CLASS DIAGRAM:

Registration Number: FA22-BSE-159

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1) Model

Schedule
- Schedule id : string
- Device id : string
- start time : Date
- ending time : Date
→ is Active (Current time: Date)

✓ Control operation of

Device
deviceId : string
type : string
status : Boolean
energy Consumed: Double
turn On(): void
turn Off(): void
get status(): Boolean
Calculate Energy Usage(): Double

Data Base
save(entity: Object): v
update (entity: object): v
fetch (query: string): obj
delete (entity: string): vo

store and retire

✓ logs energy Consumption

Energy Usage
usageId: string
energy Consumed: Double
time stamp: Date
Calculate Total Usage(): Double
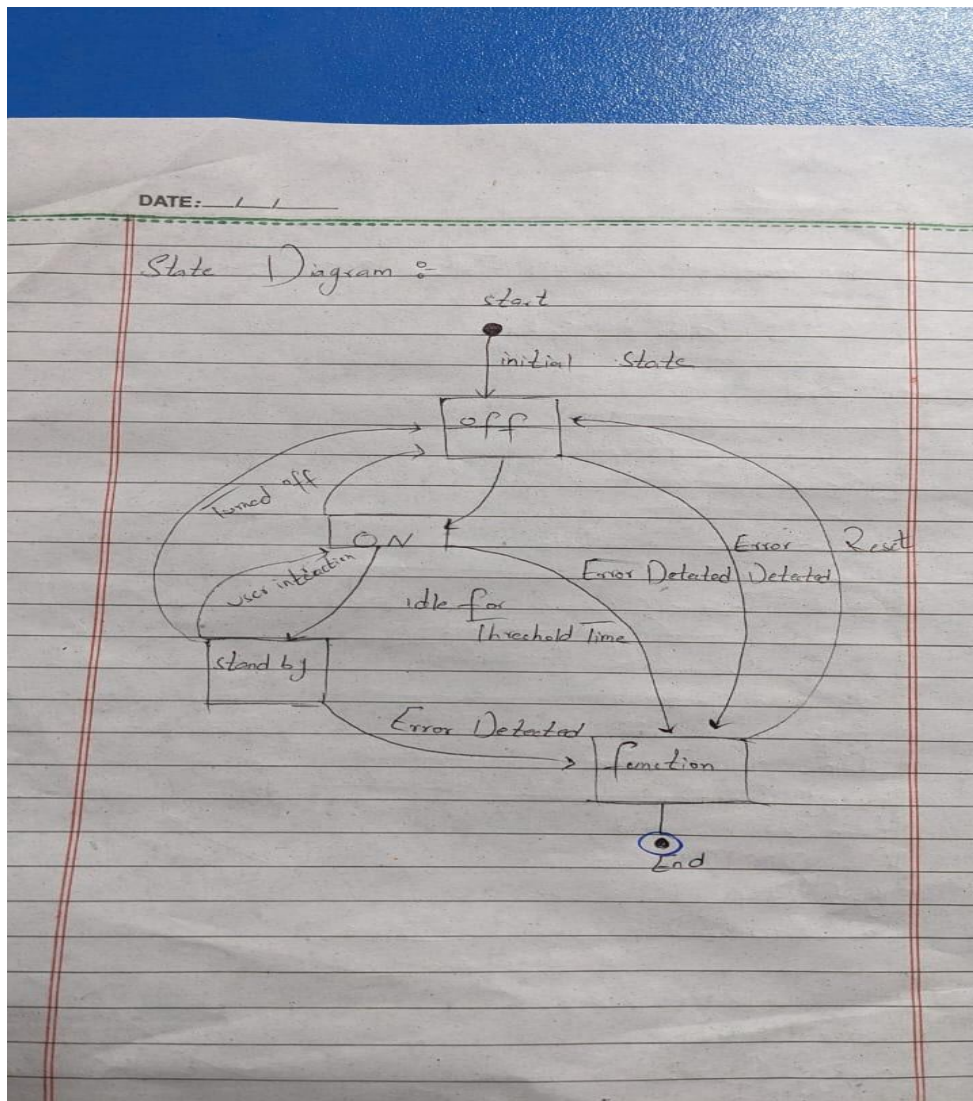log Usage (device: Device): Void

store and retire

STATE DIAGRAM:

ARCHITECTURE DIAGRAM:

Artitecture Diagram:-

Sensor

- Temperature Sensor
- light Sensor
- Motion Sensor

Controllers

- HVAC Controller
- lighting Controller
- Appliance Controller