Final Project

Smart Vending Machine

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The vending machine you need a smart vending machine that has a smart card to be a smart vending machine when implementing the code of the problem space we need to write so many classes to pick a design that we decide top up of time constraints that we have there was a challenge in selecting the design pattern that we use we opted to do for state pattern of the vending machine when it has equipment and inventory we monitor the quantity of the commodities that are inside of the inventory of the vending machine when the commodities are out of stock the state of the vending machine should go to out of stock that it cannot serve that particular item.

The challenge that we face designing of the program is that we didn’t have enough time to complete the implementation of a fully automated working machine system

so the only design pattern implemented was the iterator design pattern to iterate among the different type of commodities that we have in the system but those are just a few but of the state of the code we left is that state of at any time we can come back and add more functionality because the code has been set modular it has loose so it can extend the code base without affecting the erase of the functionality of the classes if you have more items to add to the data base we will just add more classes related to the types of the items that you are going to add in the data base we didn’t have the database but the system has some assistant type of database it shows the product that it has so when we are executing the program you can select the different categories of items then you can view particular categories of items then you can select a particular categories of item and adding to the cart you can do so from every categories add items to the cart and finally since it’s a smart vending machine is finished you move to the checkout stage the sys releases your order so out of completing the project as it is we did not complete providing the card payment system there is no payment system the system is not connected to a database system to store all the inventory in the future it can be improved easily.