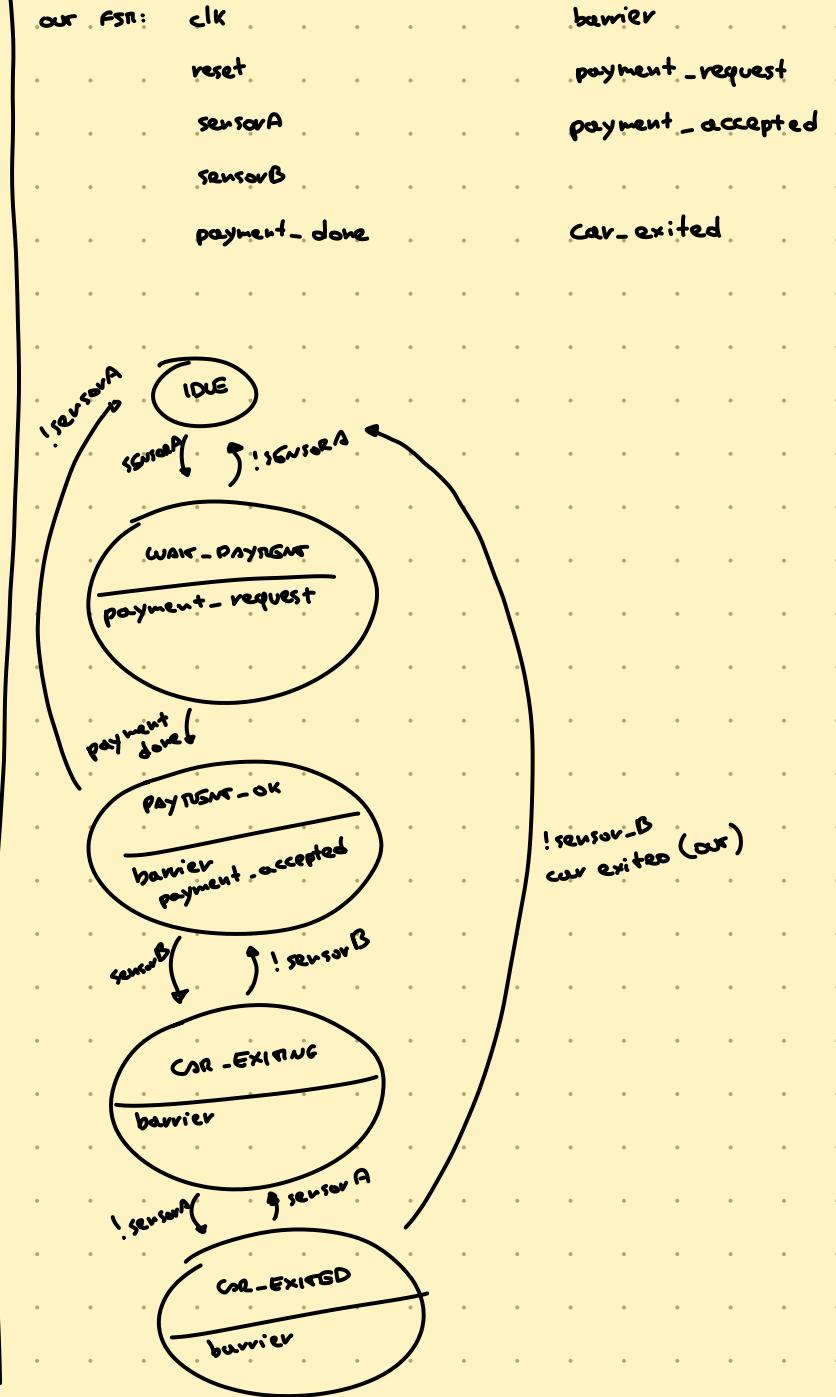
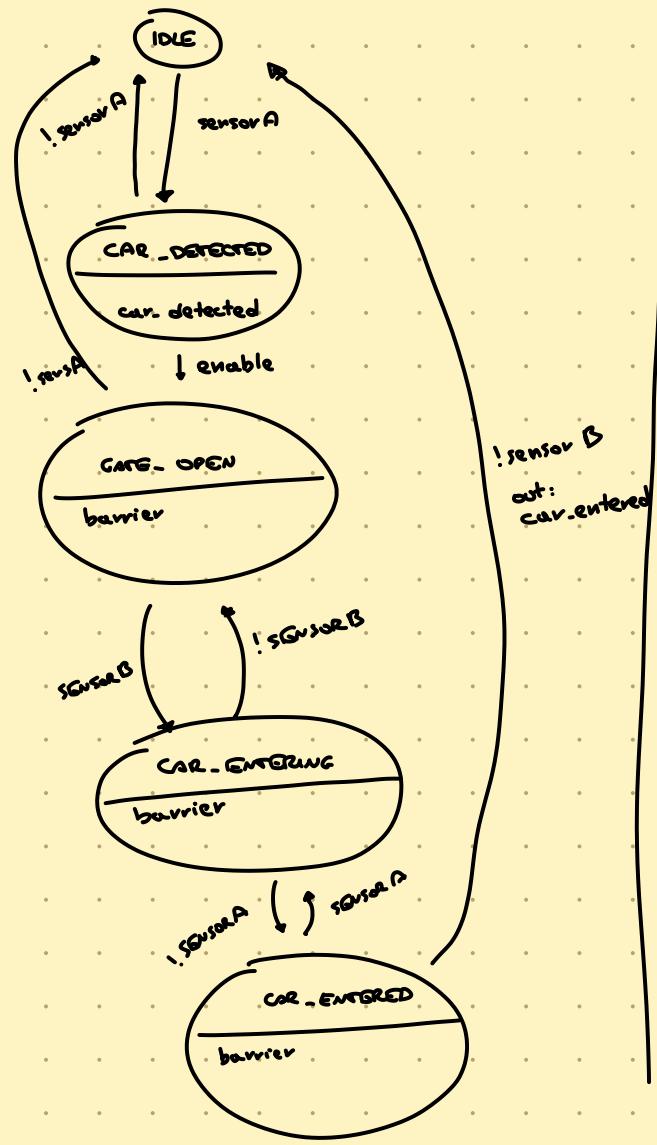
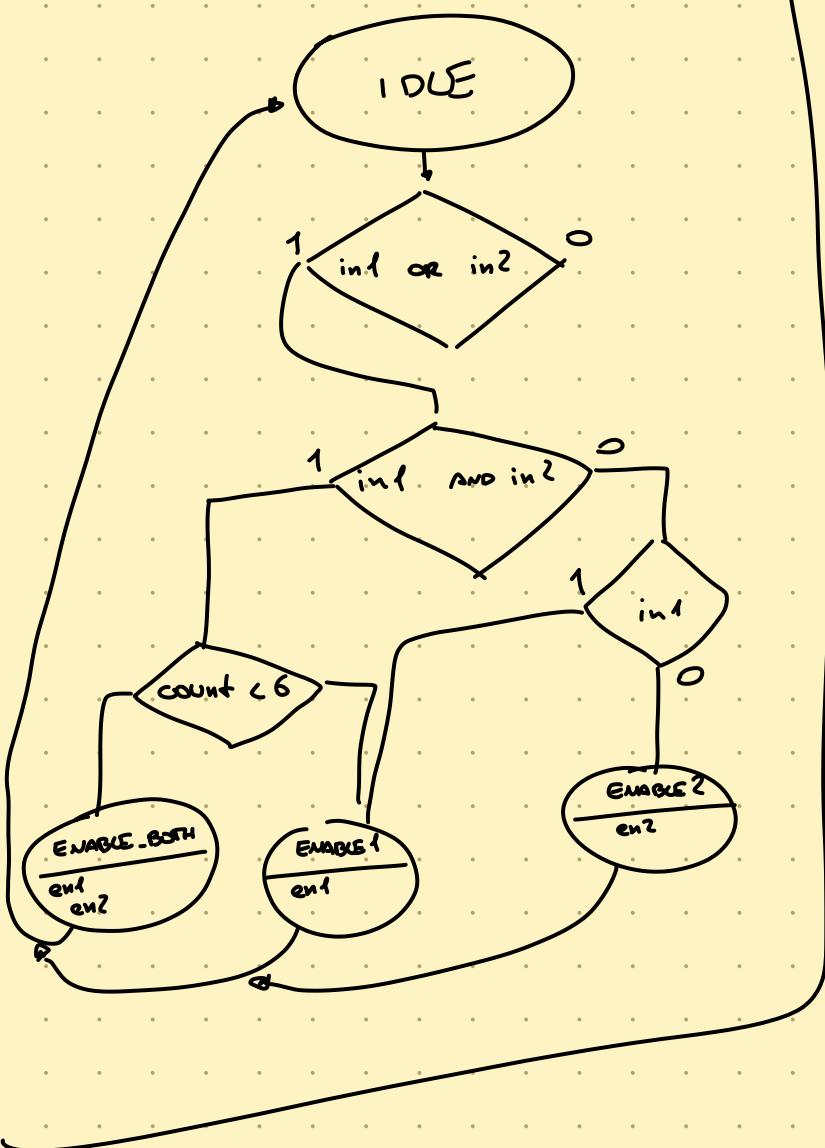


|         |          |              |          |              |                  |
|---------|----------|--------------|----------|--------------|------------------|
| IN FST: | clk      | car-detected | out FST: | clk          | barrier          |
|         | reset    | car-entering |          | reset        | payment-request  |
|         | sensor A | car-entered  |          | sensorA      | payment-accepted |
|         | sensor B | barrier      |          | sensorB      |                  |
|         | enable   |              |          | payment-done | car-exited       |



controller      PARKING\_CAPACITY  
 internal : car-count  
 car-detected-1  
 car-entering-1  
 car-entered-1  
 car-detected-2  
 car-entering-2  
 car-entered-2  
 enable-1  
 enable-2

### EMERGING



payment-request  
 payment-done  
 payment-request  
 car-exited-1  
 car-exited-2

### EXISTING

req1  
 req2  
 =>  
 acc1  
 acc2  
 =>  
 acc

### CONTROLLER

PARKING  
b

counter    if car-ent : +1  
 if car-exit : -1

+ Park MP

+ LED :    if counter < max: green  
 else red

+ Display :    DECODE \* max - car count