Assigment 2

Smart Home System

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Problem:The problem is in my opinion operate devices in a correct order.

My Solve:In my opinion if we are correct categarizing the system.Problem of organization will automaticlly solve.

My Systems Benefits: I have used variable names and method names in an understandable language. For the expected errors unique to the methods, I have put number outputs so that I can debug each method. So I think the errors are understandable.

Benefits of OOP in my code: most of all, it ensures that certain methods and names can be defined differently in the code, and therefore it allows me to use certain objects such as variable names and method names in a more understandable way in the code.

It helped me a great deal in classifying and categorizing and making the relationship of different classes practical.

According to the way the incoming data is sorted in the input file, I saved it to the system with an abstract similarity link as if it represents the same feature.

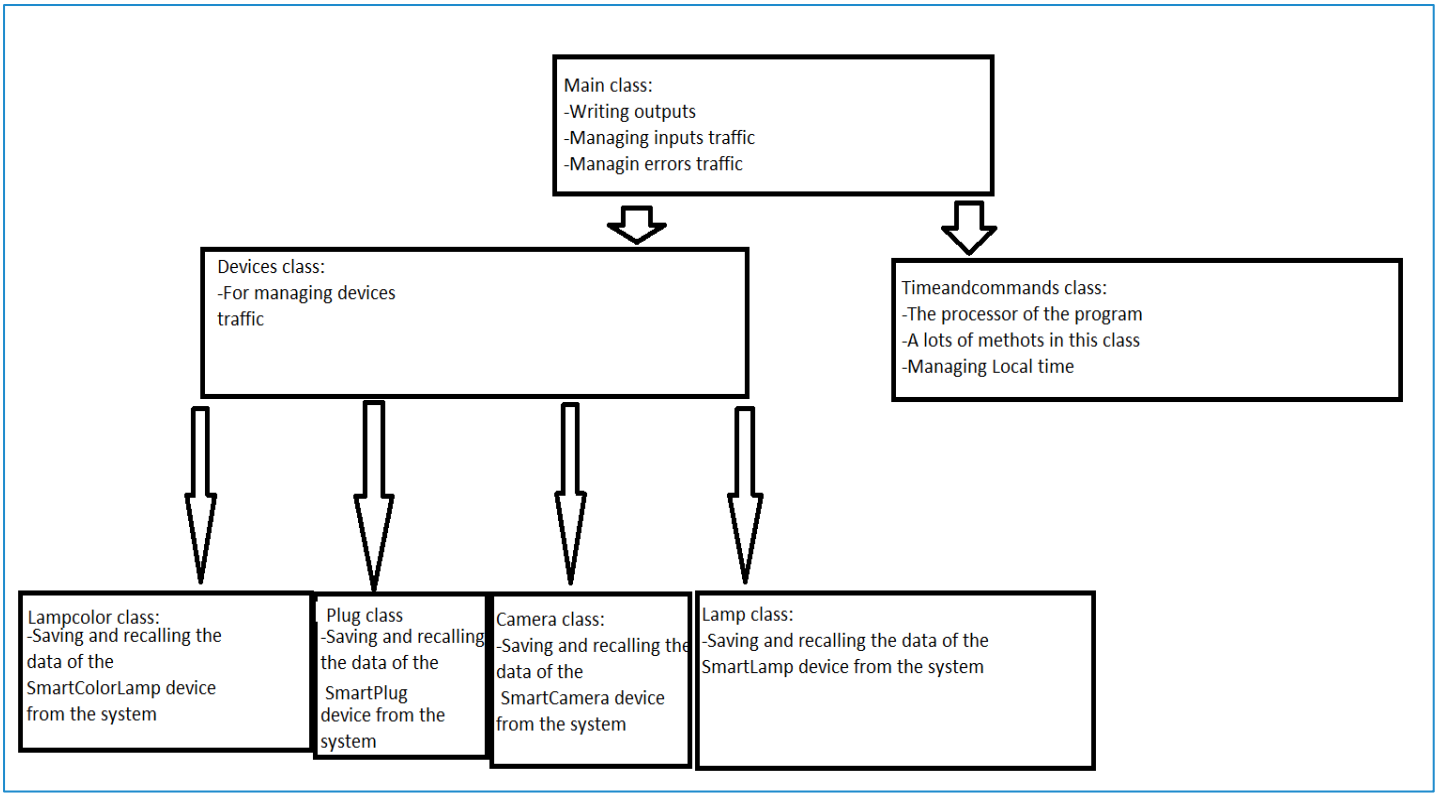
Pillars of OOP:

-ABSTRACTION: For abstraction, it was saved in data type by creating an abstract connection only over the order of giving, without depending on the features given in order in the input.

-INHERITENCE: It is provided by the connection established between the subclasses of the Devices class (extends) and the connection established between the Main class and its subclasses.

-POLYMORPHİSM:There is a overloading and overreading examples in Devices class and its inner classes.

-ENCAPSULATION: Used for once in the code.(Private object)



Codes class contructed with two class.It can be doing with three class:Time,Commands,Devices but the code was created in a more practical way by combining these two classes, both because the time class is small and because the two work in conjunction with each other.

In the Main class, the input flow was directed, commands were given to the Timeandcommands class according to the situations, and with the outputs from that class, if an error occurred in the Main class, the debugging and printing were provided. According to the planning, the writing operations would be done in the Timeandcommands class, but because the writing command could not be run in that class, it was done on the Main class.

The data given in the Devices class was classified according to its status and distributed to four subclasses according to device names, and within these subclasses, the devices were recorded in the system through their own methods.

Resources:

ChatGpt from understanding hexadecimal strings and some knowledges like(Local Date Time ,Duration,isBefore(),isEqual,isAfter(), catch(ArrayIndexOutOfBoundsException e))