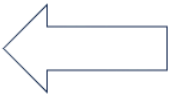Name: Iffat Rahman

Access ID: hk4935

In a PDF file, present the description of both classes. The description must be a paragraph with 50-500 words that explains the class ideas or concepts and their relationships. Also, in this document, define each class using a UML diagram:

For this assignment, I chose my base class to be based on the idea of a clothing store. As for the derived class, the concept here would be based on a specific pair of pants. Based on the example from the assignment, I recognized my base class would have to be something general and the derived class would not only be closely related to the base class, but something a bit more specific. To illustrate this, the base class would have general attributes such as the size for the clothing or for what gender the pants would be for. As for the derived class, it would be a bit more specific on what color, type, or style. Styles can range from "ripped jeans" or "white pocketed sweatpants." As for the size of the pants, the size can be ranged from a double order 1-3 (1 being the lowest, 3 being the highest). Of course, each class attribute has a setter/getter, two constructors, and etc. In regards to limiting an attribute from a setter function, if the usercost were higher than $50, we would discount it to $50. And if the user put a invalid size input, the program will output an error. All in all, the overall project consists of each class having a setter/getter for each attribute, two constructors, and the separate ".h/.cpp" files for both classes.

Please scroll down to the second page for the UML diagram:

ClothingStore

-+ size: double
-+ gender: string
-+ invalid: string

+ setsize(double s1): void
+ getsize() const: integer
+ setgedner(string g2): void
+ getgender() const: string
+ clothingStore()
+ clothingStore(double s2, string g2)
+ printWRONG(): void

pant

--- type: string
--- color: string
--- style: string
--- usercost: integer

+ settype(string t): void
+ gettype() const: string
+ setcolor(string c): void
+getcolor() const: string
+ setstyle(string s): void
+ getstyle() const: string
+ setusercost(int u): void
+getsuercost() const: integer
+ getfrombase(double s3): void
+ print(): void
+ print2(): void

Legend

- 🟩 Class name
- 🟨 Attribute name
- 🟦 Attribute type
- 🟧 Method name
- 🟪 Method return type
- ⬜ Access