

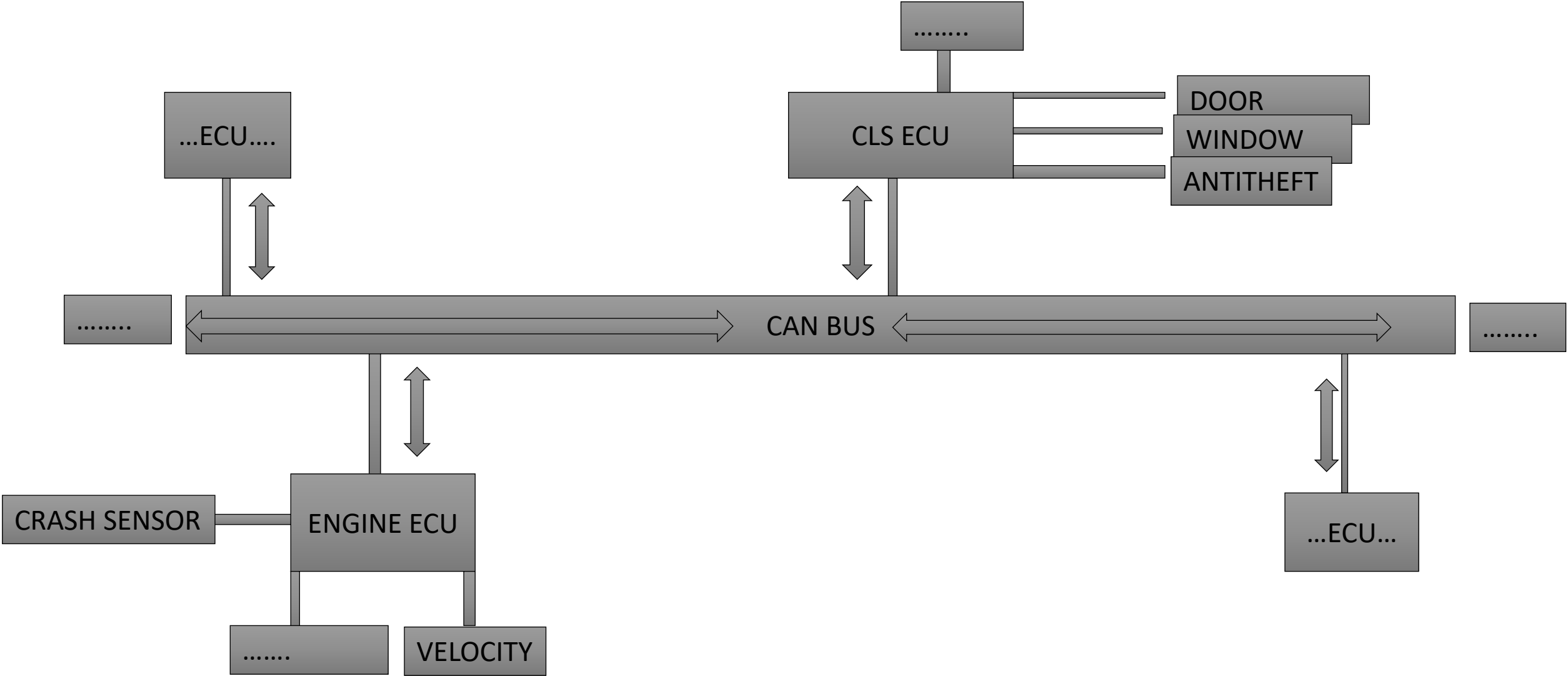
*****Central Locking System Outline*****

- Central locking system (CLS): Lock, unlock, comfort lock which locks the car and closes the windows.
- If a crash occurs then the CLS unlocks the car. The window lift supports opening and closing functions
- Functionalities adhere to the .dbc file, consisting of messages and signals that are mapped.
- Use cases have been implemented.
- Programs with .can files supports cannoe configuration.
- Block diagram attached for precise understanding.

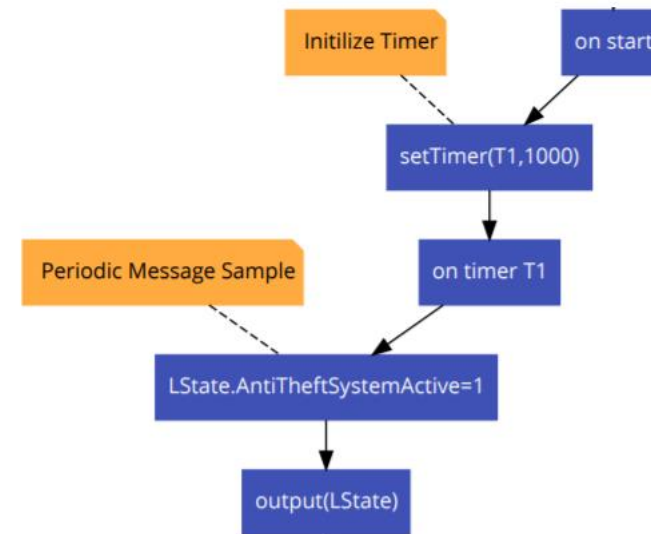
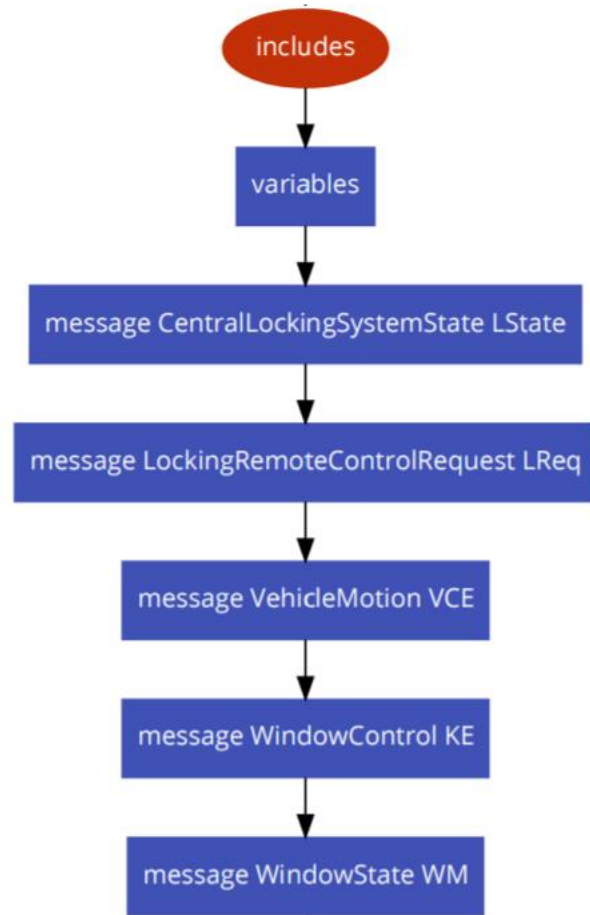
*****Socketcan Quickstart*****

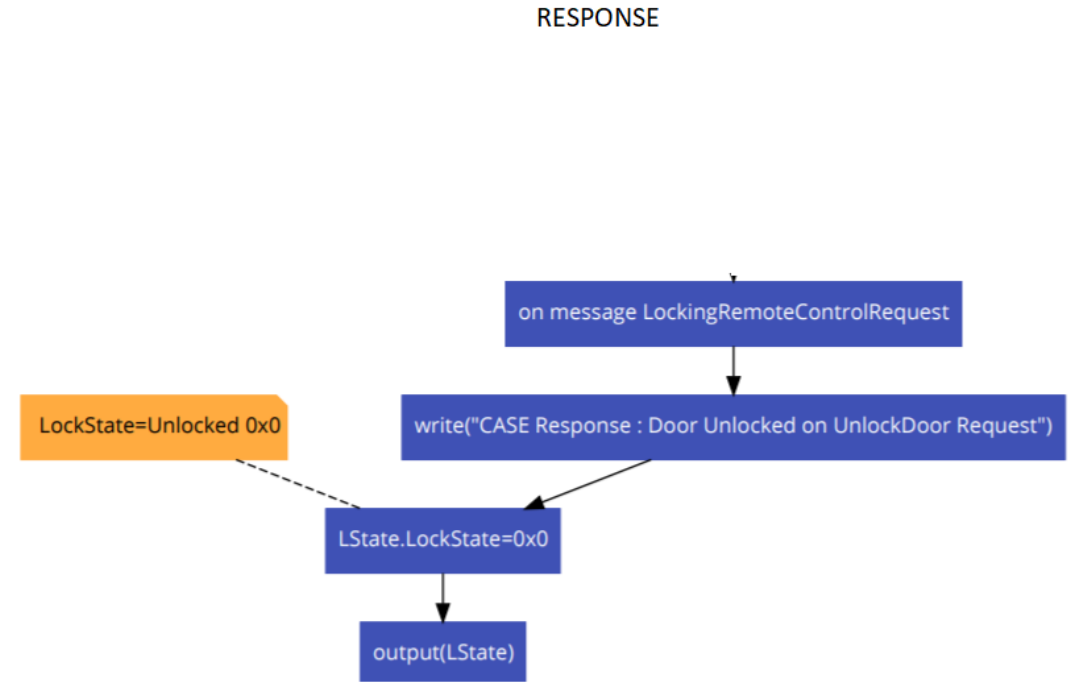
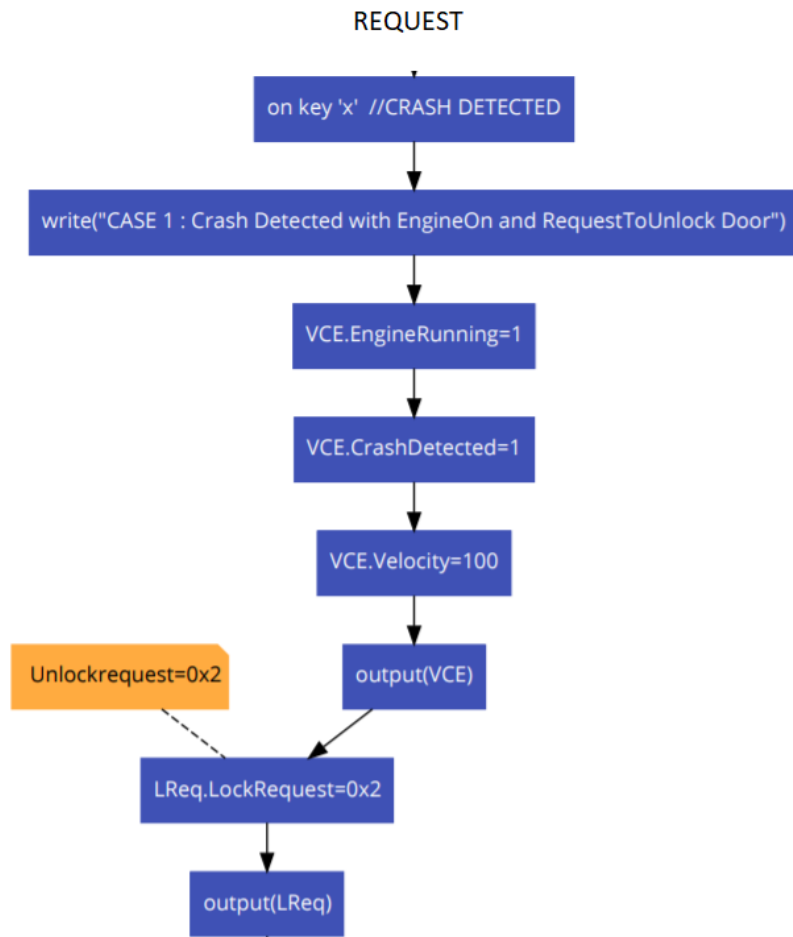
- 1: The CAN network driver provides a generic interface to setup, configure and monitor CAN devices.
- 2: The virtual CAN driver (vcan) --> The virtual CAN interfaces allow the transmission and reception of CAN frames without real CAN controller hardware.
- 3: Virtual CAN network devices are usually named vcan0 vcan1 vcan2.
- 4: To create a virtual can interface using socketcan run the following:
>>> sudo modprobe vcan
>>> sudo ip link add dev vcan0 type vcan# Create a vcan network interface with a specific name
>>> sudo ip link set vcan0 up
>>> candump vcan0# Allows you to print all data that is being received by a CAN interface

Reference Block Diagram



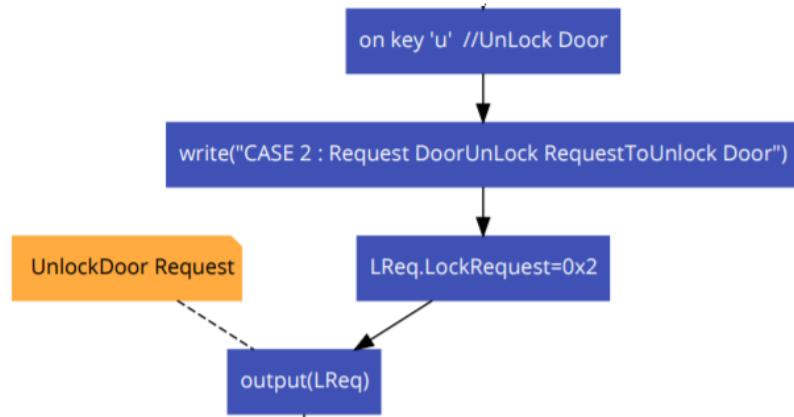
Variables and Cyclic Message



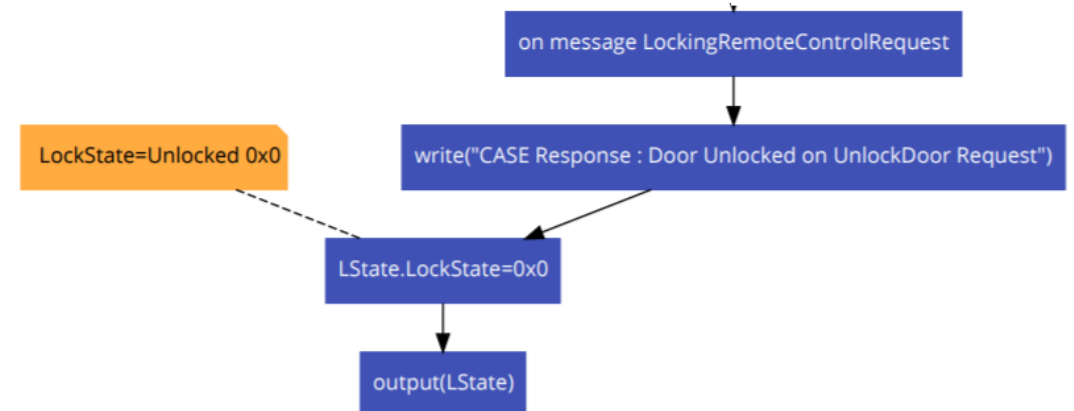


Use Case 1 : Referral Flowchart

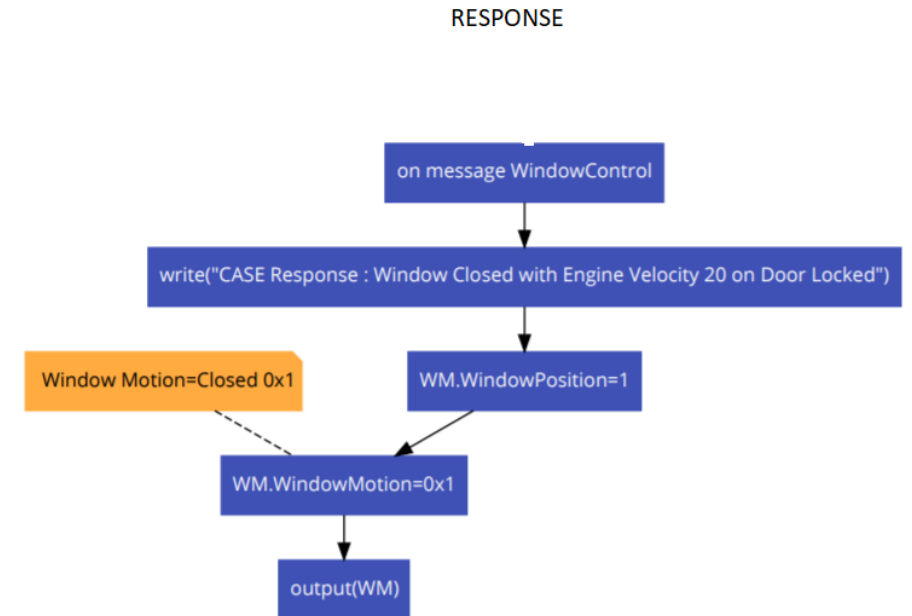
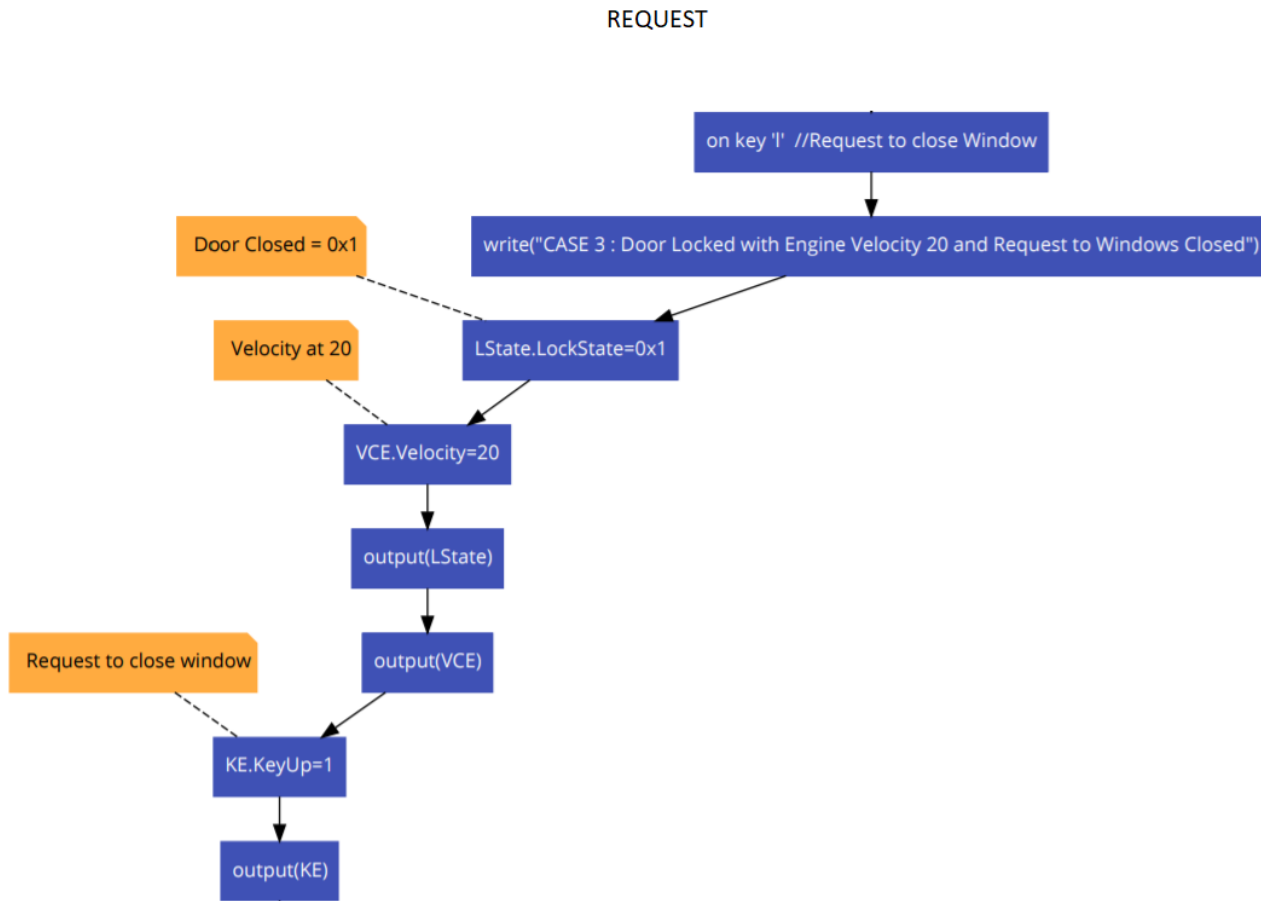
REQUEST



RESPONSE

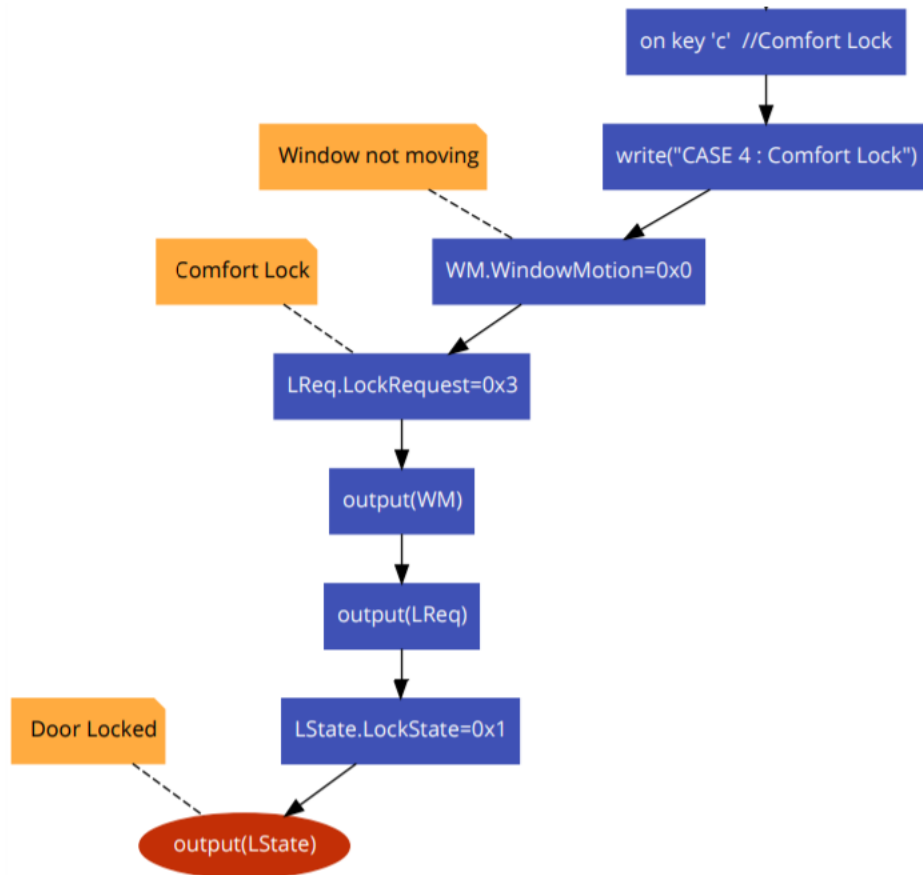


Use Case 2 : Referral Flowchart

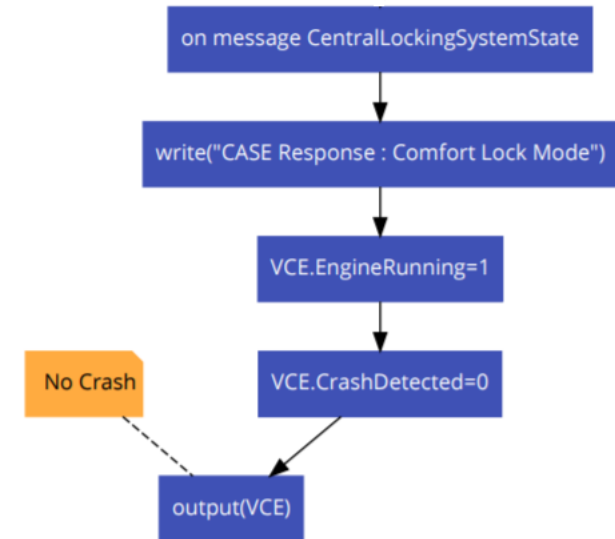


Use Case 3 : Referral Flowchart

REQUEST



RESPONSE



Use Case 4 : Referral FlowChart