santori | n |
| Case 3 | Patient patient = **new** Patient("Jenny","Elaine","Santori","123 Main Street","MyTown","CA","01234","443-310-9100","Bill Santori", "777-555-1212");  Procedure procedure1 = **new** Procedure();  Procedure procedure2 = **new** Procedure("Jenny Elaine", "09/05/08");  Procedure procedure3 = **new** Procedure("Jenny Elaine", "09/05/08", "Dr. Brother", 323); |  | Patient info:  Name: Jenny Elaine Santori  Address: 123 Main Street MyTown CA 01234  EmergencyContact: Bill Santori 777-555-1212  Procedure:  ProcedureDate:  Practitioner=  Charge: 0.0  Procedure: Jenny Elaine  ProcedureDate: 09/05/08  Practitioner=null  Charge: 0.0  Procedure: Jenny Elaine  ProcedureDate: 09/05/08  Practitioner=Dr. Brother  Charge: 323.0  Total Charges: $323.00  Student Name: Logan Young  MC#: M21195576  Due Date: 03/01/2024 |  |
| Case 4 |  |  |  |  |

**Part3: Screenshots related to the Test Plan:**

**Case 1**

**Case 2**

**Case 3**

A screenshot of a computer

Description automatically generated

**Lessons Learned** <Provide answers to the questions listed above>**:**

Write about your Learning Experience, highlighting your lessons learned and learning experience from working on this project.

What have you learned? Learned about how to actually use other objects efficiently

What did you struggle with? Sometimes I would get errors with static methods, or get errors with variables in another file.

What would you do differently on your next project? Start earlier

What parts of this assignment were you successful with, and what parts (if any) were you not successful with? I was successful with actually running the project, the UML seemed simple, hoping I did it right.

Provide any additional resources/links/videos you used to while working on this assignment/project.

OPENAI for help with the UML

**Check List:** <Provide answers to the column Y/N or N/A >**:**

|  |  |  |  |
| --- | --- | --- | --- |
| **#** |  | **Y/N** | **Comments** |
|  | **Assignment files:** |  |  |
|  | * FirstInitialLastName\_ Assignment#\_Moss.zip | **y** |  |
|  | * FirstInitialLastName\_Assignment#.docx/.pdf | **y** |  |
|  | * Source java files | **y** |  |
|  | **Program compiles** |  |  |
|  | **Program runs with desired outputs related to a Test Plan** |  |  |
|  | **Documentation file:** |  |  |
|  | * Comprehensive Test Plan |  |  |
|  | * Screenshots related to the Test Plan |  |  |
|  | * Screenshots of your GitHub account with submitted Assignment# (if required) | **y** |  |
|  | * UML Diagram (if required) | **y** |  |
|  | * Flowchart (if required) |  |  |
|  | * Lessons Learned |  |  |
|  | * Checklist is completed and included in the Documentation |  |  |